AGENDA
HIDALGO COUNTY
COMMISSIONERS COURT
MEETING
March 21, 2017
9:30 A.M.

NOTICE is hereby given in accordance with Chapter 551, Texas Government Code, that a SPECIAL MEETING of the Commissioners Court will be held in the Commissioners Courtroom of the Administration Building, 100 E. Cano, 1st floor, Edinburg, Hidalgo County, Texas. Discussion and possible action relating to the following business will be transacted:

1. **Roll Call**

2. **Pledge of Allegiance**

3. **Prayer**

4. **Approval of Consent Agenda**

5. **County Judge's Office:**

A. **AI-59000** Resolution in Support of Big Brothers Big Sisters of South Texas

B. **AI-58999** Proclamation declaring March 2017 as Intellectual and Developmental Disabilities Awareness Month

C. **AI-59043** Update on Texas A&M McAllen Campus

6. **District Attorney's Office:**

A. **AI-58747** DA Check Fraud (1222):
Approval of 2017 appropriation of funds in the amount of $9,000.00 to fund fuel expenditures.

B. **AI-58876** Hidalgo County DA's Office - Victim Assistance Program (VAP) Grant (1281):
Approval to submit a VAP Grant #2924301 budget adjustment to the Office of the Governor (OOG).

C. **AI-58826** District Attorney's Office - LEOSE (1220):
1. Approval of certification of revenues by the County Auditor for the 2017 LEOSE allocation of the District Attorney's Office in the amount of $1,147.33.

2. Approval of Budget Amendment to appropriate the 2017 LEOSE allocation from the State Comptroller in the amount of $1,147.33.

7. County Clerk's Office - Arturo Guajardo, Jr.:

A. AI-59051 Discussion and action ratifying the transfer of Justice of the Peace Precinct 2, Place 2, duties as local registrar to the Clerk of the County of Hidalgo, Texas.

8. Constables:

A. AI-58874 Constable Pct. 2:
1. Authorization to accept the Approval Notice in reference to Operation Stonegarden FY 2016 for the amount of $75,000.00.
2. Authorization and approval for County Judge, as authorized official, to Electronically accept grant award form and related documents.
3. Authorization to pay Overtime reimbursable under the grant terms and conditions.
4. Approval of Certification of Revenues as certified by the County Auditor for the FY 2016 Operation Stonegarden Grant.
5. Approval to appropriate the budget for Constable Pct. 2 Office portion of the FY 2016 Operation Stonegarden Grant in the amount of $75,000.00.

B. AI-58890 Constable Pct. 2 LEOSE:(1220)
1. Approval of Certification of revenues, as certified by the County Auditor, for the 2017 LEOSE (Peace Officer Allocation) funds award received from the Texas Comptroller of Public Accounts Office in the amount of $1448.79.
2. Approval of 2016 Appropriation of funds for the Constable Pct. 2 - LEOSE (1220) in the amount of $1448.79.

C. AI-58786 Constable Pct. 3 - OPSG (1284)
1. Authorization to accept the Approval Notice in reference to Operation Stonegarden FY 2016 for the amount of $80,000.00.
2. Authorization and approval for County Judge, as authorized official, to electronically accept grant award form and related documents.
3. Authorization to pay Overtime reimburseable under the grant terms and conditions.
4. Approval of Certification of Revenues as certified by the County Auditor for the FY 2016 Operation Stonegarden Grant in the amount of $80,000.00.
5. Approval to appropriate the budget for Constable Pct. 3 portion of the FY 2016 Operation Stonegarden Grant in the amount of $80,000.00.

D. **AI-58880** Constable Precinct #4 (1284):

1.Authorization to accept the Approval Notice in reference to Operation Stonegarden FY2016 for the amount of $75,000.00.

2. Authorization and approval for County Judge, as authorized official, to electronically accept grant award form and related documents.

3. Authorization to pay Overtime reimbursable under the grant terms and conditions.

4. Approval of Certification of Revenues as certified by the County Auditor for the FY2016 Operation Stonegarden Grant in the amount of $75,000.00.

5. Approval to appropriate the budget for Hidalgo County Constable Precinct 4 portion of the FY2016 Operation Stonegarden Grant in the amount of $75,000.00.

9. Sheriff's Office:

A. AI-58932 Discussion, consideration, and approval to appoint Susie Hernandez as an intern under the Hidalgo County Sheriff's Office Law Enforcement Internship Program for the period of March 27, 2017 through May 31, 2017.

B. AI-58896 1. Discussion, consideration, and approval of agreement between the Hidalgo County Sheriff's Office and Big Fish Entertainment, LLC. subject to compliance with HB1295 when and if applicable
2. Authorization for Hidalgo County Sheriff to sign agreement.

C. AI-58879 1. Discussion and authorization for Hidalgo County Sheriff or designee to participate in the Law Enforcement Product Council with General Motors Company (GMC). subject to compliance with HB1295 when and if applicable
2. Discussion, consideration, and approval of confidentiality agreement between Hidalgo County Sheriff's Office and GMC related to the participation in the Law Enforcement Product Council.
3. Approval for Hidalgo County Sheriff to sign agreement.

D. AI-58933 Jail Commissary (2102):
1. Approval of certification of revenues as certified by the County Auditor.
2. Approval of appropriation of funds in the Jail Commissary account for the amount of $111,794.56.

10. Executive Office:

A. Presentation for discussion, consideration and action (if necessary) including, but not limited to the following:
1) Update on ongoing county owned building construction, relocation and/or renovation repair projects
2) Emergency situations occurring since last agenda meeting

B. AI-58447 1. Presentation of Delinquent Tax Collection Report for the period of July 1, 2016 through January 31, 2017.

2. Presentation of Fees and Fines Report for the period of July 1, 2016 through January 31, 2017.

3. Discussion and action on tax resale bids received on the properties (see attached list).

4. Discussion and action on Order for tax resale bid properties.

C. **AI-59024** Discussion, consideration and action on Memorandum of Understanding (MOU) between Hidalgo County and RGV Hispanic Chamber of Commerce

D. **AI-59042** Discussion, consideration and action providing for public comment on behalf of Hidalgo County regarding the 2016 Texas Floods and Storms recovery funding State Action Plan - US Department of Housing and Urban Development (HUD).

E. **AI-58796** Discussion and approval to appoint members to the Hidalgo County Historical Commission.

11. **Public Defender's Office:**

A. **AI-58714** Requesting approval to reimburse Jaime (Jimmy) Gonzalez, Chief Public Defender the amount of $93.86 for the purchase of indigent defendant's clothing expense for court with authority for County Treasurer to issue payment/check after review and auditing procedures are completed by County Auditor.

12. **Human Resources:**

A. **AI-58977** Approval of Re-appointment of Civil Service Commission Member, Jaime Ortiz (by Pct. 1)

B. **AI-58877** County Treasurer (1100):
1. Requesting waiver of the Budget Amendment Policy - Personnel Related - Amendments.
2. Discussion, consideration, and approval of the following personnel actions effective next full pay period, 4/03/2017 :

Action	Dept. / Program	Slot#	Position Title	Current Budgeted Allowance	Proposed Budgeted Allowance
Salary adjustment/ Supplement Pay (increase)	150-001	0002	Chief Deputy II	$561.00	$3,061.00
Salary adjustment/ Supplement Pay (decrease)	150-001	0003	Payroll Supervisor	$5,500.00	$3,000.00

3. Approval to revise salary schedule in accordance with Commissioners Court approval.

C. **AI-58878** Sheriff Investigation HB65 (1227):
1. Discussion, consideration and approval of the following personnel actions, effective next full pay period, 04/03/2017:

Action	Dept./ Program	Slot#	Position Title	Proposed Budgeted Salary
Create	280-005	0001	Criminal Research Specialist	$42,700.00
Create	280-005	0002	Criminal Research Specialist	$42,700.00

2. Approval to revise salary schedule in accordance with Commissioners Court action.

13. **Health & Human Services Department:**

A. **AI-58936** Recognition of Antonio Lopez, Weslaco Fire Chief / Emergency Manager, for facilitating a medical counter measures exercise conducted on February 24, 2017.

B. **AI-58934** Discussion to inform Commissioner's Court of the pending bills that may impact Hidalgo County. SB 1680, SB 1681, SB 1695.

C. **AI-58937** 1. Discussion and action to authorize Jose Gonzalez, Hidalgo County Health & Human Services Division, to be the designated representative for the OSSF Permits & Subdivsion approvals.
2. Approval to submit notice to State of Texas informing the State of the change in designee.

D. **Health Care Funding District:**

1. Discussion and/or action, including but not limited to Health Care Funding District and/or Expenditures

E. **Indigent Health Care Program:**

1. Discussion and/or action, including but not limited to Indigent Health Care Program and 1115 Waiver and/or Expenditures

14. **Emergency Management:**

A. **AI-59007** 1. Presentation, discussion, and necessary action to terminate Proclamation declaring Local State of Disaster for the County of Hidalgo due to the torrential rain event of March 10, 2017, which caused severe flooding to property.
2. Authorization for County Judge to sign the required documentation.

15. **Community Service Agency:**

A. **AI-58990** Discussion, consideration, and possible action to accept $50,000 funds from Direct Energy to be used in accordance with the Neighbor-to-Neighbor Program for 2017. Authorization for Jaime Longoria to sign any and all pertinent documents.

B. **AI-58720** Discussion, consideration and possible action to enter into a contract with Superior Alarms for wireless fire monitoring with authority for County Judge to sign documents

16. **IT Department:**

A. **AI-58904** BOOT CAMP / PCT. #2 / PCT. #4:
Authorization and approval to continue with existing service and purchase new wireless service through the County's membership/participation (CONTRACT: DIR-TSO-3415) with VERIZON WIRELESS for the following:

Qty:	Description:	Department:	User:	Service Plan:	MDN:
2	Cont. Cell Phone Service	Juvenile Det.	Office Use	Nationwide 1000 Share N&W+M2M Unl 200 Msgs @ $39.99 + $5.00 each per month	956-219-9921 & 956-219-9925
3	Cont. Data Card Service	Juvenile Det.	Office Use	4G Mobile Broadband Unl. @ $37.99 each per month	956-578-1993, 956-578-2401 & 956-578-2827

4	Cont. GPS Service	Comm. Pct. 2	Office Use	Machine to Machine Account Share 5MB @ $7.00 each per month	See Comm.Pct.2 Backup
11	Cont. GPS Service	Comm. Pct. 2	Office Use	Machine to Machine Account Share 1MB @ $5.00 each per month	See Comm.Pct.2 Backup
1	New Activation	Comm. Pct. 4	Mariano Manzano 113379	4G Mobile Broadband Unl. @ $37.99 per month	

17. Urban County:

A. AI-58661 1. Hold a Public Hearing to consider public comments for Hidalgo county Precinct No. 4's proposed budget and program amendment for fiscal years 28 & 29 (2015 & 2016).

2. Requesting approval of a budget and program amendment for Hidalgo County Precinct No. 4 for fiscal years 28 & 29. (2015 & 2016). Amendment will delete two Street Improvements (street Lighting) projects and the Substance Abuse Services line items and add funding to the Parks, Recreational Facility Improvements Project for Brewster Park.

B. AI-58925 "Subject to: HB 1295 Compliance." Requesting authority to purchase playground equipment through the County's Membership/Participation with BuyBoard's awarded vendor, Park Place Recreation Designs, Inc. (contract # 512-16), in the amount of $11,840.15 for Mercedes Sports Complex Park located in Mercedes (FY 2016).

C. AI-58924 "Subject to: HB 1295 Compliance." Requesting authority to purchase playground equipment through the County's Membership/Participation with BuyBoard's awarded vendor, Park Place Recreation Designs, Inc. (contract # 512-16), in the amount of $1,968.00 for Goza Park located in Mercedes (FY 2016).

D. **AI-58894** 1. Subject to Compliance with HB 1295, when and if Applicable, the Urban County Program on behalf of the City of Peñitas is requesting approval of a best and final negotiated contract for Construction Material Testing Services with Raba-Kistner Consultants, Inc., in the amount of $22,726.55 utilizing CDBG FY 24, 25 & 26(2011, 2012 & 2013) Street Improvement funds.

2. Approval of Work Authorization No. 1 for Raba-Kistner Consultants, Inc. in the amount of $22,726.55.

E. **AI-58875** 1. Subject to Compliance with HB 1295 requesting approval of a best and final negotiated contract for Professional Engineering Services with STRADA Engineering and Consulting, LLC, in the amount of $21,395.00 utilizing CDBG FY 2016.

2. Requesting approval of Work Authorization No. 1- "2016 Sullivan City Drainage Improvements" in the amount of $21,395.00.

F. **AI-59006** "Subject to Compliance with HB 1295, when and if Applicable." The Urban County Program is requesting the award of bids and the approval of contracts with Quality Investment and R G Enterprises, LLC dba G & G Contractors for the demolition and reconstruction of the following:
1. (1) Unit in the City of Alamo in the total contract amount of $59,999.99 to Quality Investments; and
2. (2) Unit in the Countywide area and (1) unit in the City of San Juan in the total contract amount of $179,220.00 to R G Enterprises, LLC, dba G & G Contractors.

G. **AI-59017** Subject to HB 1295 Compliance, requesting consideration and action to award and enter into a construction contract with Texas Cordia Construction, LLC in the amount of $337,177.000 UCP Year 24-28 (2011-2015) City of Peñitas Street Improvement funds will be utilized.

18. **Elections Administration:**

A. **AI-59082** Discussion, consideration and action but not limited to Election updates.

B. **AI-58989** Discussion, consideration and approval to maintain and apply the current election services billing rate to the Hart Verity System utilized only during the November 2017 election billing cycle.

C. **AI-58930** 1. Approval of 2017 Lease Contract for Election Services between Hidalgo County and the City of McAllen for their election to be held on May 6, 2017.
2. Approval of 2017 Full Contract for Election Services between Hidalgo County and the City of Pharr for their election to be held on May 6, 2017.
3. Approval of 2017 Full Contract for Election Services between Hidalgo County and the City of San Juan for their election to be held on May 6, 2017.
4. Approval of 2017 Full Contract for Election Services between Hidalgo County and the McAllen Independent School District for their election to be held on May 6, 2017.

19. **TX. Agri-Life Extension Services:**

A. **AI-58921** Presentation of 2016 Making A Difference Annual Report by Andrea Valdez, County Extension Agent-Family & Consumer Sciences/County Coordinator

20. **Auditor's Office:**

A. **AI-58871** Requesting approval to submit the "Pro Rata Tobacco Settlement Distribution County Expenditure Statement - 2017" to the Department of State Health Services, and authorize County Judge to execute the report.

21. **Precinct #2 - Comm. Cantu:**

A. **AI-58960** Presentation of certificate of appreciation to Virginia Townsend on behalf of the O.W.L.S.

B. **AI-59037** Requesting approval of Amendment No. 1 to the Interlocal Cooperation Agreement with the City of San Juan and Alamo approved by CC 09/01/2015 (AI#51086), to extend the length of the improvements to Cesar Chavez Road from Nolana Loop to Ridge Road.

C. **AI-59039** 1. Requesting approval of an Interlocal Cooperation Agreement (ICA) between the County of Hidalgo and the City of Hidalgo, regarding road safety improvements for the Pct 2 McColl Road Project.
2. In accordance with Section 791.014 of the Texas Government Code, requesting approval of the Interlocal Cooperation Agreement (ICA) project for the Pct 2 McColl Road Project.

D. **AI-58961** Approval to rescind action previously taken by Commissioners Court on 2/21/17 AI#58536 for approval of closing documents for Parcel 2 for Pct 2 Yuma Ave Extension Project.

E. **AI-59053** Pct 2 Yuma Ave Rd Prj (1200):
1. Approval of certification of revenue as certified by the County Auditor for revenue received from the City of McAllen for Interlocal Agreement approved by Commissioners Court on 7/19/16 AI#55455 .
2. Approval of 2017 appropriation of funds into Pct 2 Yuma Ave Ext Prj in the amount of $80,000.00.

22. **Budget & Management:**

A. **AI-58914** 1. Approval to undesignate the amount of $20,089.01 in the year 2016 from the 1115 Waiver Assigned Fund Balance.
2. Approval to undesignate the amount of $7,772.95 in the year 2016 from the New Courthouse Assigned Fund Balance.

B. **Budget Appropriations:**

1. **AI-58902** CO 2016 (1350):
Approval of 2016 estimated revenues and appropriation of funds for Certificates of Obligation, Series 2016, in relation to bond proceeds, bond premium, and related issuance costs.

2. **AI-58915** New Courthouse (1100):
a. Approval to undesignate the amount of $3,951,866.52 in the year 2017 for expenditures related to the New Courthouse.
b. Approval of 2017 appropriation of funds in the amount of $3,951,866.52 to fund program expenditures.

3. **AI-58919** Pct 3 Parks (1100):
a. Approval to undesignate the amount of $279,375.11 in the year 2017 for expenditures related to insurance proceeds received for the damages sustained during the May 2016 weather event.
b. Approval of 2017 appropriation of funds in the amount of $279,375.11 to fund anticipated repairs/purchases needed for the Anzalduas Park.

23. **Purchasing Department:**
Notes:
A. FOR ANY CONTRACT(S) AWARDED AND APPROVED UNDER THIS AGENDA, EXECUTED COPIES OF THE CONTRACT(S) WILL BE AVAILABLE ON THE COUNTY INTRA-NET WEBSITE AND WILL BE FOWARDED VIA E-MAIL, FAX OR HAND DELIVERED TO HIDALGO COUNTY AUDITOR'S OFFICE.
B. ANY AND ALL REQUESTS FOR PAYMENT(S) APPROVED WILL BE SUBJECT TO COUNTY AUDITORS PROCESSING PROCEDURES INCLUDING AUTHORITY FOR COUNTY TREASURER TO ISSUE PAYMENT(S)/CHECK(S).

A. **Hidalgo County**

1. **AI-58992** A. Requesting exemption from competitive procurement requirements pursuant to Texas Local Government Code, 262.024 (7) & (A) an item that can only be obtained from one source;
B. Requesting approval of a "Sole Source Declaration" for SCI Technologies, Inc. d/b/a SkyCop, Inc. for the purchase [through the requisition/PO protocol] of a SkyCop Mobile Surveillance Unit [equipment and related items/services] for all Hidalgo County Elected Offices [commencing with the Sheriff's Office], Departments, Programs and/or Agencies (all funding sources) with the declaration to remain in effect unless otherwise revokes by Hidalgo County Commissioners' Court including compliance with HB23 and/or HB1295 when and if applicable.

B. **Pct. 1**

1. **AI-58499** A. Acceptance and approval of the following listed construction contract documents as awarded by Commissioners' Court on December 13, 2016 (AI#57719) for the following HC Pct. #1- Paving and Drainage Improvements Projects:

Hidalgo County Precinct No. 1 – FEMA Road Drainage Improvements - Indian Hills Subdivision	2016-399-12-07	IOC Company	$1,280,979.70

B. Pursuant to TXLGC 262.031 and in the interest of expediting a Project's progress, requesting authority/approval for the Precinct Commissioner or designee: David Suarez, Chief Administrator to execute change orders that involve Increasing or decreasing in cost of $50,000.00 or LESS and in no event to exceed the Change Order's statutory limits. The original contract price may not be decreased by 18% or more without

the consent of the contractor.

C. Pct. 2

1. **AI-59025** A. Requesting approval of Supplemental Agreement No. 1 to Contract No. C-15-300-09-01 for L&G Consulting Engineers, Inc. d/b/a L&G Engineering, resulting in an amendment to the project limits from (Business 83 to Nolana) to (Nolana to Business 83) and (Business 83 to Ridge Road) for the Pct 2 Cesar Chavez Road Project.
B. Requesting approval of Supplemental Agreement No. 1 for services under Work Authorization No. 1, Contract No. C-15-300-09-01 for L&G Consulting Engineers, Inc. d/b/a L&G Engineering, resulting in an estimated cost increase of $249,994.32 for the Pct 2 Cesar Chavez Road Project.

2. **AI-59021** Approval of Work Authorization No. 3 (with an estimated cost of $3,969.00) as submitted by Terracon Consultants, Inc., Contract No. C-16-208-07-19 to provide construction material testing services for the Pct 2 CRC Youth Facility Project.

3. **AI-58956** Approval of Work Authorization No. 2 (with an estimated cost of $3,994.00) as submitted by Terracon Consultants, Inc., Contract No. C-16-208-07-19 to provide construction material testing services for the Co Wide Mechanic Shop Project.

4. **AI-59022** Requesting approval of Supplemental Agreement No. 1 for L&G Consulting Engineers, Inc. d/b/a L&G Engineering, Contract No. C-16-258-06-14 thus amending the contract removing/deleting construction contract administration and inspection services from the professional engineering services contract for the Pct 2 Yuma Avenue Extension Project.

5. **AI-58889** Requesting approval of a professional appraisal services agreement with LEONEL GARZA, JR. & ASSOCIATES, LLC for the purposes of appraisal services for: The Fair Market Value Appraisals in connection with the Acquisition of Land-Sale and/or Exchange, Rights of Way, Easements, Condemnations and Disposition of County owned Property located within Hidalgo County Precinct No. 2 (on an as needed basis) and as selected for negotiations by CC from the "POOL" of Appraisers by CC on 2/6/17.

D. Pct. 4

1. AI-59044 A. Requesting exemption from competitive bidding requirements under the Texas Local Government Code, Section 262.024 (A) (4) for a professional service;

B. Presentation of the scoring grid (for the purposes of ranking by CC) the firms graded & evaluated through the County's approved "pool" of Engineering Firms for the provision of "professional engineering services" for *Project: Expansion of the Mile 22.5 Road located within Hidalgo County Precinct No. 4;*

ENGINEERING FIRMS:

Totals	Quintanilla, Headly & Associates, Inc.	DBR Engineering Consultants, Inc.	Alpha Infrastructure Engineering, PLLC
Scores	97	95	94
Ranking			

C. Authority for the Purchasing Department to negotiate a professional engineering services agreement for *Project: Expansion of the Mile 22.5 Road located within Hidalgo County Precinct No. 4*, commencing with the No.1 ranked firm _____ for Engineering Services.

D. Requesting exemption from competitive bidding requirements under the Texas Local Government Code, Section 262.024 (A) (4) for a professional service;

E. Presentation of the scoring grid (for the purposes of ranking by CC) the firms graded & evaluated through the County's approved "pool" of Engineering Firms for the provision of "professional engineering services" for *Project: Cesar Chavez Road (Owassa - Iowa) located within Hidalgo County Precinct 4;*

ENGINEERING FIRMS:

Totals	Strada Engineering and Consulting, LLC	Doucet & Associates, Inc.	Fulcrum Consulting Services
Scores	98	95	92
Ranking			

F. Authority for the Purchasing Department to negotiate a professional engineering services agreement for *Project: Cesar Chavez Road (Owassa - Iowa) located within Hidalgo County Precinct 4*, commencing with the No.1 ranked firm _____ for Engineering

Services.

2. AI-58651 A. Presentation and recommendation by project engineer, Halff & Associates [with concurrent by Pct.] to award Pct. #4's: Recovery and Motor Pool Improvements Project to Synergy Builders of Texas the responsible vendor submitting the lowest and best bid meeting all specifications and/or requirements to Synergy Builders of Texas in the amount of $395,000.00;
B. Pursuant to TXLGC 262.031 and in the interest of expediting a project's progress, requesting authority/approval for the Precinct Commissioner or designee: Maria D. Lucio to execute change orders for Pct. 4 that involve an increase or decrease in the cost of $50,000.00 or LESS and in no event to exceed the Change Order's Statutory limits. The original contract price may not be decreased by 18% or more without the consent of the contractor.

3. AI-58887 Presentation & Award to the sole responsible vendor submitting the lowest and best [and as further detailed in tabulation sheet contained herein] and meeting all specifications/requirements, including the approval of contract [but in no event to exceed $50K] for the Request for Sealed Quotes titled: Hidalgo County Pct 4-"Garbage Collection at New San Carlos CRC" through project No.: 2017-097-03-06-SGS.

4. AI-58867 a. Requesting exemption from competitive bidding requirements under the Texas Local Government Code, Section 262.024 (A) (4) for a "professional service";

b. Presentation of the scoring grid (for the purposes of ranking by CC) the firm graded & evaluated through the County's approved "pool" of Architectural Firms for the purposes of [Repairs/Renovations/Remodeling, Additions/Alterations and/or Building Review/Assessment Related Services on a [per project basis] for County-owned Buildings/Structures] located within Hidalgo County Precinct No. 4;

ARCHITECTURAL FIRMS

Totals	**The Warren Group Architects, Inc.**	**Gomez, Mendez & Saenz, Inc.**	**HDR Architecture, Inc.**
Scores	**98**	**95**	**93**
Ranking			

c. Authority for the Purchasing Department to negotiate an "on call" professional Architectural Services Agreement for the purposes of [Repairs/Renovations/Remodeling, Additions/Alterations and/or Building Review/Assessment Related Services on a [per project basis] for

County-owned Buildings/Structures] located within Hidalgo County Precinct No. 4, with the No.1 ranked firm _____ for Architectural Services.

E. District Attorney

1. AI-58988 Pursuant to current contract #C-10-243-07-06 [holdover status & on an "as needed basis"] for the provision of Autopsy Facility and Related Services between Hidalgo County and Ceballos Funeral Home, we request approval to issue and send written notice of termination effective March 31, 2017.

24. Open Forum

25. Closed Session:
Commissioners' Court may go into Closed Session pursuant to Chapter 551, Texas Government Code, Sections 551.071 & 551.072 to discuss the following:

A. Real Estate Acquisition

B. Pending and/or potential litigation

C. AI-59035 Pending/potential litigation - matter involving joint real estate sale by the County of Hidalgo, City of Edinburg, Edinburg EDC and others

D. AI-58898 C-0722-16-E; Santiago Aguilera Lara et al v. County of Hidalgo

E. AI-58922 CL-15-4029-H; Yesenia Garza v. Russell Doaks Suits Jr. and Hidalgo County Sheriff's Department

F. AI-58966 EEOC Charge No. 451-2017-01167; Leticia Martinez

G. AI-59027 Cause No. CCD-0371-E; Hidalgo County RMA v Jose Antonio Aguilar, et al

H. AI-59029 CL-17-1012-F; Cristo Rey Garza v. Hon. Luis Garza

I. AI-58969 Hidalgo County v. Daniel Wayne Young

J. **AI-58971** Hidalgo County v. Ramiro Lerma Sanchez & Anna Liza Sanchez

26. A. Requesting exemption from competitive bidding requirements under the Texas Local Government Code, Section 262.024(A) (4) "a Professional Service" for the "provision of legal services/representation in connection with litigation."

B. Requesting engagement with the firm of _____ for the "Provision of Legal Services/Representation in connection with Litigation" and authority to submit letter of engagement (subject to compliance with HB1295)

27. **Open Session:**

A. Real Estate Acquisition and appropriation for same

B. Pending and/or potential litigation

C. **AI-59036** Pending/potential litigation - matter involving joint real estate sale by the County of Hidalgo, City of Edinburg, Edinburg EDC and others

D. **AI-58899** C-0722-16-E; Santiago Aguilera Lara et al v. County of Hidalgo

E. **AI-58923** CL-15-4029-H; Yesenia Garza v. Russell Doaks Suits Jr. and Hidalgo County Sheriff's Department

F. **AI-58967** EEOC Charge No. 451-2017-01167; Leticia Martinez

G. **AI-59028** Cause No. CCD-0371-E; Hidalgo County RMA v Jose Antonio Aguilar, et al

H. **AI-59030** CL-17-1012-F; Cristo Rey Garza v. Hon. Luis Garza

I. **AI-58970** Hidalgo County v. Daniel Wayne Young

J. **AI-58972** Hidalgo County v. Ramiro Lerma Sanchez & Anna Liza Sanchez

28. **Closed Session:**
Commissioners Court may reconvene into Closed Session for the discussion regarding the agenda items listed

29. **Open Session:**
Commissioners Court may reconvene into Open Session for the discussion regarding the agenda items listed

30. **Adjourn**

AI-59000 **County Judge's Office** **5. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Julia Sullivan, PUBLIC AFFAIRS **Submitted By:** Jane Lopez, PUBLIC AFFAIRS

Department: PUBLIC AFFAIRS

Information

CAPTION

Resolution in Support of Big Brothers Big Sisters of South Texas

BACKGROUND

For nearly 40 years, Big Brothers Big Sisters of South Texas has helped at risk youth through matching youth with Big Brothers and Big Sisters who serve as mentors.

Fiscal Impact

Attachments

LIT

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/16/2017 02:48 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Jane Lopez		Started On: 03/16/2017 02:37 PM
Final Approval Date: 03/17/2017		

RESOLUTION IN HONOR OF BIG BROTHERS BIG SISTERS

WHEREAS, since 1978, Big Brothers Big Sisters of South Texas has addressed our community's most pressing youth issues, strengthened families, and built stronger communities by facilitating long-lasting, one-to-one mentoring relationships for disadvantaged and at-risk youth.; and

WHEREAS, the County of Hidalgo recognizes the importance and benefits of the activities of Big Brothers Big Sisters in South Texas and nationally, in that the children of our community are tomorrow's leaders; and

WHEREAS, many young people need an effective mentoring program to help them cope with a wide range of social and financial hardships. Big Brothers Big Sisters, through mentoring, is at the forefront of efforts in substance abuse prevention, delinquency prevention, and literacy programs. By participating in the program little brothers and sisters are more confident in their schoolwork, are able to get along better with their families, and are less likely to begin using illegal drugs or alcohol.

NOW, THEREFORE, BE IT RESOLVED that the Hidalgo County Commissioners Court hereby recognizes the important role of volunteer mentors in the Big Brothers Big Sisters program and encourages residents to support Big Brothers Big Sisters of South Texas.

Approved this 21st day of March, 2017.

RAMON GARCIA
County Judge

DAVID L. FUENTES
County Commissioner, Pct. 1

EDUARDO "EDDIE" CANTU
County Commissioner, Pct. 2

JOE M. FLORES
County Commissioner, Pct. 3

JOSEPH PALACIOS
County Commissioner, Pct. 4

Attest: ARTURO GUAJARDO, JR.
County Clerk

AI-58999 **County Judge's Office** **5. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Julia Sullivan, PUBLIC AFFAIRS **Submitted By:** Jane Lopez, PUBLIC AFFAIRS

Department: PUBLIC AFFAIRS

Information

CAPTION

Proclamation declaring March 2017 as Intellectual and Developmental Disabilities Awareness Month

BACKGROUND

Fiscal Impact

Attachments

LIT

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/16/2017 02:48 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Jane Lopez		Started On: 03/16/2017 02:28 PM
Final Approval Date: 03/17/2017		

PROCLAMATION
INTELLECTURAL AND DEVELOPMENTAL DISABILITIES AWARENESS MONTH

WHEREAS, Intellectual and Developmental Disabilities (IDD) affects more than 3.4 million Texans and their families; and

WHEREAS, public awareness and education enhance a community's understanding of the issues affecting people with a diagnosis of IDD; and

WHEREAS, people with a diagnosis of IDD are vital and vibrant members of our communities and can be empowered to assume more active roles and increased participation by improving their generalized quality of life; and

WHEREAS, the month of March has been designated Intellectual and Developmental Disabilities Awareness Month, with more than 1,766 individuals with a diagnosis of Intellectual and Developmental Disabilities in the Rio Grande Valley receiving services from Tropical Texas Behavioral Health; and

WHEREAS, Tropical Texas Behavioral Health has served the residents of the Rio Grande Valley for 50 years with a vision to lead in the management of comprehensive behavioral healthcare resources, facilitate services for individuals with IDD and their families: and to empower them to live full and productive lives as part of their communities.

NOW, THEREFORE, BE IT RESOLVED that the Hidalgo County Commissioners Court proclaims March 2017 as Intellectual and Developmental Disabilities Awareness Month and encourages all residents to support efforts towards empowering people with IDD to live full and productive lives of inclusion in our communities.

Approved this 21st day of March, 2017.

RAMON GARCIA
County Judge

DAVID L. FUENTES
County Commissioner, Pct. 1

EDUARDO "EDDIE" CANTU
County Commissioner, Pct. 2

JOE M. FLORES
County Commissioner, Pct. 3

JOSEPH PALACIOS
County Commissioner, Pct. 4

Attest: ARTURO GUAJARDO, JR.
County Clerk

AI-59043 **County Judge's Office** **5. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Robert Villarreal, COUNTY JUDGE

Submitted By: Sandra Deleon, COUNTY JUDGE

Department: COUNTY JUDGE

Information

CAPTION

Update on Texas A&M McAllen Campus

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 02:57 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Sandra Deleon		Started On: 03/17/2017 02:52 PM
Final Approval Date: 03/17/2017		

AI-58747 **District Attorney** **6. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Rosie Cantu, DISTRICT ATTORNEY

Submitted By: Sylvia Solis, DISTRICT ATTORNEY

Department: DISTRICT ATTORNEY

Information

CAPTION

DA Check Fraud (1222):
Approval of 2017 appropriation of funds in the amount of $9,000.00 to fund fuel expenditures.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1222-412-00-080-006-0-626

FUNDS AVAILABLE Y/N?: Y/Pending **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funds available pending 2017 carryover of fund balances.

Attachments

Appropriation

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	02/28/2017 04:42 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Sylvia Solis		Started On: 02/28/2017 04:33 PM
Final Approval Date: 03/17/2017		

DATE: February 28, 2017

2017
Appropriation

DEPARTMENT HEAD: Ricardo Rodriguez, Jr., District Attorney

DEPARTMENT NAME: District Attorney's Office

ACCOUNT NUMBER: 7-1222-412-00-080-006-0-XXX

Contact Person: Sylvia Solis **Ph#:** (956) 292-7600

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME	AMOUNT
7-1222-412-00-080-006-0-626	DA CHECK FRAUD - GASOLINE/ DIESEL	$9,000.00
	TOTAL BUDGET INCREASE (DECREASE)	**$9,000.00**

REASON: Appropriation to fund fuel expenditures for FY2017.

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

AI-58876 **District Attorney** **6. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Ramiro Sendejo, DISTRICT ATTORNEY

Submitted By: Ramiro Sendejo, DISTRICT ATTORNEY

Department: DISTRICT ATTORNEY

Information

CAPTION

Hidalgo County DA's Office - Victim Assistance Program (VAP) Grant (1281):
Approval to submit a VAP Grant #2924301 budget adjustment to the Office of the Governor (OOG).

BACKGROUND

Approval to reallocate funds within the VAP categorical budget to replace equipment. This will reallocate funds but will not increase or decrease the amount of grant.
Approval to accept grant AI#51339 9/29/2015.

Fiscal Impact

FISCAL YEAR: SEE BELOW **ACCT. #:** 7-1281-412-00-080-017-5-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funds available as of 03/16/2017.

Grant Fiscal Year: 2015
County Calendar Year: 2017

Program Fund: VA-Victims of Crime Act Formula Grant Program - OOG

Attachments

Original Budget
Adjusted Budget

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/08/2017 02:09 PM
Ivan Cantu	Ivan Cantu	03/16/2017 11:23 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Ramiro Sendejo		Started On: 03/07/2017 04:16 PM
Final Approval Date: 03/17/2017		

Print This Page

Agency Name: Hidalgo County
Grant/App: 2924301 **Start Date:** 9/1/2015 **End Date:** 9/30/2017

Project Title: Hidalgo County DA's Office-Victim Assistance Program
Status: Active Grant

Budget Details Information

Budget Information by Budget Line Item:

CATEGORY	SUB CATEGORY	DESCRIPTION	CJD	CASH MATCH	IN-KIND MATCH	GPI	TOTAL	UNIT/%
Personnel	Advocate	Advocate I- prepares victims for interview; provides assessment of victim and family needs and makes appropriate referrals for on-site or off-site services including medical, mental health, crime victims assistance, VINE, etc.; may debrief victim after interview to assess immediate mental/emotional state; may provide immediate crisis intervention counseling or refer to mental health specialist as needed. Base Salary: $33,260 + Fringe Benefits $12,281.63 = $45,541.63. Fringe Benfits Breakdown= Health Insurance $5928, Life Inusurance $37.56 ,FICA $2,544.39, Retirement $3,535.54, Unemployment $199.56 , Workers Comp $36.99= $12,281.63; POSITION START DATE: 11/30/15, EMPLOYEE'S INITIALS:B.F.	$67,972.87	$16,993.22	$0.00	$0.00	$84,966.09	100
Personnel	Advocate	Family Advocate 2 - prepares victims for interview; provides assessment. of victim and family needs and makes appropriate referrals for on-site and/or off-site services including medical, mental health, crime victims assistance, VINE, etc.; may debrief victim after interview to	$67,972.87	$16,993.22	$0.00	$0.00	$84,966.09	100

		assess immediate mental/emotional state of child (and family) and if child (or family) is assessed to be in emotional crisis may provide immediate crisis intervention counseling or refer to mental health specialist. . Base Salary: $33,260 + Fringe Benefits $12,281.63 = $45,541.63. Fringe Benfits Breakdown= Health Insurance $5928, Life Inusurance $37.56 ,FICA $2,544.39, Retirement $3,535.54, Unemployment $199.56 , Workers Comp $36.99= $12,281.63; POSITION START DATE: 12/14/15, EMPLOYEE'S INITIALS:A.Q.						
Personnel	Attorney	The attorney will dedicate 100% of the time overseeing the advocates and will provide guidance on legal procedures; will assist victims in securing rights and services from other agencies; will provide intervention with employers, creditors and others on behalf of the victim; and will provide other general information on rights and remedies available to the victim. Attorney will not be prosecuting cases. Base Salary $51,800 + Fringe Benefits $15,802.38= $67,602.38 Fringe Benefits Breakdown= Health Insurance $5,928, Life Insurance $37.56, FICA $3,962.70, Retirement $5,506.34, Unemployment $310.80, Workers Comp $ 56.98= $15,802.38; POSITION START DATE: 1/25/2016 END DATE 8/22/2016, EMPLOYEE'S INITIALS:A.G.	$36,030.29	$9,007.57	$0.00	$0.00	$45,037.86	100
Personnel	Attorney	The attorney will dedicate 100% of the	$5,765.38	$1,441.35	$0.00	$0.00	$7,206.73	100

		time overseeing the advocates and will provide guidance on legal procedures; will assist victims in securing rights and services from other agencies; will provide intervention with employers, creditors and others on behalf of the victim; and will provide other general information on rights and remedies available to the victim. Attorney will not be prosecuting cases. Base Salary $51,800 + Fringe Benefits $15,802.38= $67,602.38 Fringe Benefits Breakdown= Health Insurance $5,928, Life Insurance $37.56, FICA $3,962.70, Retirement $5,506.34, Unemployment $310.80, Workers Comp $ 56.98= $15,802.38; POSITION START DATE: 9/20/2016 END DATE 10/25/2016, EMPLOYEE'S INITIALS:J.D.						
Personnel	Attorney	The attorney will dedicate 100% of the time overseeing the advocates and will provide guidance on legal procedures; will assist victims in securing rights and services from other agencies; will provide intervention with employers, creditors and others on behalf of the victim; and will provide other general information on rights and remedies available to the victim. Attorney will not be prosecuting cases. Base Salary $51,800 + Fringe Benefits $15,802.38= $67,602.38 Fringe Benefits Breakdown= Health Insurance $5,928, Life Insurance $37.56, FICA $3,962.70, Retirement $5,506.34, Unemployment $310.80, Workers Comp $ 56.98= $15,802.38; POSITION	$75,292.91	$18,823.23	$0.00	$0.00	$94,116.14	100

		START DATE: 1/9/2017 - PRESENT, EMPLOYEE'S INITIALS: D.G.						
Supplies and Direct Operating Expenses	Cellular, Fax, Pager, and/or Office Telephone	Three IP Phones(Office phones), plus licenses and support. These Office phones are to replace older phones that have become obsolete. Office phones will be assign and used by each employee working under this grant; One for the attorney and one for each of the two advocate. Phones are needed to communicate with victims and law enforcement agencies on a daily basis, also will be used for other communications to help the victims. Cost of each phone system plus support cost $400.00	$960.00	$240.00	$0.00	$0.00	$1,200.00	0
Supplies and Direct Operating Expenses	Desktop System and Accessories ($5,000 or less per unit)	Three Computer Systems to replace computers that have become obsolete. Each computer system consist of the following items; One (1) Computer Tower, One (1)LED Monitor, One (1)Printer. Each Computer System will be assign to the employees working under this grant; One for the attorney and one for each of the two advocates. Computers are needed for documentation, storage and analysis of victims data. Each Computer Systems has a cost of $1,166.66.	$2,800.00	$700.00	$0.00	$0.00	$3,500.00	0
Supplies and Direct Operating Expenses	Office Supplies (e.g., paper, postage, calculator)	Office Supplies -- paper, postage, post it, pens, paper clips, calculator.	$6,481.72	$1,620.44	$0.00	$0.00	$8,102.16	0
Supplies and Direct Operating Expenses	Printer, Fax, and/or Scanner Equipment and Accessories ($5,000 or less per unit)	Three Document Scanners. Scanners are needed to scan documents victims fill out and photos of victims injuries. Scanning of these items facilitates storage, analysis and communications with local agencies. Each	$1,200.00	$300.00	$0.00	$0.00	$1,500.00	0

		scanner will be assign to employees working under this grant; One for the attorney and One for each of the two advocates. Each scanner has a cost of $500.00						

You are logged in as **User Name:** HidalgoCDA

Print This Page

Adjusted Budget

Agency Name: Hidalgo County
Grant/App: 2924301 **Start Date:** 9/1/2015 **End Date:** 9/30/2017

Project Title: Hidalgo County DA's Office-Victim Assistance Program
Status: Pending Grantee Certification

Budget Details Information

Budget Information by Budget Line Item:

CATEGORY	SUB CATEGORY	DESCRIPTION	CJD	CASH MATCH	IN-KIND MATCH	GPI	TOTAL	UNIT/%
Personnel	Advocate	Advocate I- prepares victims for interview; provides assessment of victim and family needs and makes appropriate referrals for on-site or off-site services including medical, mental health, crime victims assistance, VINE, etc.; may debrief victim after interview to assess immediate mental/emotional state; may provide immediate crisis intervention counseling or refer to mental health specialist as needed. Base Salary: $33,260 + Fringe Benefits $12,281.63 = $45,541.63. Fringe Benfits Breakdown= Health Insurance $5928, Life Inusurance $37.56 ,FICA $2,544.39, Retirement $3,535.54, Unemployment $199.56 , Workers Comp $36.99= $12,281.63; POSITION START DATE: 11/30/15, EMPLOYEE'S INITIALS:B.F.	$69,572.87	$17,393.22	$0.00	$0.00	$86,966.09	100
Personnel	Advocate	Family Advocate 2 - prepares victims for interview; provides assessment. of victim and family needs and makes appropriate referrals for on-site and/or off-site services including medical, mental health, crime victims assistance, VINE, etc.; may debrief victim after interview to assess immediate mental/emotional state of child (and family) and if child (or family) is assessed to be in emotional crisis may provide immediate crisis intervention counseling or refer to mental health specialist. . Base Salary: $33,260 + Fringe Benefits $12,281.63 = $45,541.63. Fringe Benfits Breakdown= Health Insurance $5928, Life Inusurance $37.56 ,FICA $2,544.39, Retirement $3,535.54, Unemployment $199.56 , Workers Comp $36.99= $12,281.63; POSITION START DATE: 12/14/15, EMPLOYEE'S INITIALS:A.Q.	$67,972.87	$16,993.22	$0.00	$0.00	$84,966.09	100
Personnel	Attorney	The attorney will dedicate 100% of the time overseeing the advocates and will provide guidance on legal procedures; will assist victims in securing rights and services from	$36,030.29	$9,007.57	$0.00	$0.00	$45,037.86	100

		other agencies; will provide intervention with employers, creditors and others on behalf of the victim; and will provide other general information on rights and remedies available to the victim. Attorney will not be prosecuting cases. Base Salary $51,800 + Fringe Benefits $15,802.38= $67,602.38 Fringe Benefits Breakdown= Health Insurance $5,928, Life Insurance $37.56, FICA $3,962.70, Retirement $5,506.34, Unemployment $310.80, Workers Comp $ 56.98= $15,802.38; POSITION START DATE: 1/25/2016 END DATE 8/22/2016, EMPLOYEE'S INITIALS:A.G.						
Personnel	Attorney	The attorney will dedicate 100% of the time overseeing the advocates and will provide guidance on legal procedures; will assist victims in securing rights and services from other agencies; will provide intervention with employers, creditors and others on behalf of the victim; and will provide other general information on rights and remedies available to the victim. Attorney will not be prosecuting cases. Base Salary $51,800 + Fringe Benefits $15,802.38= $67,602.38 Fringe Benefits Breakdown= Health Insurance $5,928, Life Insurance $37.56, FICA $3,962.70, Retirement $5,506.34, Unemployment $310.80, Workers Comp $ 56.98= $15,802.38; POSITION START DATE: 9/20/2016 END DATE 10/25/2016, EMPLOYEE'S INITIALS:J.D.	$5,765.38	$1,441.35	$0.00	$0.00	$7,206.73	100
Personnel	Attorney	The attorney will dedicate 100% of the time overseeing the advocates and will provide guidance on legal procedures; will assist victims in securing rights and services from other agencies; will provide intervention with employers, creditors and others on behalf of the victim; and will provide other general information on rights and remedies available to the victim. Attorney will not be prosecuting cases. Base Salary $51,800 + Fringe Benefits $15,802.38= $67,602.38 Fringe Benefits Breakdown= Health Insurance $5,928, Life Insurance $37.56, FICA $3,962.70, Retirement $5,506.34, Unemployment $310.80, Workers Comp $ 56.98= $15,802.38; POSITION START DATE: 1/9/2017 - PRESENT, EMPLOYEE'S INITIALS: D.G.	$59,698.41	$14,924.61	$0.00	$0.00	$74,623.02	100
Supplies and Direct Operating Expenses	Cellular, Fax, Pager, and/or Office Telephone	Three IP Phones(Office phones), plus licenses and support. These Office phones are to replace older phones that have become obsolete. Office phones will be assign and used by each employee working	$960.00	$240.00	$0.00	$0.00	$1,200.00	0

		under this grant; One for the attorney and one for each of the two advocate. Phones are needed to communicate with victims and law enforcement agencies on a daily basis, also will be used for other communications to help the victims. Cost of each phone system plus support cost $400.00						
Supplies and Direct Operating Expenses	Desktop System and Accessories ($5,000 or less per unit)	Three Computer Systems to replace computers that have become obsolete. Each computer system consist of the following items; One (1)Computer Tower, One (1)LED Monitor, One (1)Printer. Each Computer System will be assign to the employees working under this grant; One for the attorney and one for each of the two advocates. Computers are needed for documentation, storage and analysis of victims data. Each Computer Systems has a cost of $1,166.66.	$2,800.00	$700.00	$0.00	$0.00	$3,500.00	0
Supplies and Direct Operating Expenses	Desktop System and Accessories ($5,000 or less per unit)	One Computer System, which consist of the following: One Computer Tower, One LED Monitor, and One Printer. This Computer system will be placed at the receptionist desk which is located in our New Safe Room.	$880.73	$220.18	$0.00	$0.00	$1,100.91	0
Equipment	Furniture	Office Furniture to be placed in the Safe Room for Crime Victims and their families which consist of the following: One Three Seat Lounge Chair $1,285.18; One Single Seat Lounge chair $714.15; One Two Seat Lounge chair $575.83; One Three Seat chair $723.75; Four Stacker chairs (@ $313.13 each) $1,252.52; One 36" Round Top Table $185.38, One base for 36" Round Top Table $273.27; Twenty Single Seat chairs (@ $209.91 each) $4,198.20; One Multisection Storage $525.00; One Youth Seating Set 4pc $650.00; One Rect Table Resin 48" $216.00; One Canvas Book Display $110.00; One 3-in-1 easel $79.00; One Bilingual Circletime Rug $483.92.	$9,017.76	$2,254.44	$0.00	$0.00	$11,272.20	36
Travel and Training	In-State Incidentals and/or Mileage	Mileage and Incidentals for two advocates and a attorney when required to travel to attend seminars/training for Crime Victims.	$200.00	$50.00	$0.00	$0.00	$250.00	0
Travel and Training	In-State Registration Fees, Training, and/or Travel	Travel to attend seminars/training for two advocates and a attorney for Crime Victims	$1,400.00	$350.00	$0.00	$0.00	$1,750.00	0
Supplies and Direct Operating Expenses	Office Supplies (e.g., paper, postage, calculator)	Office Supplies -- paper, postage, post it, pens, paper clips, calculator.	$6,481.72	$1,620.44	$0.00	$0.00	$8,102.16	0
Supplies	Printer,	Three Document Scanners.	$1,200.00	$300.00	$0.00	$0.00	$1,500.00	0

and Direct Operating Expenses	Fax, and/or Scanner Equipment and Accessories ($5,000 or less per unit)	Scanners are needed to scan documents victims fill out and photos of victims injuries. Scanning of these items facilitates storage, analysis and communications with local agencies. Each scanner will be assign to employees working under this grant; One for the attorney and One for each of the two advocates. Each scanner has a cost of $500.00						
Supplies and Direct Operating Expenses	Printer, Fax, and/or Scanner Equipment and Accessories ($5,000 or less per unit)	One Fax Machine to be used in the Crime Victims section.	$239.99	$60.00	$0.00	$0.00	$299.99	0
Supplies and Direct Operating Expenses	Printer, Fax, and/or Scanner Equipment and Accessories ($5,000 or less per unit)	Equipment use fees. Lease of copier @ $211.50 a month for the remaining seven months in current fiscal year.	$1,184.40	$296.10	$0.00	$0.00	$1,480.50	0
Equipment	Television / Video System and Accessories	Two 55" Television to be placed in the Safe Room for Crime Victims.	$1,071.62	$267.90	$0.00	$0.00	$1,339.52	2

You are logged in as **User Name**: HidalgoCDA

AI-58826 **District Attorney** **6. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Ramiro Sendejo, DISTRICT ATTORNEY

Submitted By: Ramiro Sendejo, DISTRICT ATTORNEY

Department: DISTRICT ATTORNEY

Information

CAPTION

District Attorney's Office - LEOSE (1220):
1. Approval of certification of revenues by the County Auditor for the 2017 LEOSE allocation of the District Attorney's Office in the amount of $1,147.33.

2. Approval of Budget Amendment to appropriate the 2017 LEOSE allocation from the State Comptroller in the amount of $1,147.33.

BACKGROUND

The Comptroller is directed by the Occupations Code, Section 1701.157 to make an annual allocation from the LEOSE account to qualified law enforcement agencies for expenses related to the continuing education of persons licensed under Chapter 1701, Occupations Code. Of the account, 20 percent is allocated equally among the qualified agencies. The remaining 80 percent is allocated on the basis of the number of eligible law enforcement positions each agency had as of January 1 of the preceding calendar year.

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1220-412-00-080-004-0-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Appropriation in the amount of $1,147.33.

Revenue account: 7-1220-335-00-080-000-0-000 LEOSE FUND-DA REVENUE

Attachments

CHECK
TEXAS COM...LEOSE
appropriation-revised

COR

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/03/2017 09:51 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Ramiro Sendejo		Started On: 03/03/2017 09:17 AM
Final Approval Date: 03/17/2017		

THE STATE OF TEXAS PAYMENT INFORMATION

INVOICE NUMBER	INVOICE DATE	INVOICE DESCRIPTION	DOCUMENT	INVOICE AMOUNT
PEACE OFF ALL		PEACE OFFICER ALLOC	9P170528	1,147.33

ISSUE DATE: 02/21/2017 WARRANT TOTAL: $1,147.33

PAYEE NUMBER: 1XXXXX07176 MAIL CODE: 063 WARRANT NUMBER: 136362338

PAYEE NAME: CRIMINAL DISTRICT ATTORNEY / HIDALGO COUNTY

— NON-NEGOTIABLE —

For questions about this payment or to sign up for Direct Deposit, please contact your paying agency:

COMPTROLLER - STATE FISCAL 512-463-4561

Would you like to view:

- Your state payment history and download it?
- The invoice description information for a payment?
- The phone number of the paying agency?

You can view all of this and more on our Search State Payments Issued website. Visit COMPTROLLER.TEXAS.GOV and click on the State Payments Issued link to enroll. While there, visit the Comptroller's Video Library under the 'About' tab for short how-to videos on using Search State Payments Issued.

Also consider enrolling in direct deposit, it's easy. Go to WWW.TXDIRECTDEPOSIT.ORG. Return the completed direct deposit form to the paying agency named on this payment stub.

Printed by Texas Comptroller of Public Accounts
(512) 936-8138 or www.TexasPayeeResources.org

▼ *Detach here before depositing* ▼

TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

TREASURY WARRANT NO.
136362338

FEBRUARY 22, 2017

022117 1XXXXX07176 063 0116 902 9P170528
PAYING AGENCY 512-463-4561 COMPTROLLER - STATE FISCAL

Pay ONE THOUSAND ONE HUNDRED FORTY SEVEN DOLLARS AND 33/100 $ 1,147.33

To CRIMINAL DISTRICT ATTORNEY / HIDALGO COUNTY
100 N CLOSNER BLVD RM 3
EDINBURG, TX 78539-3563

Glenn Hegar
Comptroller of Public Accounts

VOID AFTER 08/31/2019

⑈304⑈ ⑆114900164⑆ ⑈136362338⑈

TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

P.O. Box 13528 • Austin, TX 78711-3528

February 22, 2017

CRIMINAL DISTRICT ATTORNEY / HIDALGO COUNTY
100 N CLOSNER BLVD RM 3
EDINBURG TX 78539-3563

Vendor number: 17460007176-063

Enclosed is your annual allocation payment from the Law Enforcement Officer Standards and Education (LEOSE) account in the amount of $ 1,147.33.

This payment must be used as necessary to ensure the continuing education of persons licensed under Chapter 1701, Occupations Code, or to provide necessary training, as determined by the agency head, to full-time, fully paid law enforcement support personnel in your agency.

Your agency must maintain a complete and detailed record of all money received and spent. All money received is subject to audit by the Comptroller of Public Accounts and all money spent is subject to audit by the State Auditor.

The Comptroller is directed by the Occupations Code, Section 1701.157 to make an annual allocation from the LEOSE account to qualified law enforcement agencies for expenses related to the continuing education of persons licensed under Chapter 1701, Occupations Code. Of the account, 20 percent is allocated equally among the qualified agencies. The remaining 80 percent is allocated on the basis of the number of eligible law enforcement positions each agency had as of January 1 of the preceding calendar year.

An eligible law enforcement position is defined as one held by a person licensed under Chapter 1701, Occupations Code, who works as a peace officer, licensed jailer or telecommunicator on the average of at least 32 hours a week, is compensated by a political subdivision of the state at the minimum wage rate or higher, and is entitled to all employee benefits offered to a peace officer.

To receive your agency's share of the LEOSE account in 2018, you must complete and return the enclosed Law Enforcement Officer Standards and Education Account 2018 Allocation Basis form to us no later than April 28, 2017. The information provided in this report must be accurate and returned timely to our office to ensure the correct allocation of the LEOSE account.

Please call us at 800-531-5441, ext. 3-4530, or 512-463-4530 if you have any questions or if we can be of assistance.

Enclosures

DATE: March 3, 2017

DEPARTMENT HEAD: Ricardo Rodriguez, Criminal District Attorney

DEPARTMENT NAME: District Attorney's Office

ACCOUNT NUMBER: 7-1220-412-00-080-004-0-XXX

Contact Person: Ramiro Sendejo **Ph#** (956)392-7604

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME	AMOUNT
7-1220-412-00-080-004-0-583	TRAVEL OUT OF COUNTY	$822.33
7-1220-412-00-080-004-0-584	REGISTRATION FEES	$325.00
7-1220-335-00-080-000-0-000	LEOSE FUND-DA REVENUE	$1,147.33
	TOTAL BUDGET INCREASE (DECREASE)	**$1,147.33**

REASON: TO APPROPRIATE THE D.A.'S LEOSE FUNDING FROM THE STATE COMPTROLLER.

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

COUNTY of HIDALGO



EDINBURG, TEXAS 78539

HIDALGO COUNTY AUDITOR'S OFFICE
Hidalgo County Administration Building
2808 South Business Highway 281
Edinburg, Texas 78539-6243
PHONE: (956) 318-2511
FAX: (956) 318-2577
WEBSITE: www.co.hidalgo.tx.us/auditor

March 16, 2017

The Honorable Ramon Garcia, Hidalgo County Judge
The Honorable David Fuentes, Commissioner, Precinct No. 1
The Honorable Eduardo "Eddie" Cantu, Commissioner, Precinct No. 2
The Honorable Jose M. Flores, Commissioner, Precinct No. 3
The Honorable Joseph Palacios, Commissioner, Precinct No. 4

RE: Certification of Revenue

Dear Judge and Commissioners:

Pursuant to Local Government Code § 111.0706 SPECIAL BUDGET FOR GRANT OR AID MONEY:

> The county auditor shall certify to the commissioners court the receipt of all public or private grant or aid money that is available for disbursement in a fiscal year but not included in the budget for that fiscal year. On certification, the court shall adopt a special budget for the limited purpose of spending the grant or aid money for its intended purpose.

I, Ray Eufracio, County Auditor of Hidalgo County, certify to the Hidalgo County Commissioners Court the receipt of the LEOSE annual allocation payment from the Texas Comptroller of Public Accounts for the Hidalgo County District Attorney in the amount of $1,147.33. These funds may now be made available by creating a new special budget or amending a current budget for its intended purposes.

CERTIFIED BY:

Raymundo Eufracio, CPA
Hidalgo County Auditor

3/16/17
Date

Nereyda Gonzalez

From: Ramiro Sendejo [ramiro.sendejo@da.co.hidalgo.tx.us]
Sent: Friday, March 03, 2017 4:51 PM
To: ray.eufracio@auditor.co.hidalgo.tx.us
Cc: Linda Fong; Marcela Luna; Nereyda Gonzalez; Rosalinda Cantu
Subject: DA - 2017 LEOSE - Certification of Revenue
Attachments: CHECK.pdf; TEX COM...LEOSE 2017.pdf

Good Afternoon Mr. Eufracio,

Please let this e-mail serve as a formal request for the certification of revenue from your office in relation to the District Attorney's Office LEOSE agenda item.

The total amount requested is $1,147.33.

The agenda item to approve the certification of revenue and the appropriation of these funds is AI-58826, CC 3/21/17.

Thank you for your prompt attention to this matter. If you have any questions, please do not hesitate to contact me at (956)292-7604 ext. 8082.

--

Ramiro Sendejo
Accountant III
Administration Section
Office of Criminal District Attorney
Hidalgo County, Texas
100 E. Cano, Courthouse Annex III, 2nd Floor
Edinburg, TX 78539
(956) 292-7604 ext. 8082
(956) 318-2078 FAX
ramiro.sendejo@da.co.hidalgo.tx.us

AI-58826 **District Attorney 7. 0.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Ramiro Sendejo, DISTRICT ATTORNEY

Submitted By: Ramiro Sendejo, DISTRICT ATTORNEY

Department: DISTRICT ATTORNEY

Information

CAPTION

District Attorney's Office - LEOSE (1220):
1.) Approval of certification of revenues by the County Auditor for the 2017 LEOSE allocation of the District Attorney's Office in the amount of $1,147.33.

2.) Approval of Budget Amendment to appropriate the 2017 LEOSE allocation from the State Comptroller in the amount of $1,147.33.

BACKGROUND

The Comptroller is directed by the Occupations Code, Section 1701.157 to make an annual allocation from the LEOSE account to qualified law enforcement agencies for expenses related to the continuing education of persons licensed under Chapter 1701, Occupations Code. Of the account, 20 percent is allocated equally among the qualified agencies. The remaining 80 percent is allocated on the basis of the number of eligible law enforcement positions each agency had as of January 1 of the preceding calendar year.

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1220-412-00-080-004-0-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Appropriation in the amount of $1,147.33.

Revenue account: 7-1220-335-00-080-000-0-000 LEOSE FUND-DA REVENUE

Attachments

CHECK
TEXAS COM...LEOSE
appropriation-revised

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/03/2017 09:51 AM
Final Approval		
Form Started By: Ramiro Sendejo		Started On: 03/03/2017 09:17 AM

OFFICIAL HIDALGO COUNTY RECEIPT
OFFICE OF THE COUNTY TREASURER
NORMA G. GARCIA

Receipt No: 208280

Received From: DA'S ST. OF TEXAS COMPTROLLER 02/22/17 Date 03/09/17

1	136362338	REVENUE / L.E.O.S.E. FUND	7-1220-335-00-080-000-0-000	1,147.33

Total: **1,147.33**

Check Total	1,147.33
Cash Total	.00
Credit Total	.00
Other Total	.00

THE STATE OF TEXAS PAYMENT INFORMATION

INVOICE NUMBER	INVOICE DATE	INVOICE DESCRIPTION	DOCUMENT	INVOICE AMOUNT
PEACE OFF ALL		PEACE OFFICER ALLOC	9P170528	1,147.33

ISSUE DATE: 02/21/2017 WARRANT TOTAL: $1,147.33

PAYEE NUMBER: 1XXXXX07176 MAIL CODE: 063 WARRANT NUMBER: 136362338

PAYEE NAME: CRIMINAL DISTRICT ATTORNEY / HIDALGO COUNTY

— NON-NEGOTIABLE —

For questions about this payment or to sign up for Direct Deposit, please contact your paying agency:

COMPTROLLER - STATE FISCAL 512-463-4561

Would you like to view:

- Your state payment history and download it?
- The invoice description information for a payment?
- The phone number of the paying agency?

You can view all of this and more on our Search State Payments Issued website. Visit COMPTROLLER.TEXAS.GOV and click on the State Payments Issued link to enroll. While there, visit the Comptroller's Video Library under the 'About' tab for short how-to videos on using Search State Payments Issued.

Also consider enrolling in direct deposit, it's easy. Go to WWW.TXDIRECTDEPOSIT.ORG. Return the completed direct deposit form to the paying agency named on this payment stub.

Printed by Texas Comptroller of Public Accounts
(512) 936-8138 or www.TexasPayeeResources.org

▼ *Detach here before depositing* ▼

TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

TREASURY WARRANT NO.
136362338

FEBRUARY 22, 2017

022117 1XXXXX07176 063 0116 902 9P170528
PAYING AGENCY 512-463-4561 COMPTROLLER - STATE FISCAL

Pay ONE THOUSAND ONE HUNDRED FORTY SEVEN DOLLARS AND 33/100 $ 1,147.33

To CRIMINAL DISTRICT ATTORNEY / HIDALGO COUNTY
100 N CLOSNER BLVD RM 3
EDINBURG, TX 78539-3563

Glenn Hegar
Comptroller of Public Accounts

VOID AFTER 08/31/2019

⑈304⑈ ⑆114900164⑆ ⑈136362338⑈

TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

P.O. Box 13528 • Austin, TX 78711-3528

February 22, 2017

CRIMINAL DISTRICT ATTORNEY / HIDALGO COUNTY
100 N CLOSNER BLVD RM 3
EDINBURG TX 78539-3563

Vendor number: 17460007176-063

Enclosed is your annual allocation payment from the Law Enforcement Officer Standards and Education (LEOSE) account in the amount of $ 1,147.33.

This payment must be used as necessary to ensure the continuing education of persons licensed under Chapter 1701, Occupations Code, or to provide necessary training, as determined by the agency head, to full-time, fully paid law enforcement support personnel in your agency.

Your agency must maintain a complete and detailed record of all money received and spent. All money received is subject to audit by the Comptroller of Public Accounts and all money spent is subject to audit by the State Auditor.

The Comptroller is directed by the Occupations Code, Section 1701.157 to make an annual allocation from the LEOSE account to qualified law enforcement agencies for expenses related to the continuing education of persons licensed under Chapter 1701, Occupations Code. Of the account, 20 percent is allocated equally among the qualified agencies. The remaining 80 percent is allocated on the basis of the number of eligible law enforcement positions each agency had as of January 1 of the preceding calendar year.

An eligible law enforcement position is defined as one held by a person licensed under Chapter 1701, Occupations Code, who works as a peace officer, licensed jailer or telecommunicator on the average of at least 32 hours a week, is compensated by a political subdivision of the state at the minimum wage rate or higher, and is entitled to all employee benefits offered to a peace officer.

To receive your agency's share of the LEOSE account in 2018, you must complete and return the enclosed Law Enforcement Officer Standards and Education Account 2018 Allocation Basis form to us no later than April 28, 2017. The information provided in this report must be accurate and returned timely to our office to ensure the correct allocation of the LEOSE account.

Please call us at 800-531-5441, ext. 3-4530, or 512-463-4530 if you have any questions or if we can be of assistance.

Enclosures

DATE: March 3, 2017

DEPARTMENT HEAD: Ricardo Rodriguez, Criminal District Attorney

DEPARTMENT NAME: District Attorney's Office

ACCOUNT NUMBER: 7-1220-412-00-080-004-0-XXX

Contact Person: Ramiro Sendejo **Ph#** (956)392-7604

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME	AMOUNT
7-1220-412-00-080-004-0-583	TRAVEL OUT OF COUNTY	$822.33
7-1220-412-00-080-004-0-584	REGISTRATION FEES	$325.00
7-1220-335-00-080-000-0-000	LEOSE FUND-DA REVENUE	$1,147.33
	TOTAL BUDGET INCREASE (DECREASE)	**$1,147.33**

REASON: TO APPROPRIATE THE D.A.'S LEOSE FUNDING FROM THE STATE COMPTROLLER.

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

__/__/__
DATE

ATTEST COUNTY CLERK

AI-59051 **County Clerk** **7. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Arturo Guajardo, COUNTY CLERK **Submitted By:** Sandra Solis, COUNTY CLERK

Department: COUNTY CLERK

Information

CAPTION

Discussion and action ratifying the transfer of Justice of the Peace Precinct 2, Place 2, duties as local registrar to the Clerk of the County of Hidalgo, Texas.

BACKGROUND

Fiscal Impact

Attachments

Transfer of Duty Letter
order

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 04:44 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Sandra Solis		Started On: 03/17/2017 03:43 PM
Final Approval Date: 03/17/2017		

JAIME "JERRY" MUNOZ
HIDALGO COUNTY JUSTICE OF THE PEACE
PRECINCT TWO, PLACE TWO

300 West Hall Acres, Suite D ~ Pharr, Texas 78577 ~ Phone No. 956-787-1986 ~ Fax No. 956-787-9343

March 10, 2017

Arturo Guajardo, Jr.
Hidalgo County Clerk
100 N. Closner Blvd, 1st Floor
Edinburg, TX 78539

Dear Mr. Guajardo,

As you are aware, my office is currently a local registrar of birth and deaths in Precinct 2 of Hidalgo County. I am writing you to request that this duty be transferred to the office of the Hidalgo County Clerk as permitted by the Texas Health and Safety Code.

Please allow this correspondence and your signature below to stand as our agreement that upon ratification of the Hidalgo County Commissioners' Court, the birth and death records of the Justice of the Peace of the County of Hidalgo, Texas Precinct 2 Place 2, shall be transferred to the Hidalgo County Clerk.

Sincerely yours,

JAIME J. MUNOZ PRCT. 2 PL. 2 HIDALGO COUNTY TEXAS JUSTICE OF PEACE

Jaime Jerry Munoz,
Justice of the Peace, Precinct 2, Place 2

Arturo Guajardo, Jr.,
Clerk of the County of Hidalgo, Texas

RATIFICATION OF TRANSFER OF JUSTICE OF THE PEACE PRECINCT 2, PLACE 2, DUTIES AS LOCAL REGISTRAR TO THE CLERK OF THE COUNTY OF HIDALGO, TEXAS

WHEREAS, Section 191.021, Subsection (a)(1) Texas Health and Safety Code, provides that the Office of the Justice of Peace Precinct 2, Place 2 is the local registrar of births and deaths in Precinct 2 of the County of Hidalgo, Texas; and

WHEREAS, Section 191.022, Subsection (a) provides that the a justice of the peace may transfer the duty of registering births and deaths to a county clerk if the justice of the peace and the county clerk agree in writing and the agreement is ratified by the commissioners court; and

WHEREAS, The office of Jaime Jerry Munoz, the Justice of the Peace, Precinct 2, Place 2, of the County of Hidalgo, Texas desires to consolidate the birth, death, and fetal death records of the precinct and the County of Hidalgo, Texas; and

WHEREAS, the office of Arturo Guajardo, Jr., Clerk of the County of Hidalgo, Texas, desires to consolidate the birth, death, and fetal death records of the precinct and the County of Hidalgo, Texas; and

WHEREAS, the office of Jaime Jerry Munoz, the Justice of the Peace, Precinct 2, Place 2, of the County of Hidalgo, Texas and office of Arturo Guajardo, Jr., Clerk of the County of Hidalgo, Texas have agreed in writing to undertake such a consolidation of records; and

WHEREAS, the citizens of the County of Hidalgo, Texas would be better served by having all birth, death and fetal death records in a central location, now

Therefore be it RATIFIED, by County Commissioner's Court of the County of Hidalgo, Texas that:

Effective March 21, 2017, the records of the Justice of the Peace of the County of Hidalgo, Precinct 2, Place 2 will be consolidated with the records of the Office of the Clerk of the County of Hidalgo, Texas a local registrar, and all duties imposed by Title 3 of the Texas Health and Safety Code related thereto.

Adopted at a regular meeting of the Hidalgo County Commissioner's Court on this ____ day of _____, 2017

RAMON GARCIA
County Judge

DAVID L. FUENTES
County Commissioner, Pct. 1

EDUARDO CANTU
County Commissioner, Pct. 2

JOE M. FLORES
County Commissioner, Pct. 3

JOSEPH PALACIOS
County Commissioner, Pct. 4

Attest: ARTURO GUAJARDO
Hidalgo County Clerk

AI-58874 **Constables** **8. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Martin Cantu, CONSTABLE PCT. #2

Submitted By: Norma Castrellon, CONSTABLE PCT. #2

Department: CONSTABLE PCT. #2

Information

CAPTION

Constable Pct. 2:
1. Authorization to accept the Approval Notice in reference to Operation Stonegarden FY 2016 for the amount of $75,000.00.
2. Authorization and approval for County Judge, as authorized official, to Electronically accept grant award form and related documents.
3. Authorization to pay Overtime reimbursable under the grant terms and conditions.
4. Approval of Certification of Revenues as certified by the County Auditor for the FY 2016 Operation Stonegarden Grant.
5. Approval to appropriate the budget for Constable Pct. 2 Office portion of the FY 2016 Operation Stonegarden Grant in the amount of $75,000.00.

BACKGROUND

On 02/21/17, Commissioner's Court Approved the Authorization to apply for the FY 2016 Operation Stonegarden Grant from the Office of the Governor, department of Homeland Security, FEMA
(AI #58431).

Grant No. 3174802
Grant Operation: Date is from 01/01/2017 to 08/01/218.

Fiscal Impact

FISCAL YEAR: 2019 **ACCT. #:** 7-1284-421-00-292-047-9-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

No local match is required. Approval to accept Operation Stonegarden 2016 grant. Revenue Acct. # 7-1284-331-12-292-047-9-XXX Operation Stonegarden Revenues.

Attachments

appropriation

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/08/2017 02:09 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Norma Castrellon Started On: 03/07/2017 02:25 PM

Final Approval Date: 03/17/2017

DATE: March 20, 2017

2017
Appropriation

DEPARTMENT HEAD: Constable Martin N. Cantu

DEPARTMENT NAME: Constable Pct. 2 (292)

ACCOUNT NUMBER: 7-1284-421-00-292-047-9-XXX

Contact Person: Chief Armando Campos **Ph#** 956-784-3510

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME	AMOUNT
7-1284-421-00-292-047-9-131	CONST PCT2 OPSG-OVERTIME PAY	61,055.03
7-1284-421-00-292-047-9-220	CONST PCT2 OPSG-FICA	4,670.71
7-1284-421-00-292-047-9-230	CONST PCT2 OPSG-RETIREMENT	7,003.01
7-1284-421-00-292-047-9-250	CONST PCT2 OPSG-UNEMPLOYMENT COMP	366.33
7-1284-421-00-292-047-9-260	CONST PCT2 OPSG-WORKERS COMP	1,904.92
7-1284-331-12-292-047-9-000	CONST PCT2 OPSG-REVENUES	75,000.00
	TOTAL BUDGET INCREASE (DECREASE)	**75,000.00**

REASON: To appropriate the budget for the FY 2016 Operation Stonegarden Grant for Constable Pct 2. The grant was awarded by the Office of the Governor's Homeland Security Grants Division (HSGD)
Grant Number: 3174802; Grant period is from 01/01/17 to 08/31/18

Note: Expenses relating to health and life insurance that are assigned to the overtime hours are to be charged to the Constable Pct.2 general fund budget (7-1100-421-00-292-001-0-XXX)

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

3/20/17
DATE

ATTEST COUNTY CLERK

AI-58890 **Constables** **8. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Martin Cantu, CONSTABLE PCT. #2

Submitted By: Norma Castrellon, CONSTABLE PCT. #2

Department: CONSTABLE PCT. #2

Information

CAPTION

Constable Pct. 2 LEOSE:(1220)
1. Approval of Certification of revenues, as certified by the County Auditor, for the 2017 LEOSE (Peace Officer Allocation) funds award received from the Texas Comptroller of Public Accounts Office in the amount of $1448.79.
2. Approval of 2016 Appropriation of funds for the Constable Pct. 2 - LEOSE (1220) in the amount of $1448.79.

BACKGROUND

Fiscal Impact

Attachments

Appropriation
Check 2017
COR

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/09/2017 11:05 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Norma Castrellon Started On: 03/09/2017 09:49 AM
Final Approval Date: 03/17/2017

DATE: January 24, 2017

2017
Appropriation
AI-

DEPARTMENT HEAD: Constable Martin "Marty" Cantu

DEPARTMENT NAME: Constable Pct 2

ACCOUNT NUMBER: 7-1220-421-00-292-002-02-583

Contact Person: Norma V. Castrellon **Ph#:**

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME		AMOUNT
7-1220-421-00-292-002-0-583	Const. Pct. 2 - LEOSE	Travel Out of County	1,448.79
7-1220-335-00-292-000-0-000	LEOSE fund	Const Pct. 2 Revenue	$1,448.79
	TOTAL BUDGET INCREASE (DECREASE)		$1,448.79

REASON: To appropiate the Constable Pct. 2 LEOSE funds allocation from the State Comptroller in the amount of $1448.79.

Armando Campos, Chief
DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

THE STATE OF TEXAS PAYMENT INFORMATION

INVOICE NUMBER	INVOICE DATE	INVOICE DESCRIPTION	DOCUMENT	INVOICE AMOUNT
PEACE OFF ALL		PEACE OFFICER ALLOC	9P170528	1,448.79

ISSUE DATE: 02/21/2017 WARRANT TOTAL: $1,448.79

PAYEE NUMBER: 1XXXXX07176 MAIL CODE: 044 WARRANT NUMBER: 136362337

PAYEE NAME: HIDALGO COUNTY CONSTABLE PCT #2

— NON-NEGOTIABLE —

For questions about this payment or to sign up for Direct Deposit, please contact your paying agency:

COMPTROLLER - STATE FISCAL 512-463-4561

Would you like to view:

- Your state payment history and download it?
- The invoice description information for a payment?
- The phone number of the paying agency?

You can view all of this and more on our Search State Payments Issued website. Visit COMPTROLLER.TEXAS.GOV and click on the State Payments Issued link to enroll. While there, visit the Comptroller's Video Library under the 'About' tab for short how-to videos on using Search State Payments Issued.

Also consider enrolling in direct deposit, it's easy. Go to WWW.TXDIRECTDEPOSIT.ORG. Return the completed direct deposit form to the paying agency named on this payment stub.

Printed by Texas Comptroller of Public Accounts
(512) 936-8138 or www.TexasPayeeResources.org

▼ *Detach here before depositing* ▼

TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

TREASURY WARRANT NO.
136362337

FEBRUARY 22, 2017

022117 1XXXXX07176 044 0116 902 9P170528
PAYING AGENCY 512-463-4561 COMPTROLLER - STATE FISCAL

Pay ONE THOUSAND FOUR HUNDRED FORTY EIGHT DOLLARS AND 79/100 $ 1,448.79

To HIDALGO COUNTY CONSTABLE PCT #2
300 W HALL ACRES RD STE E
PHARR, TX 78577-5486

VOID AFTER 08/31/2019

Glenn Hegar
Comptroller of Public Accounts

⑈304⑈ ⑆114900164⑆ ⑈136362337⑈

COUNTY of HIDALGO



EDINBURG, TEXAS 78539

HIDALGO COUNTY AUDITOR'S OFFICE
Hidalgo County Administration Building
2808 South Business Highway 281
Edinburg, Texas 78539-6243
PHONE: (956) 318-2511
FAX: (956) 318-2577
WEBSITE: www.co.hidalgo.tx.us/auditor

March 16, 2017

The Honorable Ramon Garcia, Hidalgo County Judge
The Honorable David Fuentes, Commissioner, Precinct No. 1
The Honorable Eduardo "Eddie" Cantu, Commissioner, Precinct No. 2
The Honorable Jose M. Flores, Commissioner, Precinct No. 3
The Honorable Joseph Palacios, Commissioner, Precinct No. 4

RE: Certification of Revenue

Dear Judge and Commissioners:

Pursuant to Local Government Code § 111.0706 SPECIAL BUDGET FOR GRANT OR AID MONEY:

> The county auditor shall certify to the commissioners court the receipt of all public or private grant or aid money that is available for disbursement in a fiscal year but not included in the budget for that fiscal year. On certification, the court shall adopt a special budget for the limited purpose of spending the grant or aid money for its intended purpose.

I, Ray Eufracio, County Auditor of Hidalgo County, certify to the Hidalgo County Commissioners Court the receipt of the LEOSE annual allocation payment from the Texas Comptroller of Public Accounts for Constable Precinct 2 in the amount of $1,448.79. These funds may now be made available by creating a new special budget or amending a current budget for its intended purposes.

CERTIFIED BY:

Raymundo Eufracio, CPA
Hidalgo County Auditor

3/16/17
Date

HIDALGO COUNTY DISTRICT JUDGES

LUIS M. SINGLETERRY JUDGE, 92ND D.C. | RODOLFO DELGADO JUDGE, 93RD D.C. | J. R. "BOBBY" FLORES JUDGE, 139TH D.C. | ROSE GUERRA REYNA JUDGE, 206TH D.C. | JUAN R. PARTIDA JUDGE, 275TH D.C. | MARIO E. RAMIREZ, JR. JUDGE, 332ND D.C. | NOE GONZALEZ JUDGE, 370TH D.C. OVERSEER | LETICIA LOPEZ JUDGE, 389TH D.C. | L. KENO VASQUEZ JUDGE, 398TH D.C. | ISRAEL RAMON, JR. JUDGE, 430TH D.C. | RENEE R. BETANCOURT JUDGE, 449TH D.C.

Nereyda Gonzalez

From: Norma V. Castrellon [norma.castrellon1@co.hidalgo.tx.us]
Sent: Wednesday, March 15, 2017 4:51 PM
To: ray.eufracio@auditor.co.hidalgo.tx.us
Cc: Linda Fong; nereyda.gonzalez@auditor.co.hidalgo.tx.us
Subject: Certification of Revenues
Attachments: 20170315165047628.pdf

Mr. Eufracio,
Requesting certification of revenue, check has been send to the Treasure dept for deposit.

Thank You,
Norma Castrellon - Administrative Assistance II for Constable Martin "Marty" Cantu Pct. 2
Constable's Office Office (956)784-3510 ext: 2303 Fax (956)784-8687
norma.castrellon1@co.hidalgo.tx.us

AI-58890 **Constables 12. 0.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Martin Cantu, CONSTABLE PCT. #2

Submitted By: Norma Castrellon, CONSTABLE PCT. #2

Department: CONSTABLE PCT. #2

Information

CAPTION

Constable Pct. 2 LEOSE:(1220)
1. Approval of Certification of revenues, as certified by the County Auditor, for the 2017 LEOSE (Peace Officer Allocation) funds award received from the Texas Comptroller of Public Accounts Office in the amount of $1448.79.
2. Approval of 2016 Appropriation of funds for the Constable Pct. 2 - LEOSE (1220) in the amount of $1448.79.

BACKGROUND

Fiscal Impact

Attachments

Appropriation
Check 2017

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/09/2017 11:05 AM
Final Approval		
Form Started By: Norma Castrellon		Started On: 03/09/2017 09:49 AM

OFFICIAL HIDALGO COUNTY RECEIPT
OFFICE OF THE COUNTY TREASURER
NORMA G. GARCIA

Receipt No: 208460

Received From: CONST. PCT. 2 STATE OF TX. COMPTROLLER Date 03/16/17

1	136362337	L.E.O.S.E. FUND	7-1220-335-00-292-000-0-000	1,448.79
			Total:	**1,448.79**

Check Total	1,448.79
Cash Total	.00
Credit Total	.00
Other Total	.00

THE STATE OF TEXAS PAYMENT INFORMATION

INVOICE NUMBER	INVOICE DATE	INVOICE DESCRIPTION	DOCUMENT	INVOICE AMOUNT
PEACE OFF ALL		PEACE OFFICER ALLOC	9P170528	1,448.79

ISSUE DATE: 02/21/2017 WARRANT TOTAL: $1,448.79

PAYEE NUMBER: 1XXXXX07176 MAIL CODE: 044 WARRANT NUMBER: 136362337

PAYEE NAME: HIDALGO COUNTY CONSTABLE PCT #2

— NON-NEGOTIABLE —

For questions about this payment or to sign up for Direct Deposit, please contact your paying agency:

COMPTROLLER - STATE FISCAL 512-463-4561

Would you like to view:

- Your state payment history and download it?
- The invoice description information for a payment?
- The phone number of the paying agency?

You can view all of this and more on our Search State Payments Issued website. Visit COMPTROLLER.TEXAS.GOV and click on the State Payments Issued link to enroll. While there, visit the Comptroller's Video Library under the 'About' tab for short how-to videos on using Search State Payments Issued.

Also consider enrolling in direct deposit, it's easy.
Go to WWW.TXDIRECTDEPOSIT.ORG. Return the completed direct deposit form to the paying agency named on this payment stub.

Printed by Texas Comptroller of Public Accounts
(512) 936-8138 or www.TexasPayeeResources.org

▼ *Detach here before depositing* ▼

TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

TREASURY WARRANT NO.
136362337

FEBRUARY 22, 2017

022117 1XXXXX07176 044 0116 902 9P170528
PAYING AGENCY 512-463-4561 COMPTROLLER - STATE FISCAL

Pay ONE THOUSAND FOUR HUNDRED FORTY EIGHT DOLLARS AND 79/100 $ 1,448.79

To HIDALGO COUNTY CONSTABLE PCT #2
300 W HALL ACRES RD STE E
PHARR, TX 78577-5486

VOID AFTER 08/31/2019

Glenn Hegar
Comptroller of Public Accounts

Void Void Void Void Void Void Void Void

⑈304⑈ ⑆114900164⑆ ⑈136362337⑈

TEXAS COMPTROLLER OF PUBLIC ACCOUNTS

P.O. Box 13528 • Austin, TX 78711-3528

February 22, 2017

HIDALGO COUNTY CONSTABLE PCT #2
300 W HALL ACRES RD STE E
PHARR TX 78577-5486

Vendor number: 17460007176-044

Enclosed is your annual allocation payment from the Law Enforcement Officer Standards and Education (LEOSE) account in the amount of $ 1,448.79.

This payment must be used as necessary to ensure the continuing education of persons licensed under Chapter 1701, Occupations Code, or to provide necessary training, as determined by the agency head, to full-time, fully paid law enforcement support personnel in your agency.

Your agency must maintain a complete and detailed record of all money received and spent. All money received is subject to audit by the Comptroller of Public Accounts and all money spent is subject to audit by the State Auditor.

The Comptroller is directed by the Occupations Code, Section 1701.157 to make an annual allocation from the LEOSE account to qualified law enforcement agencies for expenses related to the continuing education of persons licensed under Chapter 1701, Occupations Code. Of the account, 20 percent is allocated equally among the qualified agencies. The remaining 80 percent is allocated on the basis of the number of eligible law enforcement positions each agency had as of January 1 of the preceding calendar year.

An eligible law enforcement position is defined as one held by a person licensed under Chapter 1701, Occupations Code, who works as a peace officer, licensed jailer or telecommunicator on the average of at least 32 hours a week, is compensated by a political subdivision of the state at the minimum wage rate or higher, and is entitled to all employee benefits offered to a peace officer.

To receive your agency's share of the LEOSE account in 2018, you must complete and return the enclosed Law Enforcement Officer Standards and Education Account 2018 Allocation Basis form to us no later than April 28, 2017. The information provided in this report must be accurate and returned timely to our office to ensure the correct allocation of the LEOSE account.

Please call us at 800-531-5441, ext. 3-4530, or 512-463-4530 if you have any questions or if we can be of assistance.

Enclosures

DATE: January 24, 2017

2017
Appropriation
AI-

DEPARTMENT HEAD: Constable Martin "Marty" Cantu

DEPARTMENT NAME: Constable Pct 2

ACCOUNT NUMBER: 7-1220-421-00-292-002-02-583

Contact Person: Norma V. Castrellon Ph#:

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME		AMOUNT
7-1220-421-00-292-002-0-583	Const. Pct. 2 - LEOSE	Travel Out of County	1,448.79
7-1220-335-00-292-000-0-000	LEOSE fund	Const Pct. 2 Revenue	$1,448.79
		TOTAL BUDGET INCREASE (DECREASE)	$1,448.79

REASON: To appropiate the Constable Pct. 2 LEOSE funds allocation from the State Comptroller in the amount of $1448.79.

Armando Campos, Chief
DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

AI-58786 **Constables** **8. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Rene Gonzalez, CONSTABLE PCT. #3

Submitted By: Raquel Ramos, CONSTABLE PCT. #3

Department: CONSTABLE PCT. #3

Information

CAPTION

Constable Pct. 3 - OPSG (1284)
1. Authorization to accept the Approval Notice in reference to Operation Stonegarden FY 2016 for the amount of $80,000.00.
2. Authorization and approval for County Judge, as authorized official, to electronically accept grant award form and related documents.
3. Authorization to pay Overtime reimburseable under the grant terms and conditions.
4. Approval of Certification of Revenues as certified by the County Auditor for the FY 2016 Operation Stonegarden Grant in the amount of $80,000.00.
5. Approval to appropriate the budget for Constable Pct. 3 portion of the FY 2016 Operation Stonegarden Grant in the amount of $80,000.00.

BACKGROUND

Grant No. 3174902
Grant Operation Date is from 1/1/17 to 8/31/18.

Fiscal Impact

FISCAL YEAR: 2019 **ACCT. #:** 7-1284-421-00-293-047-9-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

No local match is required; approval to accept grant. Appropriation of funds.
Revenue Acct # 7-1284-331-12-293-047-9-000

Attachments

Appropriation

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/03/2017 09:50 AM
Ivan Cantu	Debbie Tamez	03/03/2017 05:09 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Raquel Ramos Started On: 03/02/2017 10:38 AM
Final Approval Date: 03/17/2017

DATE: March 9, 2017

DEPARTMENT HEAD: Lazaro Gallardo, Jr.

DEPARTMENT NAME: Hidalgo County Constable Pct. 3

ACCOUNT NUMBER: 7-1284-421-00-293-047-8-XXX

Contact Person: Raquel Ramos Ph#: 956-205-7031

2017
Appropriation

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME		AMOUNT
7-1284-421-00-293-047-9-131	Constable Pct. 3 OPSG	Overtime Pay	$ 65,125.37
7-1284-421-00-293-047-9-220	Constable Pct. 3 OPSG	FICA	$ 4,982.09
7-1284-421-00-293-047-9-230	Constable Pct. 3 OPSG	Retirement	$ 7,469.88
7-1284-421-00-293-047-9-250	Constable Pct. 3 OPSG	Unemployment Comp.	$ 390.75
7-1284-421-00-293-047-9-260	Constable Pct. 3 OPSG	Worker's Comp.	$ 2,031.91
		Total Appropriation	**$ 80,000.00**
7-1284-331-12-293-047-9-000	Constable Pct. 3 OPSG	Revenues	$ 80,000.00
		Total Revenues	**$ 80,000.00**

REASON: To appropriate the budget for the FY 16 Operation Stonegarden Grant for the Constable Pct. 3 Department. The grant was awarded by the US Department of Homeland Security, Federal Emergency Management Agency (FEMA) pass through the Texas Office of the Governor - Homeland Security Grants Division (HSGD)

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

AI-58880 **Constables** **8. D.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Horaldo Sanchez, CONSTABLE PCT. #4

Submitted By: Nayla Munoz, CONSTABLE PCT. #4

Department: CONSTABLE PCT. #4

Information

CAPTION

Constable Precinct #4 (1284):
1.Authorization to accept the Approval Notice in reference to Operation Stonegarden FY2016 for the amount of $75,000.00.
2. Authorization and approval for County Judge, as authorized official, to electronically accept grant award form and related documents.
3. Authorization to pay Overtime reimbursable under the grant terms and conditions.
4. Approval of Certification of Revenues as certified by the County Auditor for the FY2016 Operation Stonegarden Grant in the amount of $75,000.00.
5. Approval to appropriate the budget for Hidalgo County Constable Precinct 4 portion of the FY2016 Operation Stonegarden Grant in the amount of $75,000.00.

BACKGROUND

Grant No. 3175002
Grant Dates: 1/1/2017 to 8/31/2018

Fiscal Impact

FISCAL YEAR: 2016 **ACCT. #:** 7-1284-421-00-294-047-9-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Appropriation of funds.

Grant Fiscal Year: 2016

Attachments

Appropriation

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/08/2017 04:24 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Nayla Munoz Started On: 03/08/2017 11:36 AM
Final Approval Date: 03/17/2017

DATE: March 8, 2017

2017
Appropriation

DEPARTMENT HEAD: Constable Atanacio Gaitan

DEPARTMENT NAME: Constable Pct. 4 (294)

ACCOUNT NUMBER: 7-1284-421-00-294-047-9-XXX

Contact Person: Horaldo Sanchez **Ph#:** (956) 383-8560

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME	AMOUNT
7-1284-421-00-294-047-9-131	CONST PCT4 OPSG-OVERTIME PAY	61,055.03
7-1284-421-00-294-047-9-220	CONST PCT4 OPSG-FICA	4,670.71
7-1284-421-00-294-047-9-230	CONST PCT4 OPSG-RETIREMENT	7,003.01
7-1284-421-00-294-047-9-250	CONST PCT4 OPSG-UNEMPLOYMENT COMP	366.33
7-1284-421-00-294-047-9-260	CONST PCT4 OPSG-WORKERS COMP	1,904.92
7-1284-331-12-294-047-9-000	CONST PCT4 OPSG-REVENUES	75,000.00
	TOTAL BUDGET INCREASE (DECREASE)	**75,000.00**

REASON:

To appropriate the budget for the FY 2016 Operation Stonegarden Grant for Constable Pct 4. The grant was awarded by the Office of the Governor's Homeland Security Grants Division (HSGD)
Grant Number: 3175002 ; Grant period is from 1/1/2017 - 8/31/2018.

Note: Expenses relating to health and life insurance that are assigned to the overtime hours are to be charged to the Constable Pct.4 general fund budget (7-1100-421-00-294-001-0-XXX)

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

AI-58932 **Sheriff's Office** **9. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Gabriel Castaneda, SHERIFF DEPT.

Submitted By: Emilia Uriegas, SHERIFF DEPT.

Department: SHERIFF DEPT.

Information

CAPTION

Discussion, consideration, and approval to appoint Susie Hernandez as an intern under the Hidalgo County Sheriff's Office Law Enforcement Internship Program for the period of March 27, 2017 through May 31, 2017.

BACKGROUND

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

No budgetary impact.

Attachments

intern

Form Review

Inbox	Reviewed By	Date
Emilia Uriegas (Originator)	Emilia Uriegas	03/15/2017 12:39 PM
Budget & Management	Veronica Ortiz	03/15/2017 01:28 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Emilia Uriegas		Started On: 03/13/2017 11:14 AM
Final Approval Date: 03/17/2017		

Hidalgo County Sheriff's Office Law Enforcement Internship Program

Applicant: _____

Eligibility criteria:

- — 18 years of age. DL#_____
- — In good academic standing at the school they are attending (if applicable).
- — Legally authorized to work in the United States.
- — Must not have any convictions of a misdemeanor above a Class B, and/or a crime of moral, or a felony.
- — Subject to a criminal history check.
- — Memorandum of Understanding with the education institution must be on file with the Sheriff's Office (if applicable).

Internship Program Participation Assignment:

- ☐ **Internal Affairs**
- ☐ **Academy Training Facility**
- ☐ **Communications**
- ☐ **Patrol**
- ☐ **Civil Process**
- ☐ **Investigations**
- ☐ **Crime Scene Specialist & Evidence/Property**
- ☐ **Detention Facility**
- ☐ **Intel. Research & Analysis**
- ☐ **Crime Prevention**

Internship Duration: _____

_____

Signature

Hidalgo County Sheriff's Office Law Enforcement Internship Program

Purpose

The Hidalgo County Sheriff's Office (HCSO) Internship Program is a valuable learning experience for educators, college and/or university students and graduates seeking a career in Criminal Justice or other related fields. The program introduces Interns to various aspects of Law Enforcement which will enhance their understanding of the criminal justice system. The length of the Internship is determined by the Intern's educational institution curriculum or a predetermined time frame as agreed to by the HCSO. The HCSO's internships are a non paid position.

Eligibility

Applicants must meet the following criteria:

1. 18 years of age.
2. In good academic standing at the school they are attending (if applicable).
3. Legally authorized to work in the United States.
4. Must not have any convictions of a misdemeanor above a Class B, and/or a crime of moral, or a felony.
5. Subject to a criminal history check.
6. Memorandum of Understanding with the education institution must be on file with the Sheriff's Office (if applicable).

Guidelines and Restrictions

Interns will conform to the dress code of business casual wear and are not permitted to wear any type of clothing that could be construed as a law enforcement uniform. Interns shall be provided a copy of the Hidalgo County Personnel Policy Manual, must complete the pre-employment training and enrollment requirements prior to commencing, and will sign all relevant forms and acknowledgments as applicable, including but not limited to, personnel policy acknowledgement, harassment, nondiscrimination, and waiver of liability release form (as applicable).

The Intern must abide by all existing Federal, State, County, District laws, rules and/or regulations. The participating office/department will be responsible for

orienting students to the organization. Orientation should include, but is not limited to the following:

- A clear list of expectations, duties and goals;
- Section-specific policies and procedures;
- A list of the resources available to the Intern (i.e., a workstation that has been set up for the Intern, supplies and items needed by the Intern); and
- Any other relevant information for the Intern to be successful during the course of the Internship.

All Interns are considered at-will placements, and the placement can be terminated at any time at the discretion of the HCSO.

Upon completion of the Internship period, Interns are not automatically entitled to a paid position within the County, and/or the HCSO.

Standards of Conduct

All Interns must abide by the standards of conduct as outlined in the Hidalgo County Personnel Policy Manual and The HCSO (as applicable), and are responsible for complying with the required standards of conduct.

At a minimum, all Interns are required to conduct themselves in a professional manner at all times and to use discretion when dealing with sensitive matters and confidential information. Interns will conform to the dress code of business casual wear and are not permitted to wear any type of clothing that could be construed as a law enforcement uniform. Interns must maintain hygiene and grooming in a business-like manner that is appropriate to the section placement and which reflects positively on the HCSO.

If any policy or standard of conduct is violated by the Intern during the Internship period, the Intern will be terminated at the discretion of the HCSO.

Internship Program

Interns may be assigned to a structured schedule within various sections within the four major divisions of the HCSO, to include the following:

1. **Internal Affairs:** The Intern will experience the various aspects of the hiring process. Duties may include accompanying the background Investigator on home visits, reviewing and validating information given by applicants with respect to criminal charges, finances, references, employment, as well as any other information discovered during the background investigation.

2. **Academy Training Facility** and observe the different types of training law enforcement officers are required to attend.

3. **Communications:** The Intern may spend a day in the Sheriff's Office Communication Unit and experience first hand the responsibilities of a dispatcher. They will learn the 911 call taking process and review how each call is categorized according to its priority, and then disseminated to the responding deputies. The Intern may assist with the process involved obtaining vital information for reports such as runaways, and welfare concerns. They will also see how Hidalgo County is divided into sectors and evaluate the response time by deputies is handled.

4. **Patrol Deputy:** The Intern will accompany a Patrol Deputy during their tour of duty. The Intern will have a better understanding of patrol operations. He/She may experience an arrest or subdue resisting subjects while employing defensive tactic maneuvers. The Intern may be a part of a situation involving a pursuit involving speeds that are in excess of posted limits while exercising due care and caution. The Intern will be exposed to the paperwork involved with each contact made.

5. **Civil Process:** The Intern will see first hand how civil citations, subpoenas, and protective orders are assigned to civil deputies. The Intern will experience riding along with the deputy in his daily service of serving legal documents. They may assist a transport deputy in transporting inmates or patients to various destinations. They will gather files and receive identifiers to facilitate the transportation of a wanted subject from other counties or out of state.

6. **Investigations:** The Intern will sit through CID briefing in the morning and shadow the experiences of an Investigator. The Intern will begin with an **Intake Investigator** and experience the beginning process of arrest cases that were completed during the night. The Intern will experience the arraignment process and would assist the Intake Investigator in handling misdemeanor cases such as Harassment, Unauthorized Use of Motor Vehicle, and Assaults. Later, the Intern will learn the tasks of a **Juvenile Investigator**. The Intern will experience first hand the various cases involving youth offenders. When a

juvenile is apprehended for the first time after violating the law, the process is very different compared to an adult offender. The Intern will learn several aspects of the Juvenile Justice system ranging from processing of juveniles through the legal system to the acceptance into the Juvenile Detention Center.

7. The Intern will spend a day with a **Criminal Investigator** and experience the caseload assigned to each specialty Investigator on a daily basis. They may experience an interview with the complainant and the process necessary to pursue criminal charges. The Intern may also experience the interview or interrogation process, review cases, and prepare the presentation of facts for a detailed DA case for court. They will learn the process of safeguarding and submitting any property recovered.

8. **Crime Scene Specialist:** The Intern will spend time with a Crime Scene Specialist and experience first hand the recovery of DNA, how to process and secure evidence and how to submit evidence to the proper crime laboratory. They may also attend an autopsy that did not occur involving a criminal offense. They will experience the execution of a search warrant of a vehicle or residence. They will become familiarized with the Mobile Crime Scene Unit and learn the procedure utilized in handling, and processing weapons recovered at a crime scene. If court is in session, and a Crime Scene Specialist is testifying, the Intern may experience first hand court testimony. The Intern will tour the **Evidence/ Property Room** and learn the procedures involved in the safekeeping of evidence.

9. The Intern will spend a day at the **Detention Facility** and will experience first hand the responsibilities and demands of a Detention Officer. They will learn the fingerprinting and booking process. They will experience the methods used for classifying housing assignments and the required skills necessary for the monitoring of inmates. The Intern will observe the process utilized in order for an inmate to receive a meal, medical attention, or recreational time. They will also get a review of the responsibilities needed to safely transport inmates to the courtroom. They will experience first hand the responsibilities and demands of a Detention Officer. The Intern will spend a day at the Detention Facility in the courtroom setting as they experience the process of being arraigned.

10. **Intel:** The Research and Analysis Division is a civilian unit reporting to the Sheriff. This Unit is responsible for providing preliminary crime data, arrest data, calls for service data, to both the public and other divisions within the Sheriff's Office, conducting program evaluations, gathering statistics, and

conducting other operational support research projects including the mapping of crime statistics. The Intern may include case review for data extraction and logging a homicide study, data entry for a sex abuse study, weekly and monthly statistical reports, sorting, copying, and filing.

11. **Crime Prevention**: The Intern will work closely with Deputies in the Crime Prevention Unit. They may assist with design, creation, or updating content of pamphlets, power points or face book posts. The Intern may assist or interact in communication with stakeholders, or other agencies. The Intern may also support special projects like advancing neighborhood partnerships, or special events, presentations to schools, health fairs, or other crime prevention activities. The Intern will have the opportunity to partake directly in the community to identify issues that need to be addressed, obtain information regarding crime occurring in that area and increase the citizen's awareness through a continuous information program.

Evaluation / Summary Report

All Interns should be provided with ongoing feedback on how well they are meeting the goals and expectations of their Internship. At the conclusion of the internship, the intern will provide a written evaluation of the field experience emphasizing all aspects of the program, to include any recommendations.

If applicable, participating sections/divisions shall be responsible for abiding by any formal requirements that an educational institution may requires of a participating Intern.

It is our goal to enhance the Intern's understanding of the criminal justice system and every effort will be made to keep the Intern out of life threatening situations.

Hidalgo County Sheriff's Office Law Enforcement Internship Program

INTERNSHIP AGREEMENT AND WAIVER OF LIABILITY

I, _____, agree to participate in an internship with The Hidalgo County Sheriff's Office, County of Hidalgo, Texas, in an unpaid capacity, as outlined in this agreement. I hereby certify that I am at least 18 years of age at this time, and that I am legally authorized to work in the United States. I am currently a student at _____.

I hereby agree to comply with all relevant policies, procedures and requirements as outlined in the Hidalgo County Sheriff's Office Law Enforcement Internship Program, Personnel Policy Manual and/or Hidalgo County Sheriff's Office policies or rules. I understand that I may not receive compensation for my services provided during the internship period, and that no other benefits will be provided. I understand that my placement in this internship is at-will and that I may be terminated at any time at the discretion of the Hidalgo County Sheriff's Office.

I hereby voluntarily release, discharge, waive and relinquish any and all action or causes of action for personal injury, property damage, or wrongful death occurring to me as a result of my internship with Hidalgo County Sheriff's Office. I hereby release, waive, discharge and relinquish any actions or causes of actions aforementioned, which may hereafter arise for me and my estate, and agree that under no circumstances will I prosecute or present any claim for personal injury, property damage or wrongful death against the Hidalgo County Sheriff's Office, the County of Hidalgo, or any of its agents and employees for any said cause of action, whether the same shall arise by negligence of any said persons, or otherwise. It is my intent by this instrument to exempt and release, indemnify and hold harmless the Hidalgo County Sheriff's Office, the County of Hidalgo, and any of its employees, its elected or appointed officials, employees and agents for any personal injury, property damage, or wrongful death cause by negligence.

I ACKNOWLEDGE THAT I HAVE READ THE FOREGOING PARAGRAPHS AND HAVE BEEN FULLY AND COMPLETELY ADVISED OF THE POTENTIAL DANGERS INCIDENTAL TO PARTICIPATING IN AN INTERNSHIP AND AM FULLY AWARE OF THE LEGAL CONSEQUENCES OF SIGNING THIS INSTRUMENT.

_____

Print Name

_____ _____

Signature Date

Hidalgo County Sheriff's Office Law Enforcement Internship Program

INTERNSHIP AGREEMENT AND WAIVER OF LIABILITY

I, Susie Hernandez, agree to participate in an internship with The Hidalgo County Sheriff's Office, County of Hidalgo, Texas, in an unpaid capacity, as outlined in this agreement. I hereby certify that I am at least 18 years of age at this time, and that I am legally authorized to work in the United States. I am currently a student at Texas A&M Kingsville

I hereby agree to comply with all relevant policies, procedures and requirements as outlined in the Hidalgo County Sheriff's Office Law Enforcement Internship Program, Personnel Policy Manual and/or Hidalgo County Sheriff's Office policies or rules. I understand that I may not receive compensation for my services provided during the internship period, and that no other benefits will be provided. I understand that my placement in this internship is at-will and that I may be terminated at any time at the discretion of the Hidalgo County Sheriff's Office.

I hereby voluntarily release, discharge, waive and relinquish any and all action or causes of action for personal injury, property damage, or wrongful death occurring to me as a result of my internship with Hidalgo County Sheriff's Office. I hereby release, waive, discharge and relinquish any actions or causes of actions aforementioned, which may hereafter arise for me and my estate, and agree that under no circumstances will I prosecute or present any claim for personal injury, property damage or wrongful death against the Hidalgo County Sheriff's Office, the County of Hidalgo, or any of its agents and employees for any said cause of action, whether the same shall arise by negligence of any said persons, or otherwise. It is my intent by this instrument to exempt and release, indemnify and hold harmless the Hidalgo County Sheriff's Office, the County of Hidalgo, and any of its employees, its elected or appointed officials, employees and agents for any personal injury, property damage, or wrongful death cause by negligence.

I ACKNOWLEDGE THAT I HAVE READ THE FOREGOING PARAGRAPHS AND HAVE BEEN FULLY AND COMPLETELY ADVISED OF THE POTENTIAL DANGERS INCIDENTAL TO PARTICIPATING IN AN INTERNSHIP AND AM FULLY AWARE OF THE LEGAL CONSEQUENCES OF SIGNING THIS INSTRUMENT.

Susie Hernandez
Print Name

Susie Hernandez
Signature

3/10/2017
Date

AI-58896 **Sheriff's Office** **9. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Gabriel Castaneda, SHERIFF DEPT.

Submitted By: Emilia Uriegas, SHERIFF DEPT.

Department: SHERIFF DEPT.

Information

CAPTION

1. Discussion, consideration, and approval of agreement between the Hidalgo County Sheriff's Office and Big Fish Entertainment, LLC. subject to compliance with HB1295 when and if applicable
2. Authorization for Hidalgo County Sheriff to sign agreement.

BACKGROUND

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. The law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least $1 million. The disclosure requirement applies to a contract entered into on or after January 1, 2016.

The Texas Ethics Commission was required to adopt rules necessary to implement that law, prescribe the disclosure of interested parties form, and post a copy of the form on the commission's website. The commission adopted the Certificate of Interested Parties form (Form 1295) on October 5, 2015.

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

No budgetary impact.

Attachments

agreement
legal
insurance

Form Review

Inbox	Reviewed By	Date
Emilia Uriegas (Originator)	Emilia Uriegas	03/09/2017 12:34 PM
Budget & Management	Veronica Ortiz	03/09/2017 01:25 PM
Ivan Cantu	Ivan Cantu	03/09/2017 03:05 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Emilia Uriegas		Started On: 03/09/2017 12:15 PM
Final Approval Date: 03/17/2017		

BIGFISH
ENTERTAINMENT

March 3, 2017

Joel Riviera
Hidalgo County Sheriff's Office
711 El Cibolo Road
Edinburg, TX 78541

Re: "Live PD" – Access Agreement

Ladies/Gentlemen:

This letter will confirm the agreement ("this Agreement"), dated and with effect from March 3, 2017 (the "Effective Date"), between the Hidalgo County Sheriff's Office (the "HCSO") and Big Fish Entertainment LLC ("Producer") with respect to Producer's proposed television series tentatively entitled "Live PD" as more fully described in Exhibit A attached hereto (the "Series"):

1. Term. The term of this agreement ("Term") is the period commencing on the Effective Date and continuing through and including March, 2, 2018 (the "Initial Contract Year"). The parties shall have the right to extend the Term until March 2, 2019 by mutual agreement. If any television network for which Producer is producing the Series (the "Network") desires additional options to order more Series episodes for production, Producer and HCSO shall negotiate in good faith to extend the Term as required by the Network.

2. Access. HCSO grants to Producer and its production personnel permission to enter upon and use HCSO's offices, facilities and vehicles (including, but not limited to, patrol cars or vehicles) (collectively, "HCSO Property") in addition to permission to accompany HCSO officers or other personnel (collectively "HCSO Personnel") during the course of their duties or otherwise during the Term for the purpose of filming, videotaping, photographing and otherwise recording the HCSO Personnel and the situations they encounter and/or become involved in, and all or any part of the exterior and interior and contents of HCSO Property, including names, signs and identifying insignia of HCSO Property in connection with production of the Series, related series, or derivative work and the marketing promotion, and publicity thereof (the aforementioned may collectively be referred to as Series hereunder). HCSO reserves the right to require a background check for any employee or agent of Producer prior to granting access. Further, HCSO reserves the right to restrict access to some areas of HCSO property or require Producer to be accompanied by HCSO personnel in certain areas. These areas shall include Forensic Services, Bureau of Criminal Identification, Evidence Rooms and Criminal Justice Information Systems (CJIS). Producer shall have the right to make such use of HCSO Property as may reasonably be required, including, without limitation, the right to place all necessary personnel, facilities, vehicles and equipment on HCSO Property, and Producer agrees to remove same after completion of work and leave HCSO Property in substantially the same condition as when Producer entered upon HCSO Property, reasonable wear and tear excepted. HCSO further agrees that Producer shall be entitled to return to HCSO Property thereafter at a mutually acceptable time, if and as required for re-takes, added scenes, still photography or other activity required in connection with the production, promotion or other exploitation of the Series.

3. License. HCSO licenses to Producer and its successors, licensees and assigns, the right to photograph, reproduce and otherwise use HCSO Personnel and HCSO Property and all HCSO names, voice, images, trademarks, servicemarks, tradenames, logos, copyrighted material and/or other materials to which Producer is afforded access hereunder in and in connection with the development, production, exhibition, exploitation, and

promotion of the Series, related series or derivative work, and the marketing, promotion and publicity thereof and/or otherwise, in all forms of media, now known or hereinafter invented, throughout the world an unlimited number of times in perpetuity. Notwithstanding the foregoing, exploitation of the HCSO logo, decal and/or seal and/or Hidalgo County logo decal and/or seal shall be subject to the rules and regulations imposed by the Constitution and laws of the State of Texas (i.e. logo/decal/seal cannot be used for promotional purposes outside of the taping of the Series and the use and exploitation thereof or related thereto. The aforementioned is not intended to preclude use within the promotion and publicity of the Series itself).

4. Safety/Security Review and Consultation Rights. Producer will provide HCSO with twenty-four (24) hours to review and comment on any pre-recorded segments of the Series featuring HCSO Property or HCSO personnel for the purpose of identifying any safety or security risks to HCSO (e.g. recognition of a confidential informant, undercover officer, etc.). If no comments are received by Producer following such 24-hour period, the segments will be deemed reviewed by HCSO. Producer shall provide an HCSO representative (the "Representative") with the right to be in the local control room for the Series or on the ground with Producer's crew during Producer's filming with the HCSO to review material being captured and distributed in connection with the Series. In both instances, HCSO shall have the right to review the content for factual accuracy, security and/or safety concerns, editorial comments, and HCSO classified information, provided that it is understood that Producer and Network shall make the final decision regarding the creative content of the Series and each episode thereof (including without limitation themes, featured events, story line, timeline, sequence of events, etc.). To the extent HCSO has significant safety or confidentiality concerns, Producer shall cease filming or not broadcast sensitive material associated with such safety or confidentiality concerns.

5. Ownership. All film, videotape, still photographs and other visual and/or audio recordings or representations (e.g., studios sets or designs) of HCSO Property created by or with the authorization of Producer are collectively referred to herein as the "Material". Producer shall be the sole and exclusive owner of the Material with the right for the full period of copyright, including all extensions and renewals thereof, and thereafter in perpetuity, throughout the universe, to use and re-use, an unlimited number of times, all or any part of the Material for the purpose of making and producing television programs and other works, and advertising, publicizing and exploiting the same, by all means and in all media, whether now known or hereafter devised, and to authorize others so to do. Neither HCSO, nor any employee of HCSO (to the degree HCSO has the authority), nor any other party now or hereafter having an interest in HCSO Property (to the degree HCSO has the authority)shall have any right of action against Producer or any other party arising out of any use of said Material. Neither the expiration of this Agreement in its normal course nor its sooner termination for any reason shall affect the ownership by Producer of the Material.

6. Credit. HCSO acknowledges that any credits or other identification of HCSO that Producer may furnish in connection with the Series or otherwise shall be at Producer's sole discretion. Notwithstanding the foregoing, Producer agrees to accord HCSO an on-screen credit in substantially the form "Special Thanks to the Pittsburgh Department of Public Safety" in accordance with the Network's then-current credit policies, for all Series episodes in which HCSO personnel and activities are depicted. Producer shall determine the size, position, manner of presentation and all other matters with respect to such credit in its sole discretion. No casual or inadvertent failure by Producer, nor any failure by any third party, to accord such credit shall be deemed a breach of this Agreement by Producer.

7. No Obligation to Proceed. HCSO acknowledges and agrees that Producer is not obligated to actually use HCSO Property or produce the Series or include the Material in the episode of the Series for which it was prepared or otherwise exercise any or all of Producer's rights hereunder.

8. No partnership. It is expressly understood and agreed that the parties do not by this Agreement intend to form an employment relationship or a partnership or joint venture between them and in no event shall this Agreement be construed to constitute such an employment relationship, partnership or joint venture. HCSO and HCSO Personnel shall at all times continue to independently conduct their operations and activities as they customarily operate, without regard to any other creative or logistical demands placed upon them by, or as a result of, the filming and production of the Series.

9. Insurance. Producer will obtain and keep in force during production of the Series with HCSO a policy of commercial general liability insurance naming the HCSO as an additional insured entity in a minimum amount of $1,000,000 and provide proof thereof to the HCSO prior to the commencement of production.

10. Indemnification. Producer agrees to defend, indemnify and hold harmless HCSO from and against any and all third party liabilities, claims, costs, damages, losses, or judgments arising out of or in connection with the development, production, distribution, or other exploitation or the Series. HCSO agrees that Producer shall have the right to meaningfully consult as to the legal defense of any claims, demands or litigation, including the right to be meaningfully involved in the selection counsel or any decision to compromise or settle any such claims, demands or litigation.

11. Miscellaneous. Each of the individuals signing this Agreement below represents that such individual is empowered to execute this Agreement on behalf of the party for which such individual is acting. Producer may assign its rights under this Agreement in whole or in part to any person, firm, or corporation related to the production, distribution or exploitation of the Series. HCSO shall not be permitted to assign or delegate any of rights or obligations under this Agreement. .Except if required by law, HCSO shall at all times keep the terms of this Agreement confidential. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all such counterparts together shall constitute one and the same instrument. Any executed counterpart sent by facsimile or transmitted electronically in Portable Document Format ("PDF") shall be treated as originals, fully binding and with full legal force and effect, and the parties waive any rights they may have to object to such treatment. This Agreement contains the entire understanding of the parties hereto relating to the subject matter herein, supersedes and replaces all prior understandings and agreements concerning such subject matter, whether written or oral, and cannot be modified except in writing signed by the parties.

If the foregoing complies with your understanding of our agreement, please so signify by countersigning this letter where indicated below.

Very truly yours,

BIG FISH ENTERTAINMENT LLC

By:_____
Daniel Cesareo, its Managing Member

ACKNOWLEDGED AND AGREED:

HIDALGO COUNTY SHERIFF'S OFFICE

By:_____

Its:_____

Exhibit A

Series Concept

Big Fish Entertainment LLC ("BFE") currently produces "LIVE PD" a multi-part series on A&E that embeds in several cities across the country. Each week the series follows 2-3 officers in each location. It's an unprecedented "Live" look at law enforcement in America as never before seen on television. "The appearance of" no editing, and the feeling as if content is coming straight from the street to living rooms across America. Each season we embed in six cities across the country following 2-3 officers in each city across the 12-14 week run.

In Hidalgo County, we propose embedding with the Sheriff's Department on "Ride Alongs" to capture the "real-time" perspective and diversity within the department and the city. The story will be told through the "Almost Live" experiences on patrol. In Addition to the "Almost Live" content, episodes will feature pre-taped packages that will further showcase the officers, the work, the locations and the departments.

Almost Live

The cell phone has turned every bystander into a citizen journalist. The Internet is littered with hundreds of thousands of dashboard cams. Many Police Departments across the country in an effort to encourage transparency and communication have instituted "live tweeting" from patrol units to the community. "Live PD" will be an extension of this close to real-time communications and outreach effort. Each week for up to 3 hours we will broadcast "almost live" from patrol.

The series currently airs Friday nights on A&E and reaches more than 2 million viewers each week.

Safety and Legal Precautions

The "Almost Live" aspect will be on a 10-25 minute time delay. This delay will allow us to eliminate sensitive material and address any legal concerns prior to broadcast. A department representative will have access to the stream of the show prior to broadcast from their home or the office to ensure the standards of content and safety protocols on behalf of the officers, the department, and the city.

Network

A&E, home to "First 48" and "Scared Straight, is currently the broadcast partner for the project.

Timeline

BFE proposes to begin production in late January-early February, with some preliminary non-live filming. The embed commitment is for 12-14 weeks. Live show filming is a commitment of 3 hours a week with an additional commitment of 4-5 shifts outside of the "live" taping to capture pre-recorded segments

Film Crews

Each crew will generally consist of two-three members: one camera operator, one audio person and one producer (only when necessary). The crew will have extensive experience working with Police and be certified in field and safety procedures in the field. As always they will follow the direction of their assigned law enforcement. Safety of the officers and film crew are paramount. At no time will safety be secondary to filming. Officers will control environment at all times and be able to stop filming at their discretion.

Access to Locations

The primary locations for the series shall include public streets, police headquarters, police precincts, police locker-rooms, local jails, and patrol cars. BFE will be responsible for obtaining permission to shoot on any private property and county- owned jails.

Access to the Mission Police Station

BFE requires access to one small area within the HCSO station to stage its operations, re-charge batteries, and undertake other production-related activities. BFE will be responsible for security of its equipment. BFE will need parking for two vehicles at the police station or at a parking lot adjacent to the police station.

Access to Key Characters

The proposed main characters in the series would include 3 to 5 key officers involved in the HCSO. Coverage of officers would be simultaneous at times, but may also rotate periodically. No police officer will be filmed who has not given written permission. The privacy of all officers will be respected and strictly enforced.

Activities

BFE filming may include, without limitation, any and/or all of the following activities:

- Investigations
- Operations
- Day-to-day police station meetings, shift changes, etc.
- Officers preparing for their shifts
- Any assignment process
- Day time patrol car ride along
- Night time patrol ride along
- Regular Interviews with key officers of the police station
- Activity at the police station
- Jail operations when appropriate, and as allowed by the individual county who operates the jail.

All access will be controlled by the HCSO's Public Information Officer as well as the specific officers involved. BFE will provide a liaison with the HCSO to maintain communication and updates at all times concerning the activities and whereabouts of the production crew. BFE will work with HCSO members to develop strict protocols in regards to the parameters of filming. The Series will not reveal any confidential investigative tactics that HCSO instructs BFE not to release as public information.

Emilia Uriegas

From: Gabriel Castaneda <gabriel.castaneda@hidalgoso.org>
Sent: Thursday, March 09, 2017 11:40 AM
To: Emilia Uriegas
Cc: Joel Rivera; Selene Chavez; Raul Cantu; Josephine Ramirez; Victor Garza
Subject: FW: Live PD
Attachments: BFE_LIVEPD_HIDALGO (dsmtfl 3-2 clean execution copy).pdf

Ms. Emilia,

Please place as an action item for CC on the 21st, with authority for the Sheriff to sign the agreement on behalf of the County Judge.

Thanks,

G. Castañeda

From: Josephine Ramirez [mailto:josephine.ramirez@da.co.hidalgo.tx.us]
Sent: Wednesday, March 08, 2017 10:29 AM
To: gabriel.castaneda@hidalgoso.org; Joel Rivera
Cc: Victor Garza
Subject: Fwd: Live PD

I will approve as to the form of the agreement.

Josephine Ramirez Solis

Assistant Criminal District Attorney

Chief - Civil Division

Office of Criminal District Attorney

Hidalgo County, Texas

100 E. Cano

Edinburg, TX 78539

(956) 292-7609 ext. 8186

(956) 318-2079 FAX

josephine.ramirez@da.co.hidalgo.tx.us

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ACORD™ CERTIFICATE OF LIABILITY INSURANCE

Date (MM/DD/YYYY)
3-14-17

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: **If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).**

PRODUCER	Contact Name: Laura Comerford	James Pedrick
Aon/Albert G. Ruben Co. of NY, Inc. 171 Madison Avenue, Suite 401 New York, NY 10016	Phone: 212-337-4354	212-337-4356
	Insurer's Affording Coverage	**NAIC #**
INSURED Big Fish Entertainment 1411 Broadway 16th Floor New York, New York 10018	INSURER A: Great Divide Insurance Company	
	INSURER B:	
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. LIMITS SHOWN ARE AS REQUESTED.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY**			CNA1025659	03/01/17	03/01/18	EACH OCCURRENCE	$1,000,000
	X COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$1,000,000
	CLAIMS MADE [X] OCCUR	X					PERSONAL & ADV INJURY	$1,000,000
							GENERAL AGGREGATE	$2,000,000
							PRODUCTS – COMP/OP AGG	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						MEDICAL EXPENSE	EXCLUDED
	[ ] POLICY [X] PROJECT [ ] LOC							
A	**AUTO LIABILITY**			CNA1025659	03/01/17	03/01/18	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY [ ] SCHEDULED AUTOS	X		**AUTO PHYSICAL DAMAGE DEDUCTIBLE: $2,500			BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
	X AUTO PHYS. DAM. **						AUTO PHYSICAL DAMAGE	$1,000,000
A	X **Umbrella Liab** [X] OCCUR	X		CUA 1025744	03/01/17	03/01/18	EACH OCCURRENCE	$10,000,000
	Excess Liab [ ] CLAIMS-MADE						AGGREGATE	$10,000,000
	DEDUCTIBLE							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						[ ] WC Statutory Limits [ ] Other	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? **Y / N** [ ]	N/A		NOT COVERED HEREUNDER			E.L. Each Accident	$
	(Mandatory in NH)						E.L. Disease – EA Employee	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. Disease – Policy Limit	$
A	**WORLDWIDE PRODUCTION PACKAGE**			CNA1025659	03/01/17	03/01/18	**LIMIT**	**DEDUCTIBLE**
	MISCELLANEOUS EQUIPMENT**						$5,000,000	$3,500
	PROPERTY OF OTHERS *						$5,000,000	$2,500
	PROPS, SETS & WARDROBE						$3,000,000	$2,500

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
A&E Television Networks – A&E - Live PD 1C

Certificate Holder is Additional Insured (by "Blanket" Endorsement) under General/Auto Liability but only with regard to claims arising from the negligence of Named Insured and as required by written contract. Certificate Holder is Loss Payee with regard to Production Package. All coverage is subject to terms and conditions of policies of insurance. This Certificate does not amend, extend or alter the coverage afforded by the policies above.

CERTIFICATE HOLDER	Cancellation
Hidalgo County Sheriff's Department 711 El Cibolo Road Edinburg, Texas 78541	**SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.** **AUTHORIZED REPRESENTATIVE** **Aon/Albert G. Ruben Insurance Services, Inc.**

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AI-58879 **Sheriff's Office** **9. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Gabriel Castaneda, SHERIFF DEPT.

Submitted By: Emilia Uriegas, SHERIFF DEPT.

Department: SHERIFF DEPT.

Information

CAPTION

1. Discussion and authorization for Hidalgo County Sheriff or designee to participate in the Law Enforcement Product Council with General Motors Company (GMC). subject to compliance with HB1295 when and if applicable
2. Discussion, consideration, and approval of confidentiality agreement between Hidalgo County Sheriff's Office and GMC related to the participation in the Law Enforcement Product Council.
3. Approval for Hidalgo County Sheriff to sign agreement.

BACKGROUND

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

No budgetary impact.

Attachments

legal

agreement

Form Review

Inbox	Reviewed By	Date
Emilia Uriegas (Originator)	Emilia Uriegas	03/13/2017 03:31 PM
Budget & Management	Veronica Ortiz	03/13/2017 04:02 PM
Ivan Cantu	Ivan Cantu	03/14/2017 04:09 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Emilia Uriegas		Started On: 03/08/2017 10:07 AM
Final Approval Date: 03/17/2017		

Emilia Uriegas

From: Josephine Ramirez <josephine.ramirez@da.co.hidalgo.tx.us>
Sent: Wednesday, March 08, 2017 11:10 AM
To: Emilia Uriegas
Cc: Gabriel Castaneda
Subject: Re: Agenda Item Reference Law Enforcement Product Council

Thank you Emilia,

Please note that the agreement at paragraph 11 states that controlling law is the State of Michigan. Subject to that recommended revision, I approve as to the form of the agreement.

Josephine Ramirez Solis

Assistant Criminal District Attorney

Chief - Civil Division

Office of Criminal District Attorney

Hidalgo County, Texas

100 E. Cano

Edinburg, TX 78539

(956) 292-7609 ext. 8186

(956) 318-2079 FAX

josephine.ramirez@da.co.hidalgo.tx.us

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On Wed, Mar 8, 2017 at 10:47 AM, Emilia Uriegas <emilia.uriegas@hidalgoso.org> wrote:

Ms. Ramirez:

As requested by Chief Castaneda, I am forwarding this agenda item for your review. Our office might be required to provide legal approval on this matter.

Should you have any questions or require additional information, feel free to call our office.

Thank you.

Emilia Uriegas

Budget Manager

HCSO

393-6028

GENERAL MOTORS FLEET

Law Enforcement Product Council

LAW ENFORCEMENT PRODUCT COUNCIL

Mission Statement

To pledge an integrated partnership between General Motors and Law Enforcement. Together, we will identify, evaluate and promote enhancements to products and relationships that address the vehicle requirements of the Law Enforcement Community.

Law Enforcement Product Council (LEPC) Overview

- Council comprised of approximately 15 Law Enforcement customers
  - Sworn officers and civilian
  - Manage law enforcement vehicle fleet
  - Federal, State, City & County agencies
  - United States and Canada
- 3 year term. Roughly 1/3 of council turns over each year
- Provide voice of the customer input on police vehicles and features
  - Current and future police product offerings
  - Requirements, new feature, industry trends, aftermarket equipment compatibility
- Communication Process
  - In person meeting at least annually
  - Conference calls 2-3 per year
  - E-mail or individual phone calls as required
- Requires signing of confidentiality agreement – Separate document
- Agency approve member to be on council
  - No issue with conflict of interest, nor travel to events

AGREEMENT

This agreement ("Agreement") is made as of the_____ day of _____, 2017, by and between General Motors Company, having a place of business in Detroit, Michigan ("GM") and_____ having a place of business in _____ ("Customer").

Whereas GM and Customer are entering discussions under which Customer will provide input to General Motors regarding future products to be offered to meet needs of customers who purchase vehicles for law enforcement purposes ("Input"). In connection with these discussions, GM may need to disclose to Customer information and other data of a confidential and proprietary nature to GM, including but not limited to highly confidential and competitively significant information about future General Motors products. Accordingly the parties agree as follows:

1. **GM Confidential Information.** "GM Confidential Information" shall mean any information of a confidential or proprietary nature received by Customer, directly or indirectly, from GM, or acquired or developed pursuant to the provision of the Input, including, but not limited to, business affairs, data, designs, manuals, training materials and documentation, formulas, ideas, inventions, knowledge of manufacturing processes, mask-works, methods (including PICOS), prices, financial and accounting data, products and product specifications, systems, and technical information.

2. **GM Data.** "GM Data" shall mean all data and information of GM submitted by GM to Customer, or otherwise in Customer's possession or accessible by Customer, including all data and information created by Customer on behalf of GM or created by Customer through manipulation of data and information provided by GM.

3. **Standard of Care.** Customer shall protect all GM Confidential Information with the same degree of care as it uses to avoid unauthorized use, disclosure, publication or dissemination of its own confidential information of a similar nature, but in no event less than a reasonable degree of care.

4. **Restricted Disclosure.** Customer shall not use for its own benefit or the benefit of any third party, or disclose, publish, release, transfer or otherwise make available to any third party, any GM Confidential Information without GM's prior written consent.

5. **Exclusions.** The obligations in this Agreement shall not restrict any disclosure of GM Confidential Information received by Customer where the Customer can demonstrate that: (a) such GM Confidential Information was independently developed by Customer prior to its receipt thereof without violating its obligations hereunder or any of GM's proprietary rights; (b) such GM Confidential Information is or becomes publicly known (other than through unauthorized disclosure by Customer); (c) such GM Confidential Information is disclosed by GM to a third party without any obligation of confidentiality; (d) such GM Confidential Information was already known to Customer prior to its receipt thereof without any obligation of confidentiality; (e) such GM Confidential Information is received by Customer from a third party without any obligation of confidentiality; or (f) notwithstanding anything else herein, nothing in this Agreement shall prevent Customer from producing documents or disclosing information that is required by law, statute or other legal process (provided that the Customer shall provide reasonable prior written notice to GM of such disclosure).

6. **GM Data Restrictions.** All GM Data and information are and shall remain the property of GM. The GM Data shall not be: (i) used by Customer other than in connection with providing the Input; (ii) disclosed, sold, assigned, leased or otherwise provided to third parties by Customer; or (iii) commercially exploited by or on behalf of Customer.

7. **Return of GM Confidential Information and GM Data.** Customer shall, in the event of the expiration or termination of the Agreement, return to GM all GM Confidential Information and all GM Data disclosed and all copies thereof, or at GM's option, destroy such GM Confidential Information and GM Data and provide to GM certificates evidencing such return or destruction. Archival tapes containing any GM Data

or any GM Confidential Information shall be used solely for back-up purposes and shall be returned or destroyed pursuant to this Agreement.

8. **Data Security.** Customer shall establish and maintain safeguards against the destruction, loss, alteration or unauthorized disclosure of the GM Data in the possession of Customer in accordance with GM's security standards as notified by GM to Customer from time to time, including use of passwords.

9. **Term.** The term of this Agreement is one year from the date last signed below.

10. **Survival.** The obligations of Customer relating to GM Confidential Information and GM Data shall survive termination of this Agreement.

11. **Controlling Law.** This Agreement shall be governed by the laws of the State of Texas, excluding the provisions of the United Nations Convention on Contracts for the International Sale of Goods and any conflict of law provisions that would require application of another choice of law.

Each person executing this agreement warrants that s/he is authorized to execute this agreement on behalf of the company.

<Customer>		General Motors Company	
Signed:	_____	Signed:	_____
Print Name:	_____	Print Name:	Dana G. Hammer
Title:	_____	Title:	Product & Marketing Mgr.
Date:	_____	Date:	

AI-58933 **Sheriff's Office** **9. D.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Gabriel Castaneda, SHERIFF DEPT.

Submitted By: Emilia Uriegas, SHERIFF DEPT.

Department: SHERIFF DEPT.

Information

CAPTION

Jail Commissary (2102):
1. Approval of certification of revenues as certified by the County Auditor.
2. Approval of appropriation of funds in the Jail Commissary account for the amount of $111,794.56.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-2102-423-21-280-015-0-430

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funds available as of 03/17/2017, as provided by the Jail Commissary Bank Account. Monies forwarded to County Treasurer's Office (Receipt No. 208271 dated 03/09/17).

Attachments

Request for COR
COR
Appropriation

Form Review

Inbox	Reviewed By	Date
Emilia Uriegas (Originator)	Emilia Uriegas	03/17/2017 11:59 AM
Budget & Management	Veronica Ortiz	03/17/2017 01:16 PM
Final Approval	Debbie Tamez	03/17/2017 04:33 PM
Form Started By: Emilia Uriegas		Started On: 03/13/2017 11:55 AM
Final Approval Date: 03/17/2017		

Emilia Uriegas

From: Emilia Uriegas <emilia.uriegas@hidalgoso.org>
Sent: Monday, March 13, 2017 12:37 PM
To: 'ray.eufracio@auditor.co.hidalgo.tx.us'; 'linda.fong@auditor.co.hidalgo.tx.us'
Cc: 'rosieg@hidalgoso.org'
Subject: Certification of Revenues
Attachments: JAIL.COMM.PARTITIONS.pdf

Mr. Eufracio:

This is to request the Certification of Revenues for $111,794.56 (Jail Commissary Account Program 280-015) in reference to **AI#58933**. I will be requesting that the item be included on CC agenda of 03/21/17 for expediting the project.

Should you require additional information or have any questions, feel free to call me.

Thank you.

Emilia Uriegas
Budget Manager II
Hidalgo County Sheriff's Office
393-6028

AI-58933 **Sheriff's Office**

CC - REGULAR

Meeting Date: 04/04/2017
Submitted For: Gabriel Castaneda, SHERIFF DEPT.
Submitted By: Emilia Uriegas, SHERIFF DEPT.
Department: SHERIFF DEPT.

Information

CAPTION

Jail Commissary (2102):

1. Approval of certification of revenues as certified by the County Auditor.
2. Approval of appropriation of funds in the Jail Commissary account for the amount of $111,794.56.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-2102-423-21-280-015-0-430

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

No local funds are required. Funding is provided by the Jail Commissary Bank Account. Monies forwarded to County Treasurer's Office (Receipt No. 208271 dated 03/09/17).

Attachments

budget.amendment

Form Review

Inbox	Reviewed By	Date
	Emilia Uriegas	03/13/2017 11:55 AM

Form Started By: Emilia Uriegas Started On: 03/13/2017 11:55 AM

OFFICIAL HIDALGO COUNTY RECEIPT
OFFICE OF THE COUNTY TREASURER
NORMA G. GARCIA

Receipt No: 208271

Received From: SHERIFF'S OFFICE 03/08/17 Date 03/09/17

1	5300	JAIL COMMISSARY TRUST FUNDS	7-2102-391-03-000-426-0-000	111,794.56
			Total:	111,794.56

Check Total	111,794.56
Cash Total	.00
Credit Total	.00
Other Total	.00

ORIGINAL DOCUMENT PRINTED ON CHEMICAL REACTIVE PAPER WITH HEAT SENSITIVE INK HAND ICON AND MICROPRINTED BORDER

HIDALGO COUNTY JAIL COMMISSARY
P.O. BOX 1228
EDINBURG, TX 78540
PH. 956-381-7900 EXT. 7928

LONESTAR NATIONAL BANK
WWW.LONESTARNATIONALBANK.COM
68-1168/1149

5300

3/8/2017

PAY TO THE ORDER OF Hidalgo County Treasurer

$ **111,794.56

One Hundred Eleven Thousand Seven Hundred Ninety-Four and 56/100********** DOLLARS

Hidalgo County Treasurer

Void After 90 Days

MEMO

SECURITY FEATURES INCLUDED DETAILS ON BACK

⑈005300⑈ ⑆114911687⑆ 710 15949⑈

HIDALGO COUNTY JAIL COMMISSARY 5300
Hidalgo County Treasurer 3/8/2017
For repairs and upgrade to Jail's Privacy Partitions 111,794.56

Cash on Deposit - LS 111,794.56

HIDALGO COUNTY JAIL COMMISSARY 5300
Hidalgo County Treasurer 3/8/2017
For repairs and upgrade to Jail's Privacy Partitions 111,794.56

Cash on Deposit - LS 111,794.56

DATE: March 13, 2017
DEPARTMENT HEAD: J. E. "Eddie" Guerra
DEPARTMENT NAME: Jail Commissary
ACCOUNT NUMBER: 7-2102-423-21-280-015-0-430

SUBJECT: Budget Amendments (Increases) in Accordance with Local Government Code, Chapter 111, Subchapter C

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Amendments (increases) to my budget in accordance with Local Government Code, Chapter 111, Subchapter C

INCREASE ACCOUNT NUMBER(S)	ACCOUNT OBJECT NAME	AMOUNT
7-2102-423-21-280-015-0-430	Jail Commissary--Repair & Maintenance Services	111,794.56

TOTAL APPROPRIATIONS 111,794.56

REASON: To appropriate funding for the removal and replacement of privacy partitions at the Hidalgo County Adult Detention Center.

DEPARTMENT HEAD SIGNATURE

/ /
DATE

PPROVED COMMISSIONERS' COUR

ATTEST COUNTY CLERK

COUNTY of HIDALGO



EDINBURG, TEXAS 78539

HIDALGO COUNTY AUDITOR'S OFFICE
Hidalgo County Administration Building
2808 South Business Highway 281
Edinburg, Texas 78539-6243
PHONE: (956) 318-2511
FAX: (956) 318-2577
WEBSITE: www.co.hidalgo.tx.us/auditor

March 17, 2017

The Honorable Ramon Garcia, Hidalgo County Judge
The Honorable David Fuentes, Commissioner, Precinct No. 1
The Honorable Eduardo "Eddie" Cantu, Commissioner, Precinct No. 2
The Honorable Jose M. Flores, Commissioner, Precinct No. 3
The Honorable Joseph Palacios, Commissioner, Precinct No. 4

RE: Certification of Revenue

Dear Judge and Commissioners:

Pursuant to Local Government Code § 111.07075 SPECIAL BUDGET FOR REVENUE RECEIVED AFTER START OF FISCAL YEAR.

> The county auditor shall certify to the commissioners court the receipt of revenue from a new source not anticipated before the adoption of the budget and not included in the budget for that fiscal year. On certification, the court may adopt a special budget for the limited purpose of spending the revenue for general purposes or for any of its intended purposes.

I, Ray Eufracio, County Auditor of Hidalgo County, certify to the Hidalgo County Commissioners Court the revenue received from a transfer from Jail Commissary Trust Fund in the amount of $111,794.56 to fund the removal and replacement of privacy partitions at the Hidalgo County Adult Detention Center. These funds may now be made available by creating a new special budget or amending a current budget for its intended purposes.

CERTIFIED BY:

Raymundo Eufracio, CPA
Hidalgo County Auditor

3/17/17
Date

THE COUNTY OF HIDALGO TEXAS

HIDALGO COUNTY DISTRICT JUDGES

LUIS M. SINGLETERRY JUDGE, 92ND D.C. | RODOLFO DELGADO JUDGE, 93RD D.C. | J. R. "BOBBY" FLORES JUDGE, 139TH D.C. | ROSE GUERRA REYNA JUDGE, 206TH D.C. | JUAN R. PARTIDA JUDGE, 275TH D.C. | MARIO E. RAMIREZ, JR. JUDGE, 332ND D.C. | NOE GONZALEZ JUDGE, 370TH D.C. OVERSEER | LETICIA LOPEZ JUDGE, 389TH D.C. | L. KENO VASQUEZ JUDGE, 398TH D.C. | ISRAEL RAMON, JR. JUDGE, 430TH D.C. | RENEE R. BETANCOURT JUDGE, 449TH D.C.

Nereyda Gonzalez

From: Linda Fong [Linda.Fong@auditor.co.hidalgo.tx.us]
Sent: Tuesday, March 14, 2017 2:13 PM
To: Nereyda Gonzalez
Cc: Marcela Luna
Subject: FW: Certification of Revenues
Attachments: JAIL.COMM.PARTITIONS.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

From: Emilia Uriegas [mailto:emilia.uriegas@hidalgoso.org]
Sent: Monday, March 13, 2017 12:37 PM
To: ray.eufracio@auditor.co.hidalgo.tx.us; linda.fong@auditor.co.hidalgo.tx.us
Cc: rosieg@hidalgoso.org
Subject: Certification of Revenues

Mr. Eufracio:

This is to request the Certification of Revenues for $111,794.56 (Jail Commissary Account Program 280-015) in reference to **AI#58933**. I will be requesting that the item be included on CC agenda of 03/21/17 for expediting the project.

Should you require additional information or have any questions, feel free to call me.

Thank you.

Emilia Uriegas
Budget Manager II
Hidalgo County Sheriff's Office
393-6028

AI-58933 **Sheriff's Office 9. D.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Gabriel Castaneda, SHERIFF DEPT.

Submitted By: Emilia Uriegas, SHERIFF DEPT.

Department: SHERIFF DEPT.

Information

CAPTION

Jail Commissary (2102):
1. Approval of certification of revenues as certified by the County Auditor.
2. Approval of appropriation of funds in the Jail Commissary account for the amount of $111,794.56.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-2102-423-21-280-015-0-430

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funds available as of 03/17/2017, as provided by the Jail Commissary Bank Account. Monies forwarded to County Treasurer's Office (Receipt No. 208271 dated 03/09/17).

Attachments

budget.amendment

Request for COR

Form Review

Inbox	Reviewed By	Date
Emilia Uriegas (Originator)	Emilia Uriegas	03/17/2017 11:59 AM
Budget & Management	Veronica Ortiz	03/17/2017 01:16 PM
Final Approval		
Form Started By: Emilia Uriegas		Started On: 03/13/2017 11:55 AM

OFFICIAL HIDALGO COUNTY RECEIPT
OFFICE OF THE COUNTY TREASURER
NORMA G. GARCIA

Receipt No: 208271

Received From: SHERIFF'S OFFICE 03/08/17 Date 03/09/17

1	5300	JAIL COMMISSARY TRUST FUNDS	7-2102-391-03-000-426-0-000	111,794.56
			Total:	111,794.56

Check Total	111,794.56
Cash Total	.00
Credit Total	.00
Other Total	.00

ORIGINAL DOCUMENT PRINTED ON CHEMICAL REACTIVE PAPER WITH HEAT SENSITIVE INK HAND ICON AND MICROPRINTED BORDER

5300

HIDALGO COUNTY JAIL COMMISSARY
P.O. BOX 1228
EDINBURG, TX 78540
PH. 956-381-7900 EXT. 7928

LONESTAR NATIONAL BANK
WWW.LONESTARNATIONALBANK.COM
68-1168/1149

3/8/2017

PAY TO THE ORDER OF Hidalgo County Treasurer

$ **111,794.56

One Hundred Eleven Thousand Seven Hundred Ninety-Four and 56/100********** DOLLARS

Hidalgo County Treasurer

Void After 90 Days

MEMO

DETAILS ON BACK. SECURITY FEATURES INCLUDED

⑈005300⑈ ⑆114911687⑆ 710 15949⑈

HIDALGO COUNTY JAIL COMMISSARY 5300
Hidalgo County Treasurer 3/8/2017
For repairs and upgrade to Jail's Privacy Partitions 111,794.56

Cash on Deposit - LS 111,794.56

HIDALGO COUNTY JAIL COMMISSARY 5300
Hidalgo County Treasurer 3/8/2017
For repairs and upgrade to Jail's Privacy Partitions 111,794.56

Cash on Deposit - LS 111,794.56

DATE: March 13, 2017
DEPARTMENT HEAD: J. E. "Eddie" Guerra
DEPARTMENT NAME: Jail Commissary
ACCOUNT NUMBER: 7-2102-423-21-280-015-0-430

SUBJECT: **Budget Amendments (Increases) in Accordance with Local Government Code, Chapter 111, Subchapter C**

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Amendments (increases) to my budget in accordance with Local Government Code, Chapter 111, Subchapter C

INCREASE ACCOUNT NUMBER(S)	ACCOUNT OBJECT NAME	AMOUNT
7-2102-423-21-280-015-0-430	Jail Commissary--Repair & Maintenance Services	111,794.56
7-2102-391-03-000-426-0-000	Transfers In - Jail Commissary	111,794.56
	TOTAL APPROPRIATIONS	111,794.56

← Revenue account needs to be entered. A revised budget amendment will be attached.

REASON: **To appropriate funding for the removal and replacement of privacy partitions at the Hidalgo County Adult Detention Center.**

DEPARTMENT HEAD SIGNATURE

/ /
DATE

PPROVED COMMISSIONERS' COUR

ATTEST COUNTY CLERK

Nereyda Gonzalez

From: Linda Fong [Linda.Fong@auditor.co.hidalgo.tx.us]
Sent: Friday, March 17, 2017 2:00 PM
To: Nereyda Gonzalez
Subject: FW: AI-58933
Attachments: Partition Justification.pdf

From: Roy Quintanilha [mailto:roy.quintanilha@hidalgoso.org]
Sent: Friday, March 17, 2017 11:43 AM
To: Letty Chavez <Letty.Chavez@auditor.co.hidalgo.tx.us>
Cc: Gabriel Castaneda <gabriel.castaneda@hidalgoso.org>; arcy duran <arcy.duran@auditor.co.hidalgo.tx.us>; Linda Fong <linda.fong@auditor.co.hidalgo.tx.us>; emilia uriegas <emilia.uriegas@hidalgoso.org>; Vivian Garza <Vivian.Garza@auditor.co.hidalgo.tx.us>; Chief Mario.Lopez <mario.lopez@hidalgoso.org>; Rosie Gonzalez <rosieg@hidalgoso.org>; Capt Madrigal work <belinda.madrigal@hidalgoso.org>; Josephine Ramirez <josephine.ramirez@da.co.hidalgo.tx.us>
Subject: Re: AI-58933

Good morning Ms. Chavez,

Attached is a copy of our request from the District Attorneys Office for use of the funds two projects. The partitions were one of the two.
The partitions will be replace the partitions in every housing unit that is rusted past the point of repair.

The partitions provides inmates with privacy while using the toilet or stepping out of the showers.

Please let me know if you need any further information.

Chief Roy Quintanilha.

From: "Letty Chavez" <Letty.Chavez@auditor.co.hidalgo.tx.us>
To: "roy quintanilha" <roy.quintanilha@hidalgoso.org>
Cc: "Gabriel Castaneda" <gabriel.castaneda@hidalgoso.org>, "arcy duran" <arcy.duran@auditor.co.hidalgo.tx.us>, "Linda Fong" <linda.fong@auditor.co.hidalgo.tx.us>, "emilia uriegas" <emilia.uriegas@hidalgoso.org>, "Vivian Garza" <Vivian.Garza@auditor.co.hidalgo.tx.us>
Sent: Thursday, March 16, 2017 10:06:14 AM
Subject: AI-58933

Good morning,

Agenda item 58933 is requesting certification of revenues in the amount of $111,794.56 to appropriate funding for the removal and replacement of privacy partitions at the jail.

Pursuant to Local Government Code §351.0415 (c), (c) The sheriff may use commissary proceeds only to:
(1) fund, staff, and equip a program addressing the social needs of the county prisoners, including an educational or recreational program and religious or rehabilitative counseling;
(2) supply county prisoners with clothing, writing materials, and hygiene supplies;

(3) establish, staff, and equip the commissary operation and fund the salaries of staff responsible for managing the inmates' commissary accounts;
(4) fund, staff, and equip an educational use and a law library for the educational use of inmates; or
(5) fund physical plant improvements, technology, equipment, programs, services and activities that provide for the well-being, health, safety, and security of the inmates and the facility.

Please provide me with information to determine if the use of commissary funds for the removal and replacement of privacy partitions is allowed by statute (i.e., where will the partitions be located, who will benefit from the use of the partitions, etc..).

Letty Chavez

Compliance Audit Supervisor
Hidalgo County Auditor's Office
(956) 318-2511 ext. 4651

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Zimbra **roy.quintanilha@hidalgoso.org**

Re: Use of Commissary Funds

From : Josephine Ramirez <josephine.ramirez@da.co.hidalgo.tx.us> Mon, Nov 28, 2016 10:39 AM

Subject : Re: Use of Commissary Funds

To : Roy Quintanilha <roy.quintanilha@hidalgoso.org>

Cc : Ruben Hinojosa <ruben.hinojosa@hidalgoso.org>, Sheriff Guerra <sheriff.guerra@hidalgoso.org>, Chief Mario Lopez <mario.lopez@hidalgoso.org>, Gabriel Castaneda <gabriel.castaneda@hidalgoso.org>, Capt Madrigal work <belinda.madrigal@hidalgoso.org>, Joe Vasquez <joe.vasquez@hidalgoso.org>, Daniel Casarez <daniel.casarez@hidalgoso.org>, Victor Garza <victor.garza@da.co.hidalgo.tx.us>, Mary Cheaney <mary.cheaney@da.co.hidalgo.tx.us>

Chief,

As our office has previously advised, the Texas Local Government Code dictates that the sheriff or the sheriff's designee may use commissary proceeds for a limited number of purposes, one of which is:

"[to] fund physical plant improvements, technology, equipment, programs, services, and activities that provide for the well-being, health, safety, and security of the inmates and the facility."

Tex. Loc. Gov't Code §351.0415(c)(5).

As you have represented that the proposed purchase will be used for the well being, health, and safety of inmates, and without further guidance that such a

purchase is not permitted by section 351.0415(c)(5), it is our belief that the Sheriff's Office may use these funds for this expense.

Further, as the Sheriff has wide discretion to determine how to use these funds to meet the needs of the inmates and the facility, the improvements/repair and replacement of items described below appear to be permissible purchases in accordance with the applicable code provisions.

Should you need any further assistance from our office, please feel free to contact me.

Thank you,

Josephine Ramirez Solis

Assistant Criminal District Attorney

Chief - Civil Division

Office of Criminal District Attorney

Hidalgo County, Texas

100 E. Cano

Edinburg, TX 78539

(956) 292-7609 ext. 8186

(956) 318-2079 FAX

josephine.ramirez@da.co.hidalgo.tx.us

****

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****

On Mon, Nov 14, 2016 at 4:22 PM, Roy Quintanilha <roy.quintanilha@hidalgoso.org> wrote:

Good morning Ms. Ramirez,

As previously discussed, any use of Commissary Funds for building renovations will be run through your office to determine if the projects meet the requirements of the Texas Local Government Code Section 351.0415

Sec. 351.0415. COMMISSARY OPERATION BY SHERIFF OR PRIVATE VENDOR. (a) The sheriff of a county or the sheriff's designee, including a private vendor operating a detention facility under contract with the county, may operate, or contract with another person to operate, a commissary for the use of the inmates committed to the county jail or to a detention facility operated by the private vendor, as appropriate. The commissary must be operated in accordance with rules adopted by the Commission on Jail Standards.

(b) The sheriff or the sheriff's designee:

(1) has exclusive control of the commissary funds;

(2) shall maintain commissary accounts showing the amount of proceeds from the commissary operation and the amount and purpose of disbursements made from the proceeds; and

(3) shall accept new bids to renew contracts of commissary suppliers every five years.

(c) The sheriff or the sheriff's designee may use commissary proceeds only to:

(1) fund, staff, and equip a program addressing the social needs of the inmates, including an educational or recreational program and religious or rehabilitative counseling;

(2) supply inmates with clothing, writing materials, and hygiene supplies;

(3) establish, staff, and equip the commissary operation and fund the salaries of staff responsible for managing the inmates' commissary accounts;

(4) fund, staff, and equip both an educational and a law library for the educational use of inmates; or

(5) fund physical plant improvements, technology, equipment, programs, services, and activities that provide for the well-being, health, safety, and security of the inmates and the facility.

We have two specific projects that would require the use of commissary funds.

The first project is the removal, disposal, replacement and installation of the steal privacy partitions in each housing unit. the partitions are designed to provide some privacy for inmates that are showering our using the toilets in common

areas. A total of 87 partitions of various sizes will need to be replaced. Attached is a sketch of what a partition will look like. Estimated cost for this project will be over $50,000.00...

The second item is for removal, disposal of old padding and the replacement and installation of new padding in two cells in booking commonly referred to as a padded cell. In addition to the padded cells in booking, the project would include the engineering, labor and product for converting of three single cells (1 in Echo or protective custody cells, 1 in Alpha or female dorm housing unit and 1 in the infirmary) to padded cells. This would increase our capacity to place violent, suicidal prisoners in a safer cell reducing self injury to the inmate. Estimated cost for this project will be over $50,000.00...

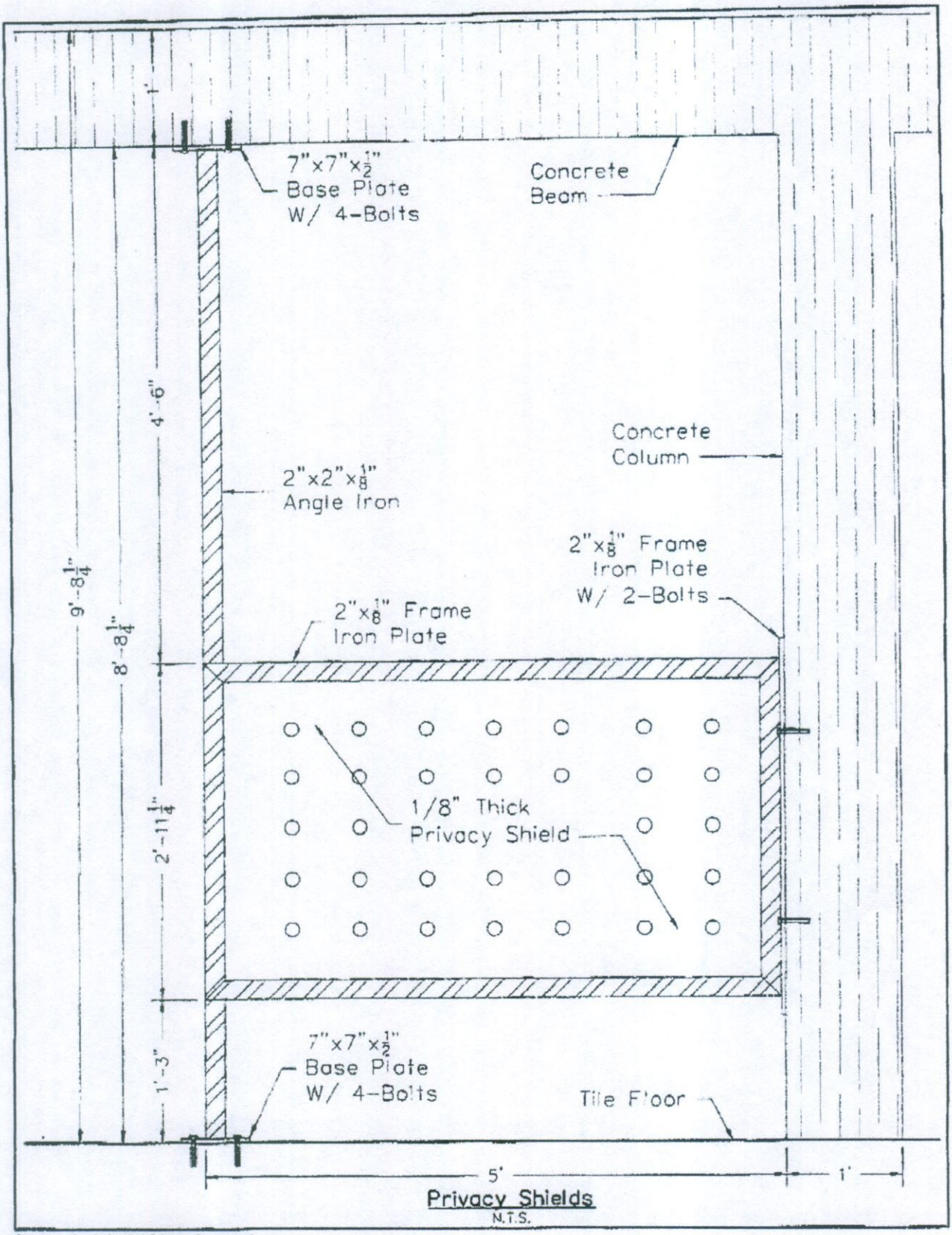
Both projects would be a benefit to the inmates well-being, health and safety. Both projects would need the Hidalgo County Purchasing Department to seek out bids. Once a vendor has been selected and the cost of each projects is known, we will transfer the appropriate amounts for the Purchase Orders as has been the practice to date.

Costs for these projects are were not included in the 2016 budget request for 2017. Both are essential for safe operations. Funding is available in Commissary accounts.

Thank you in advance for your attention to this request.

Thank You.

Chief Roy Quintanilha



Privacy Shields
N.T.S.

Drawing: I:\Jail Details\Privacy Shield.dwg
Layout Tab: Layout1 Date: 07/07/2016 Time: 04:44:14 PM

DATE: March 13, 2017
DEPARTMENT HEAD: J. E. "Eddie" Guerra
DEPARTMENT NAME: Jail Commissary
ACCOUNT NUMBER: 7-2102-423-21-280-015-0-430

SUBJECT: **Budget Amendments (Increases) in Accordance with Local Government Code, Chapter 111, Subchapter C**

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Amendments (increases) to my budget in accordance with Local Government Code, Chapter 111, Subchapter C

INCREASE ACCOUNT NUMBER(S)	ACCOUNT OBJECT NAME	AMOUNT
7-2102-423-21-280-015-0-430	Jail Commissary--Repair & Maintenance Services	111,794.56
7-2102-391-03-000-426-0-000	*TRANSFERS IN-JAIL COMMISSARY TRUST FUND REVENUES*	*111,794.56*

TOTAL BUDGET INCREASE (DECREASE) **111,794.56**

REASON: **To appropriate funding for the removal and replacement of privacy partitions at the Hidalgo County Adult Detention Center.**

DEPARTMENT HEAD

/ /
DATE

PPROVED COMMISSIONERS' COUI

ATTEST COUNTY CLERK

AI-58447 **Executive Office** **10. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

1. Presentation of Delinquent Tax Collection Report for the period of July 1, 2016 through January 31, 2017.

2. Presentation of Fees and Fines Report for the period of July 1, 2016 through January 31, 2017.

3. Discussion and action on tax resale bids received on the properties (see attached list).

4. Discussion and action on Order for tax resale bid properties.

BACKGROUND

Fiscal Impact

Attachments

request
REPORT
REPORT
bids
order

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	02/09/2017 09:44 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 02/08/2017 01:22 PM
Final Approval Date: 03/17/2017		

Zimbra **monica.badillo@co.hidalgo.tx.us**

Agenda Item Request

From : Tiffany Scott Soliz <Tiffany.Soliz@lgbs.com> Wed, Feb 08, 2017 10:45 AM
Subject : Agenda Item Request
To : 'Monica Badillo' <monica.badillo@co.hidalgo.tx.us>
Cc : Lora Briones <lora.briones@hcdd1.org>

Hi Monica,

I hope you are having a great week! We would like to present some items at an upcoming drainage district and commissioner's court meeting. Would it be possible to be added to the agenda for the March 21st meetings? Included below is the wording for the agenda items, please let me know if it's possible to be added to the agenda and by what date you will need the backup information. Thank you!

Tiffany

Hidalgo County Drainage District #1

. **Discussion and action on tax resale bids received on the properties described as follows:**
Please see attached list.

Discussion and action on resolution for tax resale bid properties.

Hidalgo County Commissioner's Court

Delinquent Tax Collection Report for the period of July 1, 2016 through January 31, 2017

2. **Discussion and action on tax resale bids received on the properties described as follows:**
Please see attached list.

Discussion and action on resolution for tax resale bid properties.

Tiffany Scott Soliz
Public Affairs Coordinator
Valley - Edinburg
Linebarger Goggan Blair & Sampson, LLP
Attorneys at Law
Tiffany.Soliz@lgbs.com
205 South Pin Oak Avenue
Edinburg, TX 78539
Main: (956) 383-4500
Direct: (956) 289-7950
Fax: 956-383-7820
http://www.lgbs.com/

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Hidalgo County
Fees and Fines Activity Report

Prepared for:

Hidalgo County Commissioners and
Ramon Garcia, County Judge

Linebarger Goggan Blair & Sampson, LLP

LINEBARGER
ATTORNEYS AT LAW

District Court and County Court at Law 1
July 2016 – January 2017

	District Court	***County Court at Law 1***
Letters Mailed	8,937	3,790
Updated Address/Phone	872	251
Inbound	694	211
Outbound	7,622	2,052

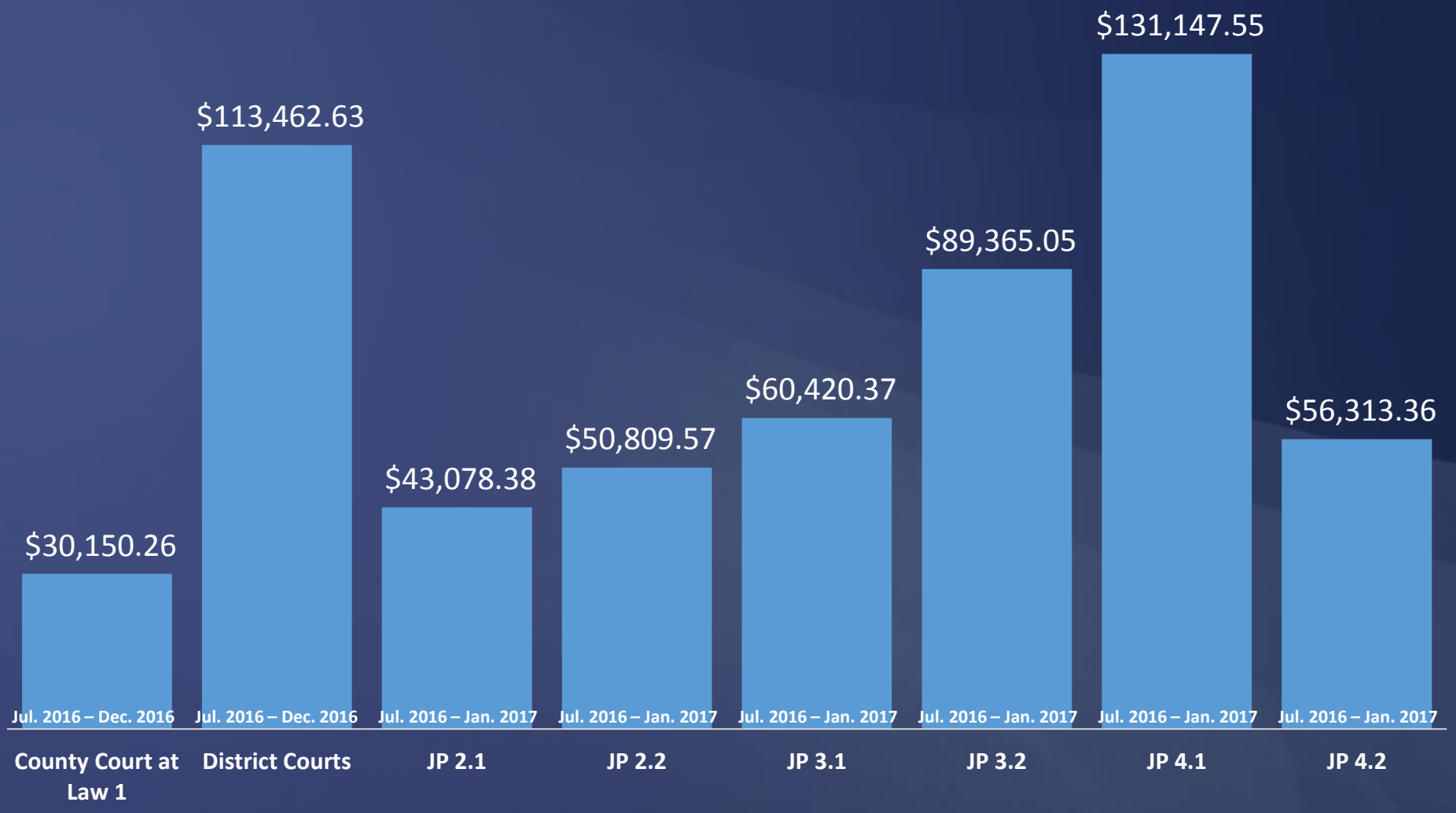
Linebarger Goggan Blair & Sampson, LLP
ATTORNEYS AT LAW
www.lgbs.com

Justice of the Peace
July 2016 – January 2017

Summary of All Courts

Letters Mailed	31,588
Updated Address/Phone	5,206
Inbound	3,319
Outbound	115,825

Partnering with LGBS has produced over $480 thousand in collections in just 6 months for Hidalgo County on tickets



Collections based on invoiced accounts including fees

Hidalgo County
Fees and Fines Activity Report

Prepared for:

Hidalgo County Commissioners and
Ramon Garcia, County Judge

Linebarger Goggan Blair & Sampson, LLP

LINEBARGER
ATTORNEYS AT LAW

Hidalgo County Delinquent Tax Report

Prepared for:

Hidalgo County Commissioners and
Ramon Garcia, County Judge

Linebarger Goggan Blair & Sampson, LLP

LINEBARGER
ATTORNEYS AT LAW

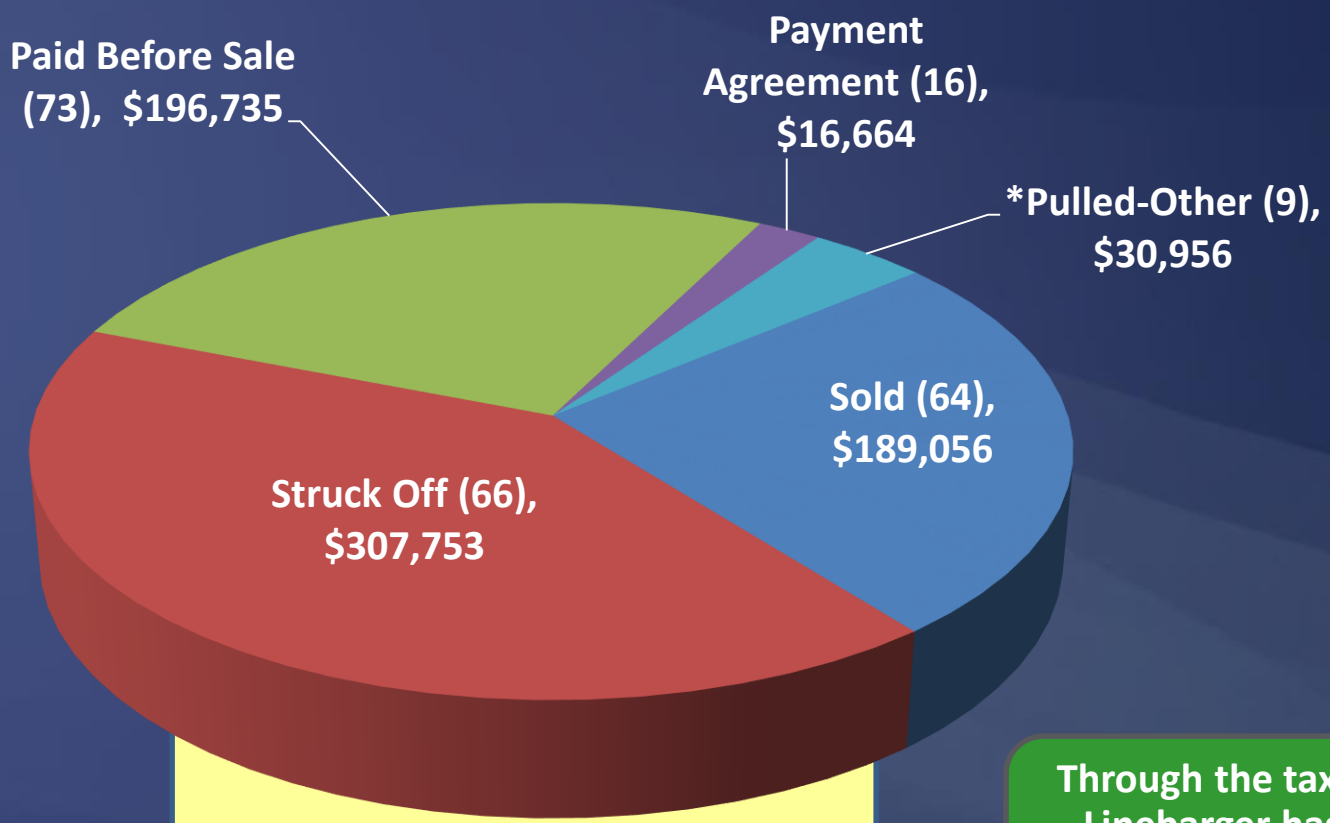
Our Services

- Mailing collection notices
- Working through inquiries and disputes
- Skip tracing
- Litigation and pursuit of pre- and post-judgment remedies
- Inbound and outbound call campaigns
- Offline payment remittance
- Facilitating payment
- Bankruptcy representation

Program Activities & Results
July 2016 – January 2017

- 1,137 Lawsuits Filed - $2,093,681
- 332 Lawsuits Disposed - $5,460,506
- 500 Judgements Taken - $1,074,210
- 75 Tax Warrants - $124,206
- 6 Demand Mailings – 112,424 Letters
- 22,633 Incoming/Outgoing Phone Calls
- 3,968 Property Inspections/Home Visits
- 7,027 Office Visitors

Tax Sale Program Results
July 2016 – January 2017
Base Tax, Penalty and Interest

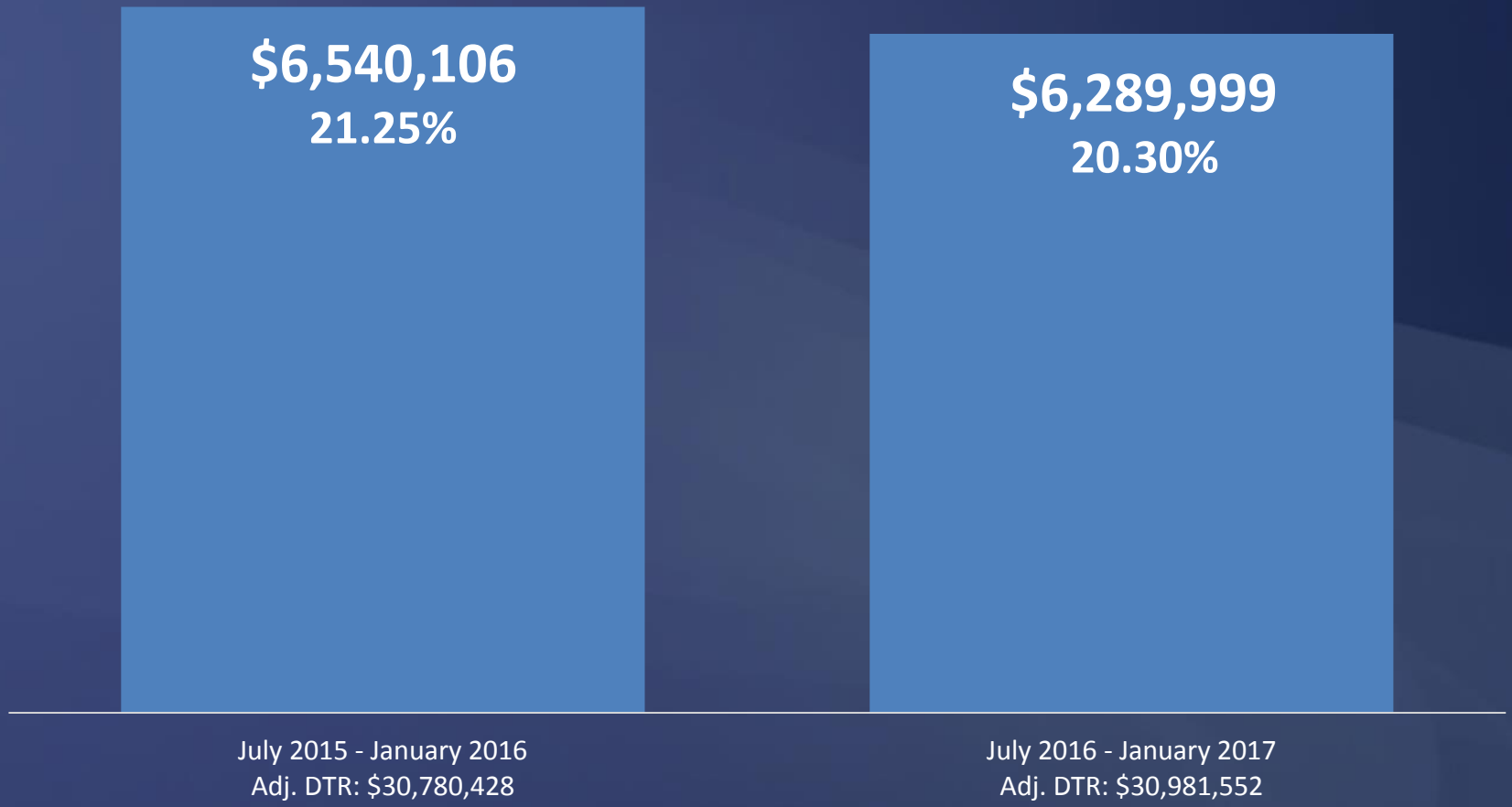


One Resale October 2016
31 Properties sold for $111,916

Through the tax resale program, Linebarger has returned over $1.18 million in appraised value back to the tax roll

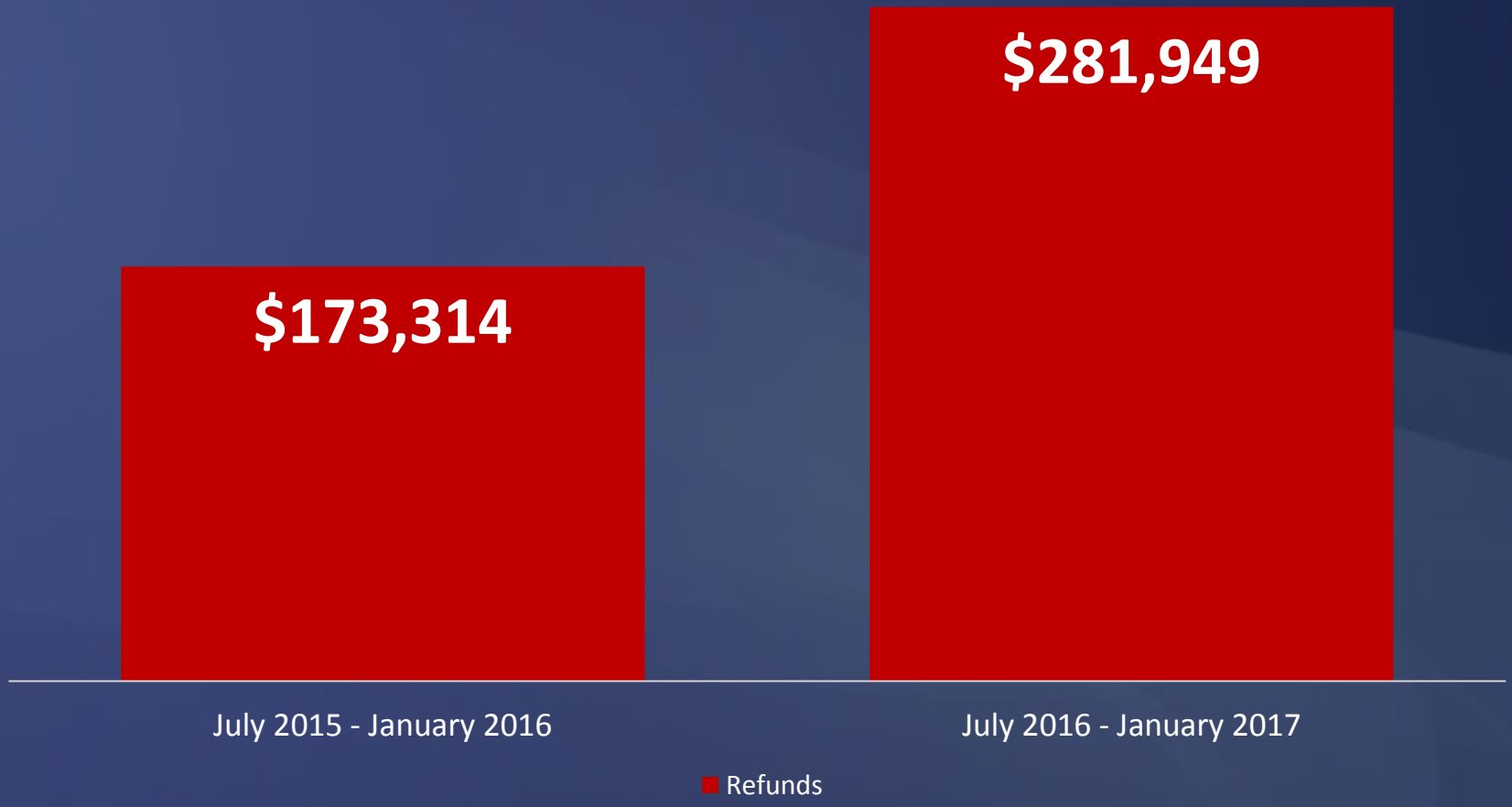
*Pulled from Sale: Bankruptcy, Letters of Commitment & Deferrals

Two Year Base Tax Collection Comparison July through January



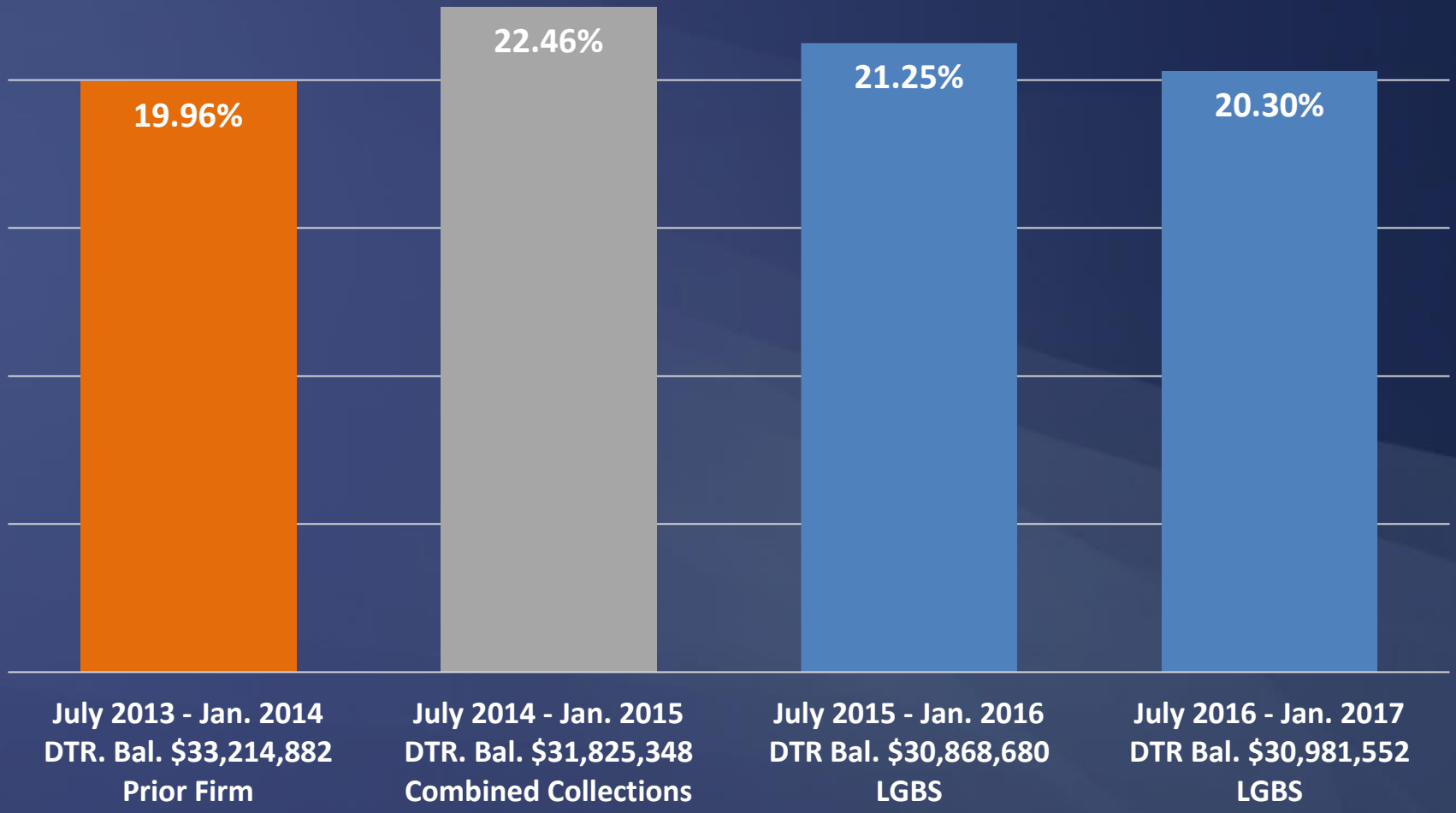
Source: Hidalgo County Tax Office Data

Refund Comparison
July through January



Source: Hidalgo County Tax Office Data

Four Year Collection Comparison
July through January



Source: Hidalgo County Tax Office Data

Payment Centers

Precinct 4

205 S. Pin Oak Ave
Edinburg, Texas

Precinct 3

1518 N. Conway
Mission, Texas

Precinct 2

400 North McColl Road
McAllen, Texas

Precinct 1

708 E. Edinburg Ave
Suite B
Elsa, Texas

Hidalgo County
Delinquent Tax Report

Prepared for:

Hidalgo County Commissioners and
Ramon Garcia, County Judge

Linebarger Goggan Blair & Sampson, LLP

LINEBARGER
ATTORNEYS AT LAW

LINEBARGER GOGGAN BLAIR & SAMPSON, LLP
February 7, 2017 TAX RESALE LIST
HIDALGO COUNTY

SUIT NUMBER	LEGAL DESCRIPTION	ACCOUNT NUMBER	OPENING BID	AMOUNT OF BID	AMOUNT FOR COUNTY	AMOUNT FOR DRAIN. DIST #1
T-568-06-A 1	Unit 9, Building "G", Dunlyn Estates, a condominium regime in Hidalgo County, Texas.	D8511-00-00G-0009-00	$86,570.00	$69,000.00	$5,242.79	$659.71
T-306-09-B 2	The South 1/2 of Lot 72 and all of Lot 73, Northside Village Mobile Home Subdivision, Phase II, a subdivision in Hidalgo County, Texas.	N7850-00-000-0072-00	$48,757.00	$15,000.00	$446.41	$148.15
T-0155-13-E 3	Lot 5, Block 6, Loma Linda Subdivision, an addition to the City of Pharr, Hidalgo County, Texas.	L5250-00-006-0005-00	$12,260.00	$7,000.00	$985.42	$123.56
T-0454-13-B 4	Lot 4 and the West 1/2 of Lot 5, Block 65, Original Townsite to the City of Alamo, Hidalgo County, Texas.	A2100-00-065-0004-00	$103,760.00	$5,000.00	$493.63	$121.35
T-0007-14-E 5	Lot 1, Block 2, Helmer Subdivision, an addition to the City of Pharr, Hidalgo County, Texas.	H2000-00-002-0001-00	$58,895.00	$13,900.00	$2,376.81	$332.88
T-2535-14-B 6	All of Lot Fourteen (14), Tierra Del Norte Subdivision, Hidalgo County Texas.	T4780-00-000-0014-00	$11,590.00	$11,100.00	$1,781.88	$210.42
T-0606-15-H 7	North 50 feet of the South 100 feet of the East 140 feet of Lot 4, Block D, Kelly-Pharr Lettered Blocks, acreage tract, in the City of Pharr, Hidalgo County, Texas.	K2100-00-00D-0004-02	$7,255.00	$13,500.00	$2,275.00	$789.75
T-0805-15-H 8	0.242 acre, more or less, out of the East 2.00 acres of the East 1/2 of the North 1/2 of Lot 4, Block 36, Alamo Land and Sugar Company Subdivision, a subdivision in Hidalgo County, Texas	A1800-00-036-0004-10	$7,850.00	$4,500.00	$475.14	$62.95

T-446-08-D 9	5.00 ACRES, MORE OR LESS, OUT OF LOTS 9 AND 10, SECTION 2, HIDALGO CANAL COMPANY SUBDIVISION, HIDALGO COUNTY, TEXAS. (LANDLOCKED)	H2550-01-002-0009-05	$39,260.00	$1,500.00	$20.01	$1.72
T-358-11-B 10	12.164 acres, more or less, being out of Lot 361, Kelly-Pharr Subdivision, a subdivision in Hidalgo County, Texas.(LANDLOCKED)	K2400-00-000-0361-05	$23,450.00	$5,000.00	$614.40	$58.70
T-0214-12-H 11	All of Lot 12, Las Brisas Del Sur Subdivision, Hidalgo County, Texas	L3140-00-000-0012-00	$22,070.00	$12,500.00	$1,978.49	$184.59
T-0734-14-G 12	The East 75 feet of a 2.95 acre tract out of Lot 5, of Tejon Land & Water Company Subdivision, Hidalgo County, Texas	T1400-00-001-0005-19	$58,920.00	$30,000.00	$6,362.25	$727.39
T-1559-08-I 13	Lot 7 which is 0.14 acre of land out of that certain 1.8 acres of abandoned canal right of way lying immediately West of Lot 172, John H. Shary Subdivision of Porciones 58, 59 and 60, Hidalgo County, Texas,	S2950-00-000-0172-51	$14,961.00	$9,000.00	$1,396.75	$124.24
T-3161-14-D 15	Lot 45, Block "C", Tri-City Subdivision, Unit 2, a subdivision in the City of Alton, Hidalgo County, Texas.	T7300-02-00C-0045-00	$30,730.00	$21,000.00	$3,000.56	$354.41
T-0873-15-I 16	Lot (11), Siebring Addition to the City of McAllen, Hidalgo County, Texas.	S3400-00-000-0011-00	$13,061.00	$15,000.00	$4,575.92	$967.78
T-801-08-E 18	Lot 19, Block 7, Richardson Heights addition, City of Monte Alto, Hidalgo County, Texas.	R3825-00-007-0019-00	$3,390.00	$5,000.00	$821.18	$75.93
T-801-08-E 19	Lot 20, Block 7, Richardson Heights addition, City of Monte Alto, Hidalgo County, Texas.	R3825-00-007-0020-00	$13,942.00	$4,000.00	$758.69	$59.83

T-1732-12-E 20	Lot 8, Block 7, Richardson Heights Addiion to the Townsite of Monte Alto, Hidalgo County, Texas.	R3825-00-007-0008-00	$9,715.00	$1,600.00	$10.13	$0.92
T-1732-12-E 21	Lot 7, Block 7, Richardson Heights Addiion to the Townsite of Monte Alto, Hidalgo County, Texas.	R3825-00-007-0007-00	$2,100.00	$1,600.00	$164.51	$19.28
T-1542-13-G 22	Lot 3, Block 2, Jessup's Subdivision, a resubdivision of the South 15.0 acres of the North 25.0 acres of Lot 13, Block 59, Mo-Tex Land and Irrigation Company Subdivision, Las Mestenas Grant, Hidalgo County, Texas.	J5250-00-002-0003-00	$2,811.77	$2,500.00	$537.18	$64.03
T-1259-06-H 23	The North 10 feet of Lot 9, and the South 25 feet of Lot 10, Block 51, Original Townsite, City of La Villa, Hidalgo County, Texas.	L2050-00-051-0010-00	$35,120.00	$2,500.00	$182.36	$27.44
T-027-05-I 24	Lot 5, Block 2, Eastside Addition, an addition to the City of La Villa, Hidalgo County, Texas.	E1400-00-002-0005-00	$9,971.00	$6,000.00	$573.00	$125.19
T-027-05-I 25	Lot 8, Block 2, Eastside Addition, an addition to the City of La Villa, Hidalgo County, Texas.	E1400-00-002-0008-00	$23,760.00	$15,500.00	$2,167.18	$450.80
T-022-07-F 26	The South 40 feet of Lot 2, and the North one-half of Lot 3, Block 18, Original Townsite, City of La Villa, Hidalgo County, Texas.	L2050-00-018-0002-0	$28,560.00	$7,500.00	$1,364.19	$110.53
T-1111-08-C 27	Lot 1, Block 1, Eastside Addition, Hidalgo County, Texas.	E1400-00-001-0001-00	$41,282.00	$10,000.00	$1,388.36	$122.71
T-0477-12-D 28	Lot 1, Block 35, Original Townsite, City of La Villa, Hidalgo County, Texas, as described in Volume 2263, Page 596, Deed Records of Hidalgo County, Texas.	L2050-00-035-0001-00	$6,825.00	$2,400.00	$2.41	$.28

T-0489-12-F 29	0.265 acres, more or less, out of Farm Tract 2153, North Capisallo District Subdivision, a subdivision in Hidalgo County, Texas.	N3400-00-000-2153-05	$10,950.00	$1,100.00	$8.85	$.83
T-1131-09-A 30	Lots 1, 2, 3, and 4, Block 4, and the adjoining North 70 feet by 110 feet, Original Townsite to the City of Edcouch, Hidalgo County, Texas.	E3100-00-004-0001-00	$177,590.00	$16,000.00	$2,866.52	$277.98
T-1619-13-H 31	LOTS 13, 14, 15, 18 & 19, BLOCK 45, FRANK A. SMITH'S NORTH ELSA RESUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 7, PAGE 15, MAP RECORDS OF HIDALGO COUNTY, TEXAS.	E5400-00-045-0013-00	$59,510.00	$1,900.00	$.90	$.08
T-1619-13-H 32	AN APPROXIMATELY .81 ACRE TRACT BEING THE PORTION OF THE 1.939 ACRE TRACT DESCRIBED IN A DEED RECORDED UNDER COUNTY CLERK'S FILE NUMBER 609006 IN THE OFFICIAL PUBLIC RECORDS OF HIDALGO COUNTY, TEXAS.	E5400-00-030-0000-02	$217,995.00	$30,000.00	$5,039.66	$419.29
T-1619-13-H 33	LOTS 20 AND 21, BLOCK 45, FRANK A. SMITH'S NORTH ELSA RESUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 7, PAGE 15, MAP RECORDS OF HIDALGO COUNTY, TEXAS.	E5400-00-045-0020-00	$16,600.00	$8,500.00	$1,251.59	$116.31
T-623-08-C 34	Lots 25 and 26, Block 2, Original Townsite to the City of Elsa, Hidalgo County, Texas,	E5400-00-002-0025-00	$43.230.00	$5,000.00	$597.17	$119.98

T-450-99-B 35	Lot 88, Tierra Linda Subdivision, City of Palmview, Hidalgo County, Texas.	T5340-00-000-0088-00	$112.172.00	$52,000.00	$13,127.57	$1,768.73
T-1082-03-B 37	THE SOUTH 724 FEET OF THE WEST 1452 FEET OF THE 20.0 ACRES OF THE SOUTH 67.33 ACRES OF THE WEST ONE-HALF OF THE TEXAN GARDENS SUBDIVISION, BLOCK 16, SAVE & EXCEPT THE SOUTH 400 FEET OF THE WEST 450 FEET, BEING MORE PARTICULARLY DESCRIBED IN VOLUME 2536, PAGE 452, OFFICIAL RECORDS OF HIDALGO COUNTY, TEXAS.	T2200-00-016-0000-08	$119,210.00	$150,000.00	$21,060.38	$3,673.53
T-394-08-C 38	Lot 17, Block 6, consisting of 0.17 acres of land, more or less, La Camelia Subdivision "A", an addition to the City of Mission, Hidalgo County, Texas.	L0650-02-006-0017-00	$26,820.00	$5,000.00	$440.47	$40.51
T-1060-10-G 39	Lot 42, Carlos Acres Subdivision, Hidalgo County, Texas.	C1760-00-000-0042-00	$28,480.00	$21,000.00	$4,520.15	$435.71
T-1483-10-C 40	All of Lot Thirty-eight (38) of La Homa Road Subdivision, Hidalgo County, Texas.	L1150-00-000-0038-00	$27,530.00	$12,500.00	$2,263.06	$230.01
T-2129-11-J 41	0.14 acres, more or less, out of the South 5.71 acres of Lot 130, Nick Doffing Co. Subdivision No. 1, Hidalgo County, Texas.	D6000-01-000-0130-02	$6,445.00	$900.00	$17.87	$1.96
T-2129-11-J 42	0.14 acres, more or less, out of the South 5.71 acres of Lot 130, Nick Doffing Co. Subdivision No. 1, Hidalgo County, Texas.	D6000-01-000-0130-03	$5,735.00	$3,500.00	$636.98	$73.08
T-2129-11-J 43	0.14 acres, more or less, out of the South 5.71 acres of Lot 130, Nick Doffing Co. Subdivision No. 1, Hidalgo County, Texas.	D6000-01-000-0130-06	$5,735.00	$900.00	$17.86	$2.05

ORDER OF THE COMMISSIONERS' COURT OF
HIDALGO COUNTY, TEXAS

On the 21st day of March, 2017, at the Special called meeting of the Hidalgo County Commissioners' Court, a motion was duly made and seconded to resell properties described on the attached list, which were acquired by the County through previous tax foreclosure proceedings. The properties were sold in accordance with Texas Tax Code Ann. §34.05.

Discussion was then conducted, and upon completion of the same, the County Judge of Hidalgo County, Texas called for a vote on the motion, and the same was passed by majority. Now therefore:

BE IT RESOLVED AND ORDERED that the Commissioners' Court of Hidalgo County, Texas approved the bids received on the properties described on the attached list and authorizes the County Judge of Hidalgo County, Texas to execute tax resale deeds conveying the approved properties.

IT IS HEREBY RESOLVED, ORDERED AND SIGNED on this 21st day of March, 2017.

HIDALGO COUNTY

_____
Ramon Garcia
County Judge
Hidalgo County

ATTEST:

_____
Arturo Guajardo, Jr.
County Clerk
Hidalgo County

AI-59024 **Executive Office** **10. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

Discussion, consideration and action on Memorandum of Understanding (MOU) between Hidalgo County and RGV Hispanic Chamber of Commerce

BACKGROUND

$2,500 sponsorship to the Hispanic Chamber of Commerce in support of health/educational services to our veterans community.

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-415-00-115-002-0-843

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funds available as of 3-17-17.

Attachments

MOU

Legal Review Email

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 01:19 PM
Ivan Cantu	Ivan Cantu	03/17/2017 01:49 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/17/2017 11:52 AM
Final Approval Date: 03/17/2017		

STATE OF TEXAS §
§
COUNT OF HIDALGO §

MEMORANDUM OF UNDERSTANDING BETWEEN
HIDALGO COUNTY AND THE RGV HISPANIC CHAMBER OF COMMERCE

This Memorandum of Understanding is made on this _____ day of _____ 2017 by and Between the **COUNTY OF HIDALGO, TEXAS**, hereinafter referred to as "COUNTY", with administrative offices located at 100 E. Cano, Edinburg, TX 78539, and the **RGV HISPANIC CHAMBER OF COMMERCE,** hereinafter referred to as "**CHAMBER**", a non-profit organization with its principal office located at 3313 N. McColl Rd., McAllen, TX 78501.

The safety, health and general welfare of the citizens of Hidalgo County is a common objective of both parties. Further, it is the objective of both parties to collaborate with partners in the community in an effort to educate the constituents in Hidalgo County about resources available for seniors and veterans.

Therefore, the aim of this Understanding is to establish an agreement for COUNTY to participate in the CHAMBER's upcoming "SENIOR SUMMIT" with a common goal of educating the community about access to health care and other resources available to citizens in HIDALGO COUNTY. Specifically, CHAMBER and COUNTY agree to work cooperatively toward the aforementioned goal as described more fully below.

I. PROVISIONS OF SERVICES

Through this Agreement the parties shall develop a cooperative program to provide services as follows:

The participation of CHAMBER in this initiative shall consist of the following:

1. CHAMBER is hosting a SENIOR SUMMIT (Summit) on April 6, 2017, in the City of Pharr, Hidalgo County, Texas, which will provide access to constituents in Hidalgo County to available resources for health care and veterans affairs.

2. CHAMBER will provide COUNTY an opportunity to participate in the aforementioned Summit so that COUNTY may provide educational information and resources to its constituents.

3. CHAMBER will allow COUNTY's participation in the Summit by including members of a team which will include but is not limited to the following: Hidalgo County Veterans Affairs, Hidalgo County Community Service Agency and the Hidalgo County Health Department.

The participation of COUNTY in this initiative shall consist of the following:

1. COUNTY will provide personnel and resources to participate in the Summit for the purposes of providing educational information and access to services for constituents.

2. COUNTY will assist in the coordination of program-related activities and events for purposes of promoting the general health, safety and welfare of its constituents.

3. COUNTY will contribute (TWO THOUSAND FIVE HUNDRED DOLLARS AND NO 100/ths) $2,500.00 for program activities and participation in the SENIOR SUMMIT scheduled to take place on April 6, 2017.

II. TERM OR AGREEMENT

The term of this agreement is for one year; it will begin on **March 21, 2017**, and end on **March 20, 2018**.

III. COMPENSATION

COUNTY will receive no reimbursement from CHAMBER for any services provided under the agreement. COUTY will contribute $2,500.00 to CHAMBER for its participation in the Summit and for services provided as described herein.

IV. NOTICES

All notices or other writing required under this Agreement shall be deemed to have been made when sent by mail to the following address:

TO CHAMBER:
RGV HISPANIC CHAMBER OF COMMERCE
Attn: Cynthia Zakulenzki, President/CEO
3313 N. McColl Rd.
McAllen, TX 78501

TO COUNTY:
County of Hidalgo
Attn: Ramon Garcia, County Judge
100 E. Cano
Edinburg, TX 78539

With CC to:
Valde Guerra
Hidalgo County Executive Officer
2818 S. Bus. Hwy 281
Edinburg, TX 78539

VI. TERMINATION

This Agreement may be amended, modified or terminated by agreement of the parties. Further, the agreement may be terminated by either party by giving thirty (30) days written notice via certified mail, return receipt requested to the other party hereto of the intention to terminate.

VII. LAW GOVERNING VENUE

This Agreement shall be governed by and construed in accordance with the laws of the State of Texas, and, obligations and undertakings of each of the parties to this Agreement shall be performable in Hidalgo County, Texas.

VIII. LIABILITIES

This Agreement is not intended to extend the liability of the Parties beyond that provided by law. Neither party waives, nor shall be deemed to have hereby waived, any immunity or defenses that would otherwise be available to it against claims arising from third parties.

WITNESS THE HANDS OF THE PARTIES effective as of the day and year first written above.

RGV HISPANIC CHAMBER OF COMMERCE

_____

Cynthia Zakulenzki, President/CEO

HIDALGO COUNTY, TEXAS

_____

Ramon Garcia, Hidalgo County Judge

ATTEST:

_____

Arturo Guajardo, JR. Hidalgo County Clerk

APPROVED AS TO FORM:
Office of Criminal District Attorney
Ricardo Rodriguez, Jr.

_____

By: Josephine Ramirez Solis
Assistant District Attorney

March 17, 2017 1:29 PM

Fwd: MOU RGV Hispanic Chamber

From: Monica Badillo

To: Ivan Cantu

Hispanic Chamber MOU revised.pdf (62.9 KB) Download | Briefcase | Remove

Hi Ivan,

Legal review; please add this email to agenda item in your inbox.

Thanks,

Monica Salinas Badillo, Court Administrator
Hidalgo County Executive Office
2818 S. Bus. Hwy. 281
Edinburg, Texas 78539
(956) 292-7655 ext. 5602
(956) 292-7034 (fax)

----- Forwarded Message -----
From: Josephine Ramirez <josephine.ramirez@da.co.hidalgo.tx.us>
To: valde guerra <valde.guerra@co.hidalgo.tx.us>, Monica Badillo <monica.badillo@co.hidalgo.tx.us>
Sent: Fri, 17 Mar 2017 13:24:21 -0500 (CDT)
Subject: MOU RGV Hispanic Chamber

As requested, here is the revised agreement.

Josephine Ramirez Solis

Assistant Criminal District Attorney

Chief - Civil Division

Office of Criminal District Attorney

Hidalgo County, Texas

100 E. Cano

Edinburg, TX 78539

(956) 292-7609 ext. 8186

(956) 318-2079 FAX

josephine.ramirez@da.co.hidalgo.tx.us

****

The
information contained in this e-mail may be 1.SUBJECT TO THE ATTORNEY-CLIENT PRIVILEGE; 2.ATTORNEY WORK PRODUCT; and/or 3.CONFIDENTIAL. It is intended only for the individual or entity designated above. Any distribution, copying, or use of or reliance upon the information contained in this e-mail by or to anyone other than the recipient designated above by the sender is unauthorized and strictly prohibited. **IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE ADVISE THE SENDER BY REPLY E-MAIL TO josephine.ramirez@da.co.hidalgo.tx.us AND DELETE THE COMMUNICATION.**

****

AI-59042 **Executive Office** **10. D.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

Discussion, consideration and action providing for public comment on behalf of Hidalgo County regarding the 2016 Texas Floods and Storms recovery funding State Action Plan - US Department of Housing and Urban Development (HUD).

BACKGROUND

From: Tania Salgado <Tania.Salgado@thc.texas.gov>
Date: March 17, 2017 at 2:07:58 PM CDT
To: "Michael Leo (michael.leo@co.hidalgo.tx.us)" <michael.leo@co.hidalgo.tx.us>, "Bobby Villarreal (roberto.villarreal@co.hidalgo.tx.us)" <roberto.villarreal@co.hidalgo.tx.us>, Rudy Madrid <rmadrid@co.kleberg.tx.us>, "Frances Garcia (fgarcia@co.kleberg.tx.us)" <fgarcia@co.kleberg.tx.us>
Subject: GLO Disaster Relief- Hidalgo and Kleberg

FYI
http://texasrebuilds.org/Pages/2016Floods.aspx

Tania Salgado
Project Reviewer
Texas Historic Courthouse
Preservation Program
Architecture
P.O. Box 12276
Austin, TX, 78711-2276
P: 512.463.6218
C: 408.645.8560
F: 512.463.6095

Tania.Salgado@thc.texas.gov
www.thc.state.tx.us

thc_logo

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 02:48 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Monica Badillo Started On: 03/17/2017 02:32 PM
Final Approval Date: 03/17/2017

AI-58796 **Executive Office** **10. E.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

Discussion and approval to appoint members to the Hidalgo County Historical Commission.

BACKGROUND

Fiscal Impact

Attachments

members
members & new
email

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/02/2017 01:49 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/02/2017 12:55 PM
Final Approval Date: 03/17/2017		

HIDALGO COUNTY HISTORICAL COMMISSION

OFFICERS FOR 2017

Chair	Alex Moreno, Jr.
Co-Vice-Chairs For Preservation	Aida Escobar Anita Vela
Vice-Chair For Markers	Beatriz Edwards
Secretary	Dee Lopez
Treasurer	Adela Ortega

HIDALGO COUNTY HISTORICAL COMMISSION

2017 - 2018 MEMBERS

NAME	ADDRESS CITY, STATE, ZIP	PCT	EMAIL PHONE NO.
Hilda Ybarra-Thompson, M.D.	9227 Mile 2 W., Mercedes , TX 78570	1	jdelafuente2000@msn.com Cell 956-454-0007
Jesse De La Fuente	9227 Mile 2 W. Mercedes, TX 78570	1	jdelafuente2000@msn.com Cell 956-793-0829
Beatrice De Leon Edwards, Ph.D.	622 N. Texas Ave. Mercedes, TX 78570	1	Beatricedeleon@yahoo.com Home 956-686-0192
John Downing	2253 Mile 6 N., Mercedes, Tx 78570	1	babyjohndowning@aol.com Cell 956-463-9431
Lille H. Dominguez	P. O. Box 972, Mercedes, TX 78570	1	lille.dominguez@gmail.com Cell 956-441-9565
Alicia De La Rosa	1206 S. Standard San Juan, TX 78589	2	ali42r@yahoo.com Home 956-781-8763

Cell 956-534-1153

Spurgeon W. Brown 5720 N. 23rd St. McAllen, TX 78504 2 spud686@juno.com
Home 956-686-5928

Anita Vela 300 Cypress Cr. Pharr, TX 78577 2
nanavela@sbcglobal.net Home 956-787-6825

Cell 956-369-5191

Aida Escobar P.O. Box 271 Pharr, TX 78577 2
aida.escobar22@sbcglobal.net Home 956-787-1968

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NAME ADDRESS CITY, STATE, ZIP PCT EMAIL
PHONE NO.

Rick Silva 225 E.3rd St., San Juan, TX 78589 2
silversson@icloud.com Cell 956-960-6406

Dr. James Barrera 2701 N. McColl #F11, McAllen, TX 78501 2 Jbbarrer@stc.edu
Cell 956-451-2978

Ed Vela P. O. Box 2, McAllen, TX 78501 2
Cell 956-343-5714

Adela Ortega 1310 N. Francisco Mission, TX 78572 3
aortega@missiontexas.us Home 956-580-8750

agortega10@gmail.com
Cell 956-458-9066

Rosa Lilia Ledesma 3602 N. Conway Mission, TX 78574 3
rlrledesma@gmail.com Home 956-563-6464

Amancio Chapa P.O. Box 306 La Joya, TX 78560 3
ajchapajr@rgv.rr.com Cell 956-571-8805

Maria Hurtado 218 Citriana Street Mission, TX 78572 3
oye951@gmail.com Cell 956-890-0211

Adalia De Luna P. O. Box 160, Penita, TX 78576 3
deluna0731@yahoo.com Cell 956-240-0015

Blas Loya 803 Paradise Circle Palmview, TX 78572 3
blasbmly@netzero.net Cell 956-222-3801

Valerie Ramirez 505 W. Palm Dr. Edinburg, TX 78541 4
Valerie.g.ramirez@gmail.com Home 956-381-8945

Cell 956-570-8148

Harry Rakosky 9620 N. Ware Rd., McAllen, TX 78504 4
harry.rakosky@tpwd.state.tx.us Cell 210-887-6029

Cell 956-330-3535

Oscar Martinez P. O. Box 343, McAllen, TX 78504 4
Cell 956-607-0111

Augie Pena P. O. Box 343, McAllen, TX 78504 4
augiepena@hotmail.com Cell 956-225-7223

Alex Moreno 4751 S. Jackson, Edinburg TX 78539 4
AMoreno51@hotmail.com Cell 956-624-1027

Sean Visintainer 1201 W. University Dr., Edinburg, TX 4
sean.visintainer@utrgv.edu Work 956-665-2990
78539
Cell 214-494-5273

NOTES:

Recent resignations and deaths have greatly effected the Historical Commission. Four long time active members have died in the last two years and others have left the area or retired. The Commission is recruiting and training new persons to replace them.

The Commission was reduced to 25 members by previous action of the Commissioners' Court. With the persons proposed for appointment, the Commission will be in compliance with membership limit.

HIDALGO COUNTY HISTORICAL COMMISSION

NEW MEMBERS

NAME	CITY	PCT .
Ed Vela	Hidalgo, TX	2
Adalia De Luna	Penitas, TX	3
Sean Visintainer	Edinburg, TX	4

Zimbra **monica.badillo@co.hidalgo.tx.us**

Fwd: Proposed Appointments for Hidalgo County Historical Commission

From : Maria Lumbreras <maria.lumbreras@co.hidalgo.tx.us> Wed, Mar 01, 2017 09:39 AM
Subject : Fwd: Proposed Appointments for Hidalgo County Historical Commission 2 attachments
To : Monica Badillo <monica.badillo@co.hidalgo.tx.us>
Cc : Erika Reyna <erika.reyna@co.hidalgo.tx.us>, amoreno1947@gmail.com, Sandra De Leon <sandra.deleon@co.hidalgo.tx.us>

Good morning Monica,

As per our conversation, please see the email below and attachments regarding the Hidalgo County Historical Commission's agenda item. Representative Alex Moreno would like this item to be placed on the Tuesday, March 21, 2016 Commissioners Court Agenda. His phone number is 956-381-8000.

Please feel free to contact Representative Moreno or our office regarding any questions related to this item.

Thank you in advance,

Mari C. Lumbreras
Executive Assistant II
Office of County Judge Ramon Garcia
100 East Cano Street, Second Floor
Edinburg, Texas 78539
Tel (956) 318-2600
Fax (956) 318-2699
maria.lumbreras@co.hidalgo.tx.us
www.co.hidalgo.tx.us

From: "Alejandro Moreno Jr" <amoreno1947@gmail.com>
To: "maria lumbreras" <maria.lumbreras@co.hidalgo.tx.us>
Sent: Friday, February 24, 2017 4:48:29 PM
Subject: Proposed Appointments for Hidalgo County Historical Commission

Mari, Lumbreras,

Enclosed is the proposed list of members for the Hidalgo County Historical Commission. I also enclose the list of officers elected by the Commission in 2016 for the 2017 calendar year. We are submitting the names of three new persons to replace persons who died or were unable to continue in their position.

Please call me if you have any question. Let me know when this scheduled so I am appear at the meeting of the Commissioners Court.

Alex Moreno, Jr., Chair

Hidalgo County Historical Commission

Email: amoreno1947@gmail.com

AI-58714 **Public Defender's Office** **11. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Jaime Gonzalez, PUBLIC DEFENDERS

Submitted By: Patti Loya, PUBLIC DEFENDERS

Department: PUBLIC DEFENDERS

Information

CAPTION

Requesting approval to reimburse Jaime (Jimmy) Gonzalez, Chief Public Defender the amount of $93.86 for the purchase of indigent defendant's clothing expense for court with authority for County Treasurer to issue payment/check after review and auditing procedures are completed by County Auditor.

BACKGROUND

Clothing was purchased so that the indigent defendant would not be unduly prejudiced by members of the jury, due to appearing in orange jail scrubs.
Cases: CR-1049-97-F; CR-3077-14-F; CR-3112-11-F; CR-3460-11-F; and CR-4749-07-F (Jury Trial on 02/22/2017)

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-412-30-085-003-0-831

FUNDS AVAILABLE Y/N?: y **MATCHING FUNDS Y/N?:** n

BUDGETARY IMPACT:

Funds available as of 3-2-2017

Attachments

Purchase Affidavit
Receipt

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/02/2017 01:43 PM
Linda Flores	Linda Flores	03/02/2017 04:26 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Patti Loya		Started On: 02/27/2017 09:29 AM
Final Approval Date: 03/17/2017		

HIDALGO COUNTY AUDITOR'S OFFICE
HIDALGO COUNTY, TEXAS

PURCHASE AFFIDAVIT

THE STATE OF TEXAS

COUNTY OF HIDALGO

I, **Jaime E. Gonzalez**, do hereby state that the item(s) listed on the invoice(s) named below
PURCHASER'S NAME
were purchased for the exclusive use of Hidalgo County:

INVOICE NO.	DATE	AMOUNT	NAME OF COMPANY
03361	2/19/17	$93.86	Walmart
TOTAL		$93.83	

I further state that I was authorized to make such a purchase(s).

I therefore request reimbursement of this invoice (these invoices) from Hidalgo County and that payment be made payable to me.

SIGNATURE: _____

TITLE: Chief Public Defender
PERSON MAKING PURCHASE

Before me **Patricia G. Loya**, a Notary Public, appeared __Jaime E. Gonzalez__ and on **h is** oath deposed and stated that the foregoing facts as set forth in the above request for expense reimbursement are true and correct in every respect. **H_e_ / S** further stated **h_e_ / s___** requested payment of the same.

(SEAL)

PATRICIA G LOYA
Notary Public, State of Texas
Comm. Expires 03-26-2020
Notary ID 8547281

Patricia G. Loya
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

APPROVAL: **DEPARTMENT HEAD**

APPROVAL: **COUNTY AUDITOR**

COUNTY AUDITOR'S FORM: MCJR-CA-004
REVISED: 01/01/2001

See back of receipt for your chance to win $1000

ID #: 7KZT7L1C2JJT

Walmart

Save money. Live better.

(956) 618 - 2018
MANAGER MARIANA GARCIA
4101 S MCCOLL RD
EDINBURG TX 78539

ST# 03886 OP# 003560 TE# 04 TR# 03361

KHAKI PANT	489396608909	13.96	X
PL SOCKS	007001061314	6.86	X
GE LS POPLIN	000082831481	14.98	X
GE LS POPLIN	000082831439	14.98	X
M CASUAL	088981712891	14.97	X
5PK CREW	088530634957	13.96	X
MENS BELT	088344916347	7.00	X
	SUBTOTAL	86.71	
TAX 1	8.250 %	7.15	
	TOTAL	93.86	
	DEBIT TEND	93.86	
	CHANGE DUE	0.00	

Pant
socks
shirt
shirt
shoes
undershirt
Belt

EFT DEBIT PAY FROM PRIMARY
93.86 TOTAL PURCHASE
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REF # 705000825911
NETWORK ID. 0076 APPR CODE 840122

US DEBIT
AID A0000000980840
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*Pin Verified
TERMINAL # SC010511

02/19/17 17:22:52

ITEMS SOLD 7

TC# 0243 0793 2327 0766 5336

Watch The Receipt
Oscar Sunday Feb 26 on ABC
02/19/17 17:22:57

Store receipts on your phone. Walmart Pay.

AI-58977 **Human Resources** **12. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Raul Silguero, HUMAN RESOURCES

Submitted By: Diana Munoz, HUMAN RESOURCES

Department: HUMAN RESOURCES

Information

CAPTION

Approval of Re-appointment of Civil Service Commission Member, Jaime Ortiz (by Pct. 1)

BACKGROUND

Jaime Ortiz - Term expires March 23, 2017 "Pursuant to Local Government Code 158.008. Appointment of Commission."

Fiscal Impact

Attachments

LGC 158.008

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/16/2017 08:55 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Diana Munoz		Started On: 03/16/2017 08:28 AM
Final Approval Date: 03/17/2017		

LOCAL GOVERNMENT CODE

TITLE 5. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES

SUBTITLE B. COUNTY OFFICERS AND EMPLOYEES

CHAPTER 158. COUNTY CIVIL SERVICE

SUBCHAPTER A. COUNTY CIVIL SERVICE SYSTEM

Sec. 158.008. APPOINTMENT OF COMMISSION. (a) If a civil service system is created under this subchapter, the commissioners court shall appoint three persons to serve as the members of the civil service commission that administers the system. The commissioners court shall designate one of the members as chairman of the commission.

(b) Each member of the commission is appointed for a term of two years.

(c) The commissioners court shall fill a vacancy on the commission by appointing a person to serve the unexpired part of the term of the member whose position is vacant.

(d) To be eligible for appointment to the commission, a person must:

(1) be at least 25 years old; and

(2) have resided in the county for the three years immediately preceding the date on which the person's term will begin.

(e) A member of the commissioners court of a county with a population of two million or more is not prohibited from being appointed to the civil service commission.

Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987. Amended by Acts 2001, 77th Leg., ch. 830, Sec. 1, eff. June 14, 2001.

Amended by:

Acts 2011, 82nd Leg., R.S., Ch. 1163, Sec. 73, eff. September 1, 2011.

AI-58877 **Human Resources** **12. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Raul Silguero, HUMAN RESOURCES

Submitted By: Diana Munoz, HUMAN RESOURCES

Department: HUMAN RESOURCES

Information

CAPTION

County Treasurer (1100):
1. Requesting waiver of the Budget Amendment Policy - Personnel Related - Amendments.
2. Discussion, consideration, and approval of the following personnel actions effective next full pay period, 4/03/2017 :

Action	Dept. / Program	Slot#	Position Title	Current Budgeted Allowance	Proposed Budgeted Allowance
Salary adjustment/ Supplement Pay (increase)	150-001	0002	Chief Deputy II	$561.00	$3,061.00
Salary adjustment/ Supplement Pay (decrease)	150-001	0003	Payroll Supervisor	$5,500.00	$3,000.00

3. Approval to revise salary schedule in accordance with Commissioners Court approval.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-415-16-150-001-0-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

No Budgetary Impact

Attachments

PAR

fiscal note

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/08/2017 02:35 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Diana Munoz		Started On: 03/07/2017 04:47 PM
Final Approval Date: 03/17/2017		

COUNTY OF HIDALGO
Human Resources Department

RECEIVED
MAR 08 2017
HUMAN RESOURCES

PERSONNEL ADJUSTMENT REQUEST FORM
(ALLOWANCES)

NOTE: COMPLETE MULTIPLE PERSONNEL ACTION FORM IF DEPARTMENT IS REQUESTING MORE THAN (3) PERSONNEL ACTIONS.

DATE:	03/02/2017	**CURRENT POSITION TITLE:**	Payroll Supervisor
DEPARTMENT NAME:	County Treasurer	**CURRENT SLOT NO.:**	003
DEPARTMENT NO.:	150 - 001	**REQUESTED POSITION TITLE:**	

ALLOWANCE REQUEST: *Type of Allowance*

- ☐ Longevity
- ☑ Supplemental
- ☐ Interpreter
- ☐ Auto
- ☐ Clothing

Allowance Amount:	$ 5,500.00	$ 3,000.00	-$ 2,500.00
	Current Budgeted Amount	Proposed Budgeted Amount	Net Change

TOTAL BUDGETARY IMPACT: -$ 2,500.00

POSITION/ALLOWANCE TO BE FUNDED FROM ONE OF THE FOLLOWING:

- ☑ Current Department Budget
- ☐ Salary Adjustment
- ☐ Annual Budget Cycle
- ☐ Will Require Additional Funds
- ☑ Other 7-1100-415-16-150-001-0-117

POSITION TYPE:

- ☑ Full Time Regular Object Code 113
- ☐ Full Time Temporary Object Code 121
- ☐ Part Time Regular Object Code 114
- ☐ Part Time Temporary Object Code 122

CIVIL SERVICE:

- ☑ Exempt
- ☐ Non-Exempt

FLSA:

- ☑ Exempt
- ☐ Non- Exempt

JUSTIFICATION/PRIORITY: ***(Explain why this allowance request is essential)***

Duties of secretary (designee) for the Bail Bond Board have been assigned to the Chief Deputy.

COMMENTS: ***(Any comments you wish to make regarding this request, attach additional pages if needed)***

Norma G. García	03/07/2017
Department Head	Date
	3/08/2017
Department of Human Resources	Date
	3/20/17
Department of Budget & Management	Date

COUNTY OF HIDALGO
Human Resources Department

RECEIVED
MAR 08 2017
HUMAN RESOURCES

PERSONNEL ADJUSTMENT REQUEST FORM
(ALLOWANCES)

NOTE: COMPLETE MULTIPLE PERSONNEL ACTION FORM IF DEPARTMENT IS REQUESTING MORE THAN (3) PERSONNEL ACTIONS.

DATE:	03/07/2017	**CURRENT POSITION TITLE:**	Chief Deputy II
DEPARTMENT NAME:	County Treasurer	**CURRENT SLOT NO.:**	002
DEPARTMENT NO.:	150-001	**REQUESTED POSITION TITLE:**	

ALLOWANCE REQUEST: ***Type of Allowance***

- ☐ Longevity
- ☑ Supplemental
- ☐ Interpreter
- ☐ Auto
- ☐ Clothing

	Current Budgeted Amount	Proposed Budgeted Amount	Net Change
Allowance Amount:	$ 561.00	$ 3,061.00	$ 2,500.00

TOTAL BUDGETARY IMPACT: $ 2,500.00

POSITION/ALLOWANCE TO BE FUNDED FROM ONE OF THE FOLLOWING:

- ☑ Current Department Budget
- ☐ Salary Adjustment
- ☐ Annual Budget Cycle
- ☐ Will Require Additional Funds
- ☑ Other 7-1100-415-16-150-001-0-117

POSITION TYPE:

- ☑ Full Time Regular Object Code 113
- ☐ Full Time Temporary Object Code 121
- ☐ Part Time Regular Object Code 114
- ☐ Part Time Temporary Object Code 122

CIVIL SERVICE:

- ☑ Exempt
- ☐ Non-Exempt

FLSA:

- ☑ Exempt
- ☐ Non- Exempt

JUSTIFICATION/PRIORITY: ***(Explain why this allowance request is essential)***

Employee is now carrying out the duties of secretary(designee) for the Bail Bond Board.
Monies come from fees collected from the Bail Bond Companies.

COMMENTS: ***(Any comments you wish to make regarding this request, attach additional pages if needed)***

Norma G. García	03/07/2017
Department Head	Date
[signature]	3/08/2017
Department of Human Resources	Date
[signature]	3/20/17
Department of Budget & Management	Date

HIDALGO COUNTY
Department of Budget & Management
FISCAL NOTE

•Fiscal notes are prepared by the Department of Budget & Management to present the budgetary impact of requests by departments/offices or of new proposals that were not approved during the budget process.

To: Commissioner' Court
From: Sergio Cruz, Budget Officer
CC Date: Tuesday, March 21, 2017 Agenda Item: 58877

Summary of request/proposal:
County Treasurer (1100)-
Approval of the following personnel actions, effective 04/03/17:

Fund	Position	Slot #	Obj	Current Budgeted Salary Allowance	Proposed Budgeted Salary/ Allowance	Total Requested
1100	Chief Deputy II	0002	117	561.00	3,061.00	2,500.00
1100	Payroll Supervisor	0003	117	5,500.00	3,000.00	(2,500.00)
				6,061.00	6,061.00	0.00

Budgetary Impact:

INCREASE/DECREASE ACCOUNT NUMBER		ACCOUNT (OBJECT) NAME		AMOUNT
7-1100-415-16-150-001-0-	117	CO TREASURER-	SUPPLEMENTAL PAY	$0.00
7-1100-415-16-150-001-0-	211	CO TREASURER-	HEALTH INSURANCE	$0.00
7-1100-415-16-150-001-0-	212	CO TREASURER-	LIFE INSURANCE	$0.00
7-1100-415-16-150-001-0-	220	CO TREASURER-	FICA	$0.00
7-1100-415-16-150-001-0-	230	CO TREASURER-	RETIREMENT	$0.00
7-1100-415-16-150-001-0-	250	CO TREASURER-	UNEMPLOYMENT COMP	$0.00
7-1100-415-16-150-001-0-	260	CO TREASURER-	WORKER'S COMP	$0.00
			2017 Budgetary Impact	$0.00

2018 Budgetary Impact: $0.00

Possible Funding Sources: No Budgetary Impact

Comments:

Hidalgo Co. Budget Office
2/3/2005

AI-58878 **Human Resources** **12. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Raul Silguero, HUMAN RESOURCES

Submitted By: Diana Munoz, HUMAN RESOURCES

Department: HUMAN RESOURCES

Information

CAPTION

Sheriff Investigation HB65 (1227):
1. Discussion, consideration and approval of the following personnel actions, effective next full pay period, 04/03/2017:

Action	Dept./ Program	Slot#	Position Title	Proposed Budgeted Salary
Create	280-005	0001	Criminal Research Specialist	$42,700.00
Create	280-005	0002	Criminal Research Specialist	$42,700.00

2. Approval to revise salary schedule in accordance with Commissioners Court action.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1227-421-00-280-005-0-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funds available as of 3/8/17

Attachments

JOB DESCRIPTION
PAR
fiscal note

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/08/2017 02:11 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Diana Munoz		Started On: 03/08/2017 09:57 AM
Final Approval Date: 03/17/2017		

HIDALGO COUNTY SHERIFF'S OFFICE

CRIMINAL RESEARCH SPECIALIST

GENERAL DESCRIPTION

The primary purpose of this position is to research and evaluate intelligence data from all-sources of information to identify and disseminate intelligence data of interest to the Texas Transnational Intelligence Center, as well as Texas Transnational Intelligence Center partners, and its stakeholders.

EXAMPLES OF WORK PERFORMED

Conduct extensive database research

Plans and conducts public meetings, briefings, and other activities in support of the Texas Transnational Intelligence Center and provides information to support the development and dissemination of key intelligence information.

Assists in the planning and development of group reports or other products, and develops instructions, guides, and manuals to support established dissemination standards and methods dealing with conventional intelligence problems, questions, or situations.

Compiles information, analyzes findings, makes interpretations, and writes comprehensive reports based on analysis

Assesses future requirements for intelligence data based on trends and interpretations of events, and identifies new sources of information for application to particularly sensitive problems.

Develop and maintain liaison with Texas Transnational Intelligence Center at Federal, State and local officials, and private industry

Prepares recommendations that regularly include analysis of multiple factors including evaluation and interpretation of findings based upon extensive database queries

Assists in the screening, evaluation, consolidation, and analyses of a large quantity of information intelligence from various sources

Represents the organization on working groups and committees

Performs all other related duties as assigned

GENERAL QUALIFICATION GUIDELINES

Experience and Education

Two (2) year of specialized experience with law enforcement relating to criminal analysis

Graduation from an accredited college or university with a Bachelors Degree in Criminal Justice, Homeland Security, International Relations, Political Science, related field or two (2) years of experience commensurate for one (1) year of education.

Specialized analysts training with certification by the Certified Law Enforcement Analyst Program preferred

Certificates, Licenses, and Registration

Must have a current valid Texas Motor Vehicle Operator's License

Must be able to be insured by the County's Insurance carrier

Knowledge, Skills, and Abilities

Knowledge of research methods and techniques

Knowledge of intelligence retention and dissemination

Able to organize and present accurate information in a logical sequence

Able to read, analyze, interpret, and evaluate research findings and recommendations through strong communication and written skills

Ability to analyze public policy issues

Ability to design and utilize research and analytical methods and techniques

Ability to write in a public policy context

Ability to convey analysis and information orally through briefings, consultations and other presentations

Ability to exercise objectivity in all phases of analysis and consultation

Ability to work effectively in a high pressure environment

Ability to exercise judgment and discretion

Ability to lead people and tasks effectively

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee frequently is required to stand. The employee is occasionally required to walk; sit; use hands to find, handle, or feel objects, tools or controls; reach with hands and arms; climb or balance; stoop and kneel.

The employee must occasionally lift and/or move over 25 pounds. Specific vision abilities required by this job include close vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounter while performing the essential functions of this job.

The noise level in the work environment is usually moderate.

SAFETY REQUIREMENTS:

Maintain physical conditions appropriate to the performance of assigned duties and responsibilities which may include the following:

- sitting for extended periods of time
- operating assigned equipment

Maintain mental capacity which permits:

- making sound decisions and using good judgment
- demonstrating intellectual capabilities

Effectively handle a work environment and conditions which involve:

- working closely with others
- working in a multi-task environment

Maintain effective audio-visual discrimination and perception needed for:

- making observations
- reading and writing
- operating assigned equipment
- communication with others
- required to follow the Hidalgo County Accident Prevention Plan and department's safety regulations

HIDALGO COUNTY
Personnel Adjustment Request Form

RECEIVED
MAR 06 2017
HUMAN RESOURCES

DEPARTMENT NAME/NUMBER: SHERIFF'S OFFICE / 280 -005 **DATE:** 3-3-2017

CURRENT POSITION TITLE: Investigation HB65 (1227) **CURRENT SLOT. #:** Pending slot Allotments 0001, 0002

REQUESTED POSITION TITLE: CRIMINAL RESEARCH SPECIALIST
(For new positions or reclassifications)

REQUEST FOR:

☑ New Position ☐ Temporary Position ☐ Position Reclassification* ☐ Other _____

*Civil Service Positions are submitted to the Civil Service Commission.

POSITION SALARY REQUEST:

Salary Amount: $ 0.00 (Current Budgeted Salary) $ 2 X 42,700.00 (Proposed Budgeted Salary) $ 2 X 42,700.00 = 85,400.00 (Net Change)

Position to be funded from one of the following:

☐ Current Department Budget ☐ Annual Budget Cycle ☐ Will Require Additional Funds

☑ Other Funds from account #7-1227-421-00-280-005-0-751

POSITION Type:

Full Time Employee Object 113 ☑ Part Time Employee Object 114 ☐

Full Time Temporary Object 121 ☐ Part Time Temporary Object 122 ☐ $ _____ Enter hourly rate for temp. positions

Hourly Rate * 2,080 hrs. per year = Annual Salary

TEMPORARY POSITIONS:

Start Date	End Date	Working Days & Hours	Hours Per Week	Duration (2 weeks, 3 months, etc.)

CIVIL SERVICE:		FLSA:	
Exempt	☐	Exempt	☐
Non-Exempt	☑	Non-Exempt	☑
N/A	☐		

JUSTIFICATION/PRIORITY: (Explain why this position or adjustment request is essential)

Meet needs of T.T.I.C staffing, funded from account #7-1227-421-00-280-005-0-751

NEW POSITION: Brief job description and attach a copy of the new job description.

Conduct extensive database research, plans and conducts public meetings, briefings, and other activities in support of the Texas Transportation Intelligence Center and provides information to support the development and dissemination of key intelligence information. Compiles information, analyze findings, make interpretations, and writes comprehensive reports based on analysis.

POSITION RECLASIFICATION: Explain change and /or increase in duties and responsibility. (Attach new job description)

COMMENTS: (Any comments you wish to make regarding this request)

HUMAN RESOURCES: Classification and Salary Recommendation

BUDGET & MANAGEMENT: Classification and Salary Recommendation

1. DEPARTMENT HEAD	3/3/17 DATE	FUNDING AVAILABLE IN DEPT. BUDGET	☑ YES	☐ NO
2. HUMAN RESOURCES DIRECTOR	3/08/2017 DATE	PERSONNEL PROCEDURES COMPLETED	☑ YES	☐ NO
3. DEPARTMENT OF BUDGET & MANAGEMENT	3/23/17 DATE	BUDGET PROCEDURES COMPLETED	☑ YES	☐ NO
4. COMMISSIONERS COURT APPROVAL	DATE			

HIDALGO COUNTY
Department of Budget & Management
FISCAL NOTE

•Fiscal notes are prepared by the Department of Budget & Management to present the budgetary impact of requests by departments/offices or of new proposals that were not approved during the budget process.

To: Commissioner' Court
From: Sergio Cruz, Budget Officer
CC Date: Tuesday, March 21, 2017 Agenda Item: 58878

Summary of request/proposal:
Sheriff Investigation HB65 (1227)-
Approval of the following personnel actions, effective 04/03/17:

Fund	Position	Slot #	Obj	Current Budgeted Salary Allowance	Proposed Budgeted Salary/ Allowance	Total Requested
1227	Criminal Research Specialist	0001	113	0.00	42,700.00	42,700.00
1227	Criminal Research Specialist	0002	113	0.00	42,700.00	42,700.00
				0.00	85,400.00	85,400.00

Budgetary Impact:

INCREASE/DECREASE ACCOUNT NUMBER		ACCOUNT (OBJECT) NAME		AMOUNT
7-1227-421-00-280-005-0-	113	SHRF INVESTIG HB65-	REGULAR F/T EMPLOYEES	$64,050.00
7-1227-421-00-280-005-0-	211	SHRF INVESTIG HB65-	HEALTH INSURANCE	$9,450.00
7-1227-421-00-280-005-0-	212	SHRF INVESTIG HB65-	LIFE INSURANCE	$65.34
7-1227-421-00-280-005-0-	220	SHRF INVESTIG HB65-	FICA	$4,899.83
7-1227-421-00-280-005-0-	230	SHRF INVESTIG HB65-	RETIREMENT	$7,346.54
7-1227-421-00-280-005-0-	250	SHRF INVESTIG HB65-	UNEMPLOYMENT COMP	$384.30
7-1227-421-00-280-005-0-	260	SHRF INVESTIG HB65-	WORKER'S COMP	$1,998.36
			2017 Budgetary Impact	$88,194.37

2018 Budgetary Impact: $117,592.48

Possible Funding Sources: Funds available

Comments:

Hidalgo Co. Budget Office
2/3/2005

AI-58936 **Health & Human Services Dept.** **13. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Olivarez, HEALTH & HUMAN SERVICES DEPT.

Submitted By: Mike Escaname, HEALTH & HUMAN SERVICES DEPT.

Department: HEALTH & HUMAN SERVICES DEPT.

Information

CAPTION

Recognition of Antonio Lopez, Weslaco Fire Chief / Emergency Manager, for facilitating a medical counter measures exercise conducted on February 24, 2017.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** N/A

FUNDS AVAILABLE Y/N?: N/A **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

No budgetary impact.

Attachments

Info

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/13/2017 04:03 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Mike Escaname Started On: 03/13/2017 02:25 PM

Final Approval Date: 03/17/2017

Talking Points Background

City of Weslaco Medical Countermeasures
Drive-through POD for First Responders
Functional Exercise – Friday, February 24, 2017

- Across the nation, there is great concern about the possibility of terrorist or "home-grown" attacks involving toxic chemicals or antigens being released into the air, food or water supplies. Such an attack could happen at any time, any place. In Hidalgo County, we constantly strive…through an all-hazards approach…to be prepared for incidents most likely to happen in our region.

- The goal of the City of Weslaco exercise was to see how the Office of Emergency Management and Fire Department team could set-up a drive-through Point of Dispensing site (or POD) to hand out oral medications to all "First Responders" during an Anthrax incident in Hidalgo County.

- "First Responders" normally include personnel from Police, Fire, EMS and Public Works. But other essential personnel such as the Mayor, City Commissioners and others may be included…along with medication sent home to protect their families as well. The City of Weslaco estimates the need to dispense some 4,000 doses to First Responders in a real event.

- During the exercise at Harlon Block Sports Complex, the Hidalgo County Health and Human Services Department worked with the Weslaco Office of Emergency Management to run a test to see how quickly cars and patients could be processed using the drive-through POD format.

- Some 51 cars and 64 heads-of-household were scanned during the exercise to record sample entry-and-exit times, plus how many minutes per person to hand-out the medications. Using those numbers, we can extrapolate for the City of Weslaco that it would take between 4–8 hours to process all First Responders, depending on how many Dispensing lanes are set up in the POD.

- I congratulate the City of Weslaco and Fire Chief Antonio Lopez for taking the lead among Fire Departments in Hidalgo County. They are the first Fire Department to write a plan for operating a closed POD and to conduct a field exercise to test the set-up.

- We would like to see all Fire Departments or City Emergency Management Offices in Hidalgo County to do what Weslaco is doing! Each city should be ready to take care of and protect their personnel. First Responders MUST be treated first so that they can continue to do their jobs to save lives. Without healthy Police, Fire and EMS personnel, a community would be hard-pressed to confront the challenges of an Anthrax threat.

AI-58934 **Health & Human Services Dept.** **13. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Olivarez, HEALTH & HUMAN SERVICES DEPT.

Submitted By: Mike Escaname, HEALTH & HUMAN SERVICES DEPT.

Department: HEALTH & HUMAN SERVICES DEPT.

Information

CAPTION

Discussion to inform Commissioner's Court of the pending bills that may impact Hidalgo County. SB 1680, SB 1681, SB 1695.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** N/A

FUNDS AVAILABLE Y/N?: N/A **MATCHING FUNDS Y/N?:** N/A

BUDGETARY IMPACT:

No budgetary impact.

Attachments

1680
1681
1695

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/13/2017 04:02 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Mike Escaname Started On: 03/13/2017 02:14 PM

Final Approval Date: 03/17/2017

By: Lucio S.B. No. 1680

A BILL TO BE ENTITLED

AN ACT

relating to a task force of border health officials.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subtitle F, Title 2, Health and Safety Code, is amended by adding Chapter 120 to read as follows:

CHAPTER 120. TASK FORCE OF BORDER HEALTH OFFICIALS

SUBCHAPTER A. GENERAL PROVISIONS

Sec. 120.001. DEFINITIONS. In this chapter:

(1) "Border region" means the Texas-Mexico border region, as defined by Section 2056.002, Government Code.

(2) "Task force" means the Task Force of Border Health Officials.

SUBCHAPTER B. POWERS AND DUTIES

Sec. 120.051. TASK FORCE; DUTIES. (a) The department shall establish the Task Force of Border Health Officials to advise the commissioner:

(1) on policy priorities addressing major issues affecting the border region residents' health and health conditions;

(2) on raising public awareness of the issues described by Subdivision (1); and

(3) on other health issues impacting the border region as determined by the commissioner, including:

(A) barriers to accessing health care;

(B) health problems affecting the region, including:

(i) diabetes;

(ii) infant mortality;

(iii) heart disease and stroke;

(iv) obesity;

(v) cervical cancer; and

(vi) communicable diseases, including tuberculosis;

(C) factors that impede access to health care, including:

(i) socioeconomic conditions;

(ii) linguistic and cultural barriers;

(iii) low population density; and

(iv) lack of health insurance;

(D) providing increased surveillance and tracking of communicable diseases, environmental factors, and other factors negatively influencing health;

(E) standardization of data to ensure compatibility with data being collected by border states on both sides of the Mexican border;

(F) public health infrastructure, including education and research institutions that can train culturally competent health care providers;

(G) establishing local and regional public health programs that build on local resources and maximize the use of public dollars to address the needs of the indigent population;

and

(H) improving collaboration and cooperation with Mexican counterparts of the task force at the state and federal level, and collaboration with federal counterparts in the United States.

(b) The task force shall study and make recommendations relating to the health problems, conditions, challenges, and needs of the population in the border region.

(c) The task force shall submit a report of recommendations to the commissioner for short-term and long-term border plans, as described by Subchapter C, not later than November 1 of each even-numbered year.

Sec. 120.052. COLLABORATION WITH THE OFFICE OF BORDER HEALTH. The Office of Border Health established under Section 12.071 shall provide staff support to the task force and any other assistance as needed or required by the task force, if practicable.

Sec. 120.053. COMPOSITION. (a) The task force is composed of:

(1) the health department directors appointed under Section 121.033 from:

(A) each county in the border region; and

(B) each municipality in the border region that has a sister city in Mexico;

(2) two ex officio nonvoting members who are members of the legislature:

(A) one of whom is appointed by the lieutenant governor; and

(B) one of whom is appointed by the speaker of the house of representatives; and

(3) additional members appointed by the commissioner.

(b) The commissioner shall designate a chair and vice chair of the task force from among the task force members.

(c) The members appointed by the lieutenant governor and the speaker of the house of representatives serve three-year terms.

Sec. 120.054. MEETINGS. (a) The task force shall meet at least quarterly each fiscal year. Members may hold meetings by conference calls and through videoconference in accordance with Section 551.127, Government Code.

(b) Section 551.125, Government Code, applies to a meeting held by conference call under this section, except that Section 551.125(b), Government Code, does not apply.

Sec. 120.055. COMPENSATION. A task force member is not entitled to compensation or reimbursement for expenses incurred in performing the member's duties.

SUBCHAPTER C. BORDER HEALTH IMPROVEMENT PLAN

Sec. 120.101. SHORT-TERM AND LONG-TERM PLANS. (a) The task force shall make recommendations to the commissioner for short-term and long-term border health improvement plans. The short-term plan shall identify health objectives proposed to be accomplished before the fourth anniversary of the date the plan is adopted. The long-term plan shall identify health objectives proposed to be accomplished before the ninth anniversary of the date the plan is adopted.

(b) The commissioner shall review the task force's

recommendations and, based on those recommendations, recommend short-term and long-term border health improvement plans to the executive commissioner, identifying specific health objectives that may be implemented under existing law.

(c) The executive commissioner shall adopt short-term and long-term border health improvement plans and direct the department to implement the portions of the plans that can be implemented within existing appropriations under existing law.

(d) Not later than September 1 of each even-numbered year, the executive commissioner shall submit a report detailing the actions taken by the task force. The report must include:

(1) the status of all projects and activities involving the health issues described under Section 120.051(a)(3);

(2) the funding for the expenditures; and

(3) recommendations for legislation necessary to implement the short-term and long-term border health improvement plans.

Sec. 120.102. APPLICATION OF OTHER LAW. Chapter 2110, Government Code, does not apply to the task force.

Sec. 120.103. ASSISTANCE FROM STATE AGENCIES AND POLITICAL SUBDIVISIONS. At the request of the task force, a state agency or political subdivision of this state shall cooperate with the task force to the greatest extent practicable to fully implement the task force's statutory duties.

SECTION 2. (a) The commissioner of state health services, lieutenant governor, and speaker of the house of representatives shall appoint the members of the Task Force of Border Health

Officials established by this Act not later than October 1, 2017.

(b) The initial short-term border health improvement plan adopted under Section 120.101, Health and Safety Code, as added by this Act, must include a border health improvement plan for implementation beginning not later than September 1, 2018. The Department of State Health Services shall implement the initiatives in the short-term border health improvement plan, as directed by the executive commissioner of the Health and Human Services Commission, not later than September 1, 2022.

(c) The initial long-term border health improvement plan adopted under Section 120.101, Health and Safety Code, as added by this Act, must include a border health improvement plan for implementation beginning not later than September 1, 2020. The Department of State Health Services shall implement the initiatives in the long-term border health improvement plan, as directed by the executive commissioner of the Health and Human Services Commission, not later than September 1, 2027.

SECTION 3. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2017.

By: Lucio S.B. No. 1681

A BILL TO BE ENTITLED

AN ACT

relating to the establishment of the Communicable Disease and Public Health Center.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. The purpose of this Act is to:

(1) address the communicable disease and public health challenges of the international border region;

(2) develop a unified message that will enable this state to:

(A) maximize the use of local resources;

(B) increase efficiency and reduce duplication of staff resources; and

(C) strengthen collaboration with local governmental entities; and

(3) foster a greater local and regional capacity to address the diseases and allow the border region and this state to capitalize on the expertise and insight of local health professionals and departments to better serve the border communities and region and this state.

SECTION 2. Chapter 81, Health and Safety Code, is amended by adding Subchapter K to read as follows:

SUBCHAPTER K. COMMUNICABLE DISEASE AND PUBLIC HEALTH CENTER

Sec. 81.451. DEFINITION. In this subchapter, "center" means the Communicable Disease and Public Health Center established

under this subchapter.

Sec. 81.452. MEMORANDUM OF UNDERSTANDING TO ESTABLISH CENTER. The department shall enter into a memorandum of understanding with a county located on an international border that has a population of at least 700,000 and that has as its county seat a municipality with a population of less than 100,000 to establish and jointly operate a Communicable Disease and Public Health Center.

Sec. 81.453. DONATION OF LAND. The governing body of a county described by Section 81.452, or a municipality in that county, may donate real property to the department for the center. The donation may be in fee simple or otherwise.

Sec. 81.454. ASSISTANCE FROM MUNICIPALITY. The local health department of a county that enters into a memorandum of understanding under Section 81.452 may seek the assistance of a municipality in the local health department's jurisdiction to establish and operate the center.

Sec. 81.455. COMMUNICABLE DISEASE AND PUBLIC HEALTH CENTER. (a) The center shall:

(1) provide a central repository of vector control resources for municipalities in a county described by Section 81.452 and counties adjacent to that county;

(2) develop local surveillance, outreach, and response campaigns to address communicable disease and potential vectors of communicable disease;

(3) provide local, regional, and international health-related briefings;

(4) cooperate with local, regional, state, and international officials to:

(A) increase environmental awareness to reduce sources for vector development; and

(B) develop recommendations for implementing nuisance abatement policies;

(5) with the assistance of appropriate authorities, facilitate trapping, adulticiding, and larviciding of vector populations along the international border;

(6) provide to health care professionals current information, including health advisories and guidance with communicable disease case management, regarding communicable disease and potential vectors of communicable disease;

(7) in cooperation with federal and international partners, educate and provide health care screenings to populations at high risk of contracting a communicable disease that are traditionally difficult to contact, including individuals not lawfully present in the United States; and

(8) facilitate information sharing between local entities.

(b) A local campaign developed under Subsection (a)(2) must be in both English and Spanish.

(c) The center may serve as a call center for concerns regarding communicable disease and public health along the international border.

(d) A local health department in each county adjacent to an international border shall report to the center information

regarding:

(1) incidents of communicable disease in the county;

(2) public health challenges in the county; and

(3) any other public health or communicable disease issue, as required by the department.

(e) The local health department of a county that enters into a memorandum of understanding under Section 81.452 shall:

(1) collaborate with the local health department of each adjoining county; and

(2) meet with a representative of each local health department described by Subdivision (1) at least monthly to discuss the health status of each county and address the occurrence and control of communicable disease in each county.

SECTION 3. This Act takes effect September 1, 2017.

By: Lucio S.B. No. 1695

A BILL TO BE ENTITLED

AN ACT

relating to mosquito control districts established for an urgent public health purpose.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Chapter 344, Health and Safety Code, is amended by designating Sections 344.001 through 344.007 as Subchapter A and adding a subchapter heading to read as follows:

SUBCHAPTER A. ESTABLISHMENT, OPERATION, AND DISSOLUTION OF MOSQUITO CONTROL DISTRICTS

SECTION 2. Chapter 344, Health and Safety Code, is amended by adding Subchapter B to read as follows:

SUBCHAPTER B. ESTABLISHMENT OF MOSQUITO CONTROL DISTRICTS FOR URGENT PUBLIC HEALTH PURPOSE

Sec. 344.051. DEFINITION. In this subchapter, "department" means the Department of State Health Services.

Sec. 344.052. LEGISLATIVE FINDINGS. The legislature finds that:

(1) scientists have concluded the Zika virus is a cause for microcephaly and other severe fetal brain defects;

(2) the department has reported that counties in the Gulf Coast region and on the international border with Mexico are at the highest risk in this state of developing localized cases of the Zika virus;

(3) Cameron County, which is located on the

international border with Mexico, has had as of December 2016 at least five documented cases of locally transmitted Zika virus;

(4) the powers of a mosquito control district may be effective in combating the increased risk of transmission of the Zika virus; and

(5) there is an urgent public health purpose for establishing a mosquito control district in Cameron and Hidalgo Counties and other high-risk counties to contain, eradicate, and treat problems associated with communicable diseases, including the Zika virus, the dengue virus, and the chikungunya virus, that are carried by mosquitos.

Sec. 344.053. APPLICABILITY OF SUBCHAPTER. This subchapter applies only to a county located on the international border with Mexico:

(1) for which the department has documented a locally transmitted case of the Zika virus; or

(2) that is adjacent to a county described by Subdivision (1).

Sec. 344.054. ESTABLISHMENT. A county described by Section 344.053 may establish an urgent public health mosquito control district on issuance of an order by the county judge or commissioners court of the county stating that an urgent public health purpose requires establishment of the district and ordering an election under Section 344.001.

Sec. 344.055. DUTIES OF COUNTY ESTABLISHING DISTRICT. A county that establishes an urgent public health mosquito control district under this subchapter shall:

(1) conduct surveillance of vectors carrying communicable disease;

(2) address the capacity of the county public health infrastructure, including by:

(A) establishing and operating communicable disease and illness identification laboratories;

(B) training and hiring public health personnel and research fellows;

(C) matching state, federal, and private initiatives and efforts aimed at addressing and mitigating health and environmental conditions that contribute to the breeding, development, and spread of vectors carrying communicable disease;

(D) testing county residents for communicable diseases and providing medical treatment to county residents who have communicable diseases; and

(E) funding prevention measures and initiatives to protect county residents from vectors carrying communicable disease; and

(3) address the prevention and spread of vectors carrying communicable disease by funding efforts to inform people about the prevention and spread through community campaigns and regional information efforts.

Sec. 344.056. SPECIAL PUBLIC HEALTH ADVISORY COMMITTEE. (a) In this section, "committee" means the special public health advisory committee established under this section.

(b) Notwithstanding Section 344.004, the commissioners court of a county that establishes an urgent public health mosquito

control district under this subchapter shall establish a special public health advisory committee.

(c) The committee is composed of seven members. The commissioners court shall appoint six members to the committee and the commissioner of state health services shall appoint one member to the committee. The members appointed by the commissioners court are as follows:

(1) one member who is the county public health administrator;

(2) two members who are public health administrators at the executive director level in the most populated municipalities in the county;

(3) one member who is a property taxpaying voter of the county; and

(4) two members who are county residents and pay property tax in the county.

(d) The county judge shall appoint one committee member as the presiding officer of the committee. The committee meets at the call of the presiding officer.

(e) A committee member serves without compensation.

(f) A committee member must take an oath of office prescribed by the commissioners court.

(g) The committee shall:

(1) make written recommendations to the commissioners court that the committee considers necessary to:

(A) address the urgent public health purpose of the mosquito control district established under this subchapter;

and

(B) implement the district's duties; and

(2) perform any other duty assigned to the committee by the commissioners court.

Sec. 344.057. MOSQUITO CONTROL PERSONNEL. The commissioners court of a county that establishes an urgent public health mosquito control district under this subchapter may appoint:

(1) a mosquito control engineer as provided by Section 344.005; or

(2) any other public health professional the commissioners court determines is necessary to carry out the duties of the district and to address the recommendations of the special public health advisory committee established under Section 344.056.

SECTION 3. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2017.

AI-58937 **Health & Human Services Dept.** **13. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Olivarez, HEALTH & HUMAN SERVICES DEPT.

Submitted By: Mike Escaname, HEALTH & HUMAN SERVICES DEPT.

Department: HEALTH & HUMAN SERVICES DEPT.

Information

CAPTION

1. Discussion and action to authorize Jose Gonzalez, Hidalgo County Health & Human Services Division, to be the designated representative for the OSSF Permits & Subdivsion approvals.
2. Approval to submit notice to State of Texas informing the State of the change in designee.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** N/A

FUNDS AVAILABLE Y/N?: N/A **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

No budgetary impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/13/2017 04:05 PM
Merlen P. Munoz	Merlen P. Munoz	03/14/2017 01:21 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Mike Escaname Started On: 03/13/2017 02:46 PM

Final Approval Date: 03/17/2017

AI-59007 **Emergency Management** **14. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Sandra Deleon, COUNTY JUDGE

Department: COUNTY JUDGE

Information

CAPTION

1. Presentation, discussion, and necessary action to terminate Proclamation declaring Local State of Disaster for the County of Hidalgo due to the torrential rain event of March 10, 2017, which caused severe flooding to property.
2. Authorization for County Judge to sign the required documentation.

BACKGROUND

3/10/2017 - Proclamation declaring a Local State of Disaster declared by the County Judge due to torrential rain event with severe flooding throughout Hidalgo County.

Fiscal Impact

Attachments

proclamation
proclamation

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/16/2017 04:41 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Sandra Deleon		Started On: 03/16/2017 04:05 PM
Final Approval Date: 03/17/2017		

PROCLAMATION TERMINATING A LOCAL STATE OF DISASTER

WHEREAS, on March 10, 2017, the County Judge issued a proclamation declaring a local state of disaster for Hidalgo County resulting from "severe damage, injury or loss of life or property due to the "immediate emergencies from the current and recent torrential rains"; and

WHERAS, the County of Hidalgo has undertaken extraordinary measures to protect the public health, safety and general wellbeing of County citizens, alleviate the suffering of people, and protect or rehabilitate property; and

WHEREAS, the immediate threat from the torrential rains which led to the current Local Disaster Declaration have subsided; and

WHEREAS, Section 418.108 of the Texas Government Code provides that the presiding officer of the governing body of a political subdivision may declare a state of local disaster; and

WHEREAS, an order or proclamation declaring, continuing, or terminating a local state of disaster shall be given prompt and general publicity and shall be filed promptly with the county clerk.

NOW, THEREFORE, BE IT PROCLAIMED BY THE COUNTY JUDGE OF THE COUNTY OF HIDALGO THAT THE LOCAL STATE OF DISASTER FOR THE COUNTY OF HIDALGO IS HEREBY TERMINATED.

This proclamation shall take effect immediately from and after this issuance.

ORDERED this the ___ day of _____. 20 ___.

_____
Ramon Garcia, County Judge

ATTEST:

_____.
ARTURO GUAJARDO, JR.
County Clerk

PROCLAMATION DECLARING A LOCAL STATE OF DISASTER

WHEREAS, the County of Hidalgo on the 10th day of March, 2017 has suffered widespread damage, injury or loss of life or property from flooding due to immediate emergencies from the current and recent torrential rains;

WHERAS, the Judge of the County of Hidalgo has determined that extraordinary measures must be taken to protect the public health, safety and general wellbeing of County citizens, alleviate the suffering of people, and protect or rehabilitate property; and

WHEREAS, Section 418.108(a) of the Texas Government Code provides that the presiding officer of the governing body of a political subdivision may declare a state of local disaster;

NOW, THEREFORE, BE IT PROCLAIMED BY THE JUDGE OF THE COUNTY OF HIDALGO:

1. That a state of disaster is declared for the County of Hidalgo.

2. That the County's Emergency Management Plan has been implemented.

3. That this state of disaster shall continue for a period of not more than seven days of the date hereof, unless the same is continued by consent of the Commissioners Court of the County of Hidalgo, Texas.

4. That this proclamation shall take effect immediately from and after this issuance.

ORDERED this the 10th day of March, 2017.

Ramon Garcia

Ramon Garcia, County Judge

ATTEST:

ARTURO GUAJARDO, JR.
County Clerk

AI-58990 **Community Service Agency** **15. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Rosalinda Gonzalez, COMMUNITY SERVICE AGENCY

Department: COMMUNITY SERVICE AGENCY

Information

CAPTION

Discussion, consideration, and possible action to accept $50,000 funds from Direct Energy to be used in accordance with the Neighbor-to-Neighbor Program for 2017. Authorization for Jaime Longoria to sign any and all pertinent documents.

BACKGROUND

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

No budgetary impact, requesting acceptance of proceeds

Attachments

Direct Energy Neighbor to Neighbor Program

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/16/2017 02:22 PM
Merlen P. Munoz	Merlen P. Munoz	03/17/2017 03:32 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Rosalinda Gonzalez Started On: 03/16/2017 01:07 PM

Final Approval Date: 03/17/2017

Tara Norris
Energy Assistance Program Coordinator
Telephone 918.493.9583
Email tara.norris@directenergy.com

March 14, 2017

Hidalgo County Community Services Agency
Jaime Longoria
2524 N. Closner
Edinburg, TX 78540

Dear Jaime Longoria:

On behalf of Direct Energy, I am pleased to enclose the Neighbor to Neighbor Program Agreement for 2017. Please read the agreement, sign and return a copy to me at neighbor-to-neighbor@directenergy.com or by mail to my address below. Please also communicate the rules of the program to your case workers and anyone who administers the program at your agency. One important change this year is that the maximum allowed per customer has been increased from $600 per year per household, to $700 per year. Please let me know if you have any questions regarding other items included in the contract.

Also included is a check in the amount of $50000 to be used in accordance with this Neighbor-to-Neighbor Program Agreement.

As a reminder, monthly reports showing disbursement of funds are due to Direct Energy no later than 10 days after the end of each month. Please have your reporting contact return these reports to DE by email to neighbor-to-neighbor@directenergy.com.

Once again, we welcome the opportunity to assist your clients through the Neighbor-to-Neighbor Program. Should you have any questions regarding the program, please feel free to contact me at (918) 493-9583 or by email at tara.norris@directenergy.com .

Sincerely,

Tara Norris
Energy Assistance Program Coordinator
Direct Energy
6502 S Yale Ave
Tulsa, OK 74136

Enclosure
CC Maria Gallegos

Direct Energy Operations Inc
12 Greenway Plaza, Suite 250
Houston, TX 77046-0813
USA

Direct Energy

PAGE 1 OF 1

2100076 01 SD T 3038 CORP -P00076

COUNTY OF HIDALGO COMMUNITY SERVICE
2524 N. CLOSNER
EDINGBURG TX 78540

Check Date: 02/23/2017
Vendor Number: 0000905378
Check Number: 7670107329

Invoice Number	Invoice Date	Voucher Number	Reference	Gross Amount	Adjustment Amount	R	Net Amount
N2N21017HCCSA	02/10/17	1900014485	NEIGHBOR TO NEIGHBOR PROGRAM	$50,000.00	$0.00		$50,000.00
				$50,000.00	$0.00		$50,000.00

SD2100076-00001_of_0001 3038-0000098 (F23S)

DETACH AND RETAIN THIS STUB FOR YOUR RECORDS

Direct Energy

Direct Energy Operations Inc
12 Greenway Plaza, Suite 250
Houston, TX 77046-0813

62-20
311

7670107329

CHECK DATE: 02/23/2017

Fifty Thousand and 00/100 Dollars

PAY TO THE ORDER OF
COUNTY OF HIDALGO COMMUNITY SERVICE
2524 N. CLOSNER
EDINGBURG TX 78540

USD **$$$$$$$$$50,000.00**

Void if Not Cashed in 90 days

AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

CITIBANK, N.A.
ONE PENN'S WAY, NEW CASTLE, DE 19720

⑈7670107329⑈ ⑆031100209⑆ 3882568⑈

NEIGHBOR-TO-NEIGHBOR PROGRAM AGREEMENT FOR ELECTRIC HOME ENERGY ASSISTANCE

This Neighbor to Neighbor Program Agreement ("Agreement") is entered into and effective as of January 1, 2017 ("Effective Date"), by and between Direct Energy, LP ("Direct Energy"), CPL Retail Energy, LP ("CPL Retail Energy"), WTU Retail Energy, LP ("WTU Retail Energy"), First Choice Power, LLC ("First Choice Power"), and/or Bounce Energy, LP ("Bounce Energy") (together the "REPs") and Hidalgo County Community Services Agency (The "Administering Agency") an established social service agency under Section 501(c)(3) of the United States Internal Revenue Code, or other; are referred to herein as "Party" and collectively as the "Parties".

Purpose of Agreement:

Under this Agreement the Administering Agency and the REPs shall implement the program known as "Neighbor-to-Neighbor," under which the REPs will provide funding in their respective areas of operation to be used by the Administering Agency for payment of the Electric Home Energy Expenses, as defined below, of needy people experiencing an energy emergency or crisis. The Parties, in consideration of the promises and commitments found herein, agree as follows:

I. Program Established

A. The Neighbor-to-Neighbor Program (hereinafter referred to as the "Program") is hereby intended to help needy people experiencing an energy emergency or crisis pay their Electric Home Energy Expenses. The REPs shall supply funding for the program in their respective areas of operation as described in Article II herein. The Administering Agency shall, subject to the terms of this Agreement, utilize these funds to aid needy people in paying their Electric Home Energy Expenses and shall coordinate the Program with the Low Income Home Energy Assistance Program (LIHEAP).

B. "Electric Home Energy Expenses" shall mean any debt incurred by the Recipient for the consumption of electric energy used (including consumption prepaid by the Recipient) in the lighting, appliance usage and cooling/heating of the primary residence of the Recipient. Debt incurred may arise from both Prepaid and/or Postpaid electricity Plans.

II. Program Funding

The REPs shall provide annual funding for the Program pursuant to the following terms. The funding amount shall be determined annually at the REP's sole discretion, with funds allocated to the Administering Agency in two potential bi-annual disbursements. The first disbursement shall occur no later than February 28th of each calendar year and the second disbursement shall occur no later than August 31st of each calendar year.

III. Recipients

A. A Recipient is any individual who receives assistance as contemplated by this Agreement. There can be only one Recipient for each household. In order to qualify as a Recipient, an individual must meet all of the following conditions at the time he or she receives this assistance.

1. The individual must be receiving residential electric service from a REP(s) at the residence from which the subject Electric Home Energy Expenses arise.
2. The individual must reside at the service address and be responsible for the Electric Home Energy Expenses to be paid.
3. The individual must meet the income eligibility criteria based on household income not to exceed 200% of the federal poverty guideline limit.

B. The Administering Agency shall select Recipients from those qualifying individuals seeking assistance in its sole discretion, but the REPs may, from time to time, refer special cases for consideration for assistance from the Program. The Administering

Agency shall give due consideration to any such special cases, but shall nonetheless retain the ultimate authority in selecting Recipients.

IV. Use of Funds

A. All funds forwarded to the Administering Agency, subject to the administrative fee discussed in Article VII, shall be used by the Administering Agency in accordance with this Agreement to help Recipients pay their Electric Home Energy Expenses.

B. No Program funds may be used for utility deposits.

C. A Recipient can receive assistance from the Program of no more than $700, in any calendar year. Assistance provided may not exceed the actual Electric Home Energy Expenses due at the time assistance is provided; or the estimated monthly Electric Home Energy Expenses at the time assistance is provided.

D. Fees can be paid using Neighbor to Neighbor funds.

E. Except to the extent specified in this Agreement, the REPs shall have no power or authority to direct the Administering Agency in the management or control of the Program.

V. Reports

The Administering Agency shall submit to each REP monthly reports, reflecting the total receipts and disbursements of Program funds, the identity, of each person helped by the Program, the company the customer is with, and the amount of assistance received. The Administering Agency shall submit each monthly report to REPs as appropriate, within 10 calendar days of the end of the month being reported. Such information and reports shall be available for audit verification by the REPs or their designated agents, at their individual expense. The Administering Agency agrees to maintain all records necessary to permit the REPs to verify the accuracy of such reports and information for a minimum of two years. The

Administering Agency's obligation to maintain records shall survive termination of this Agreement.

VI. Term of Agreement

A. This Agreement shall become effective on January 1st, 2017, and shall continue in effect for an initial term through December 31st, 2017, and may be renewed annually each January with the signatures of both Parties. The Agency can still utilize program funding until the next years agreement is executed. The Administering Agency may terminate this Agreement at anytime by delivering written notice of termination to the REPs at least thirty (30) days prior to the effective date of termination. The REPs may terminate this Agreement with the consent of the Administering Agency or for failure of the Administering Agency to meet the terms and conditions of this Agreement, by delivering written notice of termination to the Administering Agency at least thirty (30) days prior to the effective date of termination.

B. Upon termination of this Agreement, the Administering Agency agrees to return, within sixty calendar days, any balance of funds in the Program to the REPs for distribution.

VII. Administrative Fees

The administrative fee retained by the Administering Agency is intended to cover only Program costs. Program costs include costs directly related to Program outreach, application processing, accounting, reporting and other Program activities. To defray the cost of the Administering Agency's duties and responsibilities for outreach, application processing, accounting, reporting and other related Program administration activities, the Administering Agency shall be entitled to retain up to 10% of the total annual funding provided under this Agreement. Retainer of the administrative fee is optional. If the Administering Agency wishes to utilize the administrative fee for utility assistance, an email to the Program Coordinator can be sent, clearly stating how they wish to use the administrative fee for each disbursement.

VIII. Contractor Performance

A. The Administering Agency shall, on an equitable basis throughout its service area, disburse funds for the Program. The Administering Agency shall operate the Program consistent with this Agreement in conformance with applicable accounting and reporting standards.

B. The Administering Agency agrees to use diligent, good faith efforts to fully distribute all funds less the administrative fee for the benefit of Recipient households on an annual basis.

C. The failure of the Administering Agency to distribute at least 85% of the total available funds for a given calendar year shall entitle the REPs to terminate this Agreement in the manner set forth below:

1. The REPs will suspend annual funding from agencies that fail to distribute at least 85% of the total available funds in a given calendar year.
2. Agencies with suspended funding will undergo a probation period of 6 months (or until the next allocation of funds), after which the REPs will evaluate its progress and determine its eligibility for additional funds.
3. Agencies that have not utilized at least 85% of their funds in a given calendar year will have their annual funding suspended and be required to return the remaining balance to the REPs within sixty calendar days.

D. The failure of the Administering Agency to submit timely monthly reports shall entitle the REPs to terminate this Agreement in the manner set forth above.

IX. Miscellaneous

A. Any notices to be given by either Party shall be in writing and shall be sent by certified or registered mail. Addresses for notice are as follows:

Tara Norris Energy Assistance Program Coordinator Direct Energy 6502 S Yale Ave #300 Tulsa, OK 74136 Attention: Neighbor-to-Neighbor Program	Administering Agency Hidalgo County Community Services Agency 2524 N. Closner Edinburg, TX 78540 Attention: Neighbor-to-Neighbor Program and/or Maria Gallegos

B. This Agreement shall be governed by and construed in accordance with the laws of the State of Texas.

C. This Agreement can be modified or amended only by an agreement in writing executed by the authorized representatives of all Parties.

D. This Agreement will supersede and replace any previous agreements between the Parties related to the Program.

E. This Agreement may be executed by facsimile signature and in any number of counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized officers as of the Effective Date set forth above.

Direct Energy, LP by its general partner

Direct Energy GP, LLC

Signature:

Janice Richardson

Print Name: Janice Richardson

Title: Sr. Manager, Credit and Debt Operations

CPL Retail Energy, LP by its general partner,

Centrica Holdco GP, LLC

Signature:

Janice Richardson

Print Name: Janice Richardson

Title: Sr. Manager, Credit and Debt Operations

WTU Retail Energy, LP by its general partner Centrica Holdco GP, LLC

Signature:

Janice Richardson

Print Name: Janice Richardson

Title: Sr. Manager, Credit and Debt Operations

First Choice Power, LLC

Signature:

Janice Richardson

Print Name: Janice Richardson

Title: Sr. Manager, Credit and Debt Operations

Bounce Energy, Inc

Signature:

Janice Richardson

Print Name: Janice Richardson

Title: Sr. Manager, Credit and Debt Operations

Hidalgo County Community Services Agency

Signature: _____

Print Name: _____

Title: _____

AI-58720 **Community Service Agency** **15. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Jaime Longoria, COMMUNITY SERVICE AGENCY

Submitted By: Rosalinda Gonzalez, COMMUNITY SERVICE AGENCY

Department: COMMUNITY SERVICE AGENCY

Information

CAPTION

Discussion, consideration and possible action to enter into a contract with Superior Alarms for wireless fire monitoring with authority for County Judge to sign documents

BACKGROUND

6 wireless fire monitors at $55.00 each charged twice a year.

Yearly total expense $660.00
Contract for 3 years.
Total contract expense after 3 years $1,980.00

Fiscal Impact

Attachments

Superior Alarms Fire Monitoring Contract

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	02/27/2017 04:13 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Rosalinda Gonzalez		Started On: 02/27/2017 03:13 PM
Final Approval Date: 03/17/2017		

Superior Alarms

600 Ash Avenue - P.O. Drawer 3097
McAllen, TX 78501
State Lic. B4881 - Fire Lic. ACR-86318-816
Tel. (956) 682-6005 - Fax (956) 213-1179
Flor Salazar 966-0600
We send the police there in a hurry!

JUNE 24 2016

HIDALGO COUNTY COMMUNITY SERVICES AGENCY
ATTN: LILLIE
2524 N. CLOSNER
EDINBURG, TX
386-6240
383-6295

SCOPE OF WORK: WIRELESS MONITORING

WIRELESS MONITORING:
6 WIRELESS FIRE MONITORING@$55.00

TOTAL INVESTMENT $330.00 + TAX EXEMPT

We agree to the above system design and the terms listed below and authorize Superior Alarms to begin work. We also agree to sign a commercial sales agreement.

Balance due date: ON COMPLETION

_____ _____
Authorization **Date**

(Note: THIS PROPOSAL IS PROPRIETARY INFORMATION AND ANY DISCLOSURE TO ANY PARTY IS PROHIBITED)

Thank you for the opportunity to serve you with your security needs. If you have any questions feel free to call me at 682-6005.

Sincerely,
Flor Salazar
Sales Representative

COMMERCIAL ALARM MONITORING AGREEMENT

ACCOUNT NUMBER	COMMUNICATOR MAKE & MODEL DATE ON LINE	DEALER
		Superior Flor

SUBSCRIBER

Hidalgo County Community Services Agency
NAME
2524 N. Closner
ADDRESS / STREET — SUITE/APT. NO
Edinburg, TX — 78539
CITY — STATE — ZIP CODE
TEL. NO. ( ) — ( )
FAX NO. ( ) — S. S. NO.
TDL# — Email

COMPANY

Superior Alarms
600 Ash Avenue, McAllen, TX 78501
Ph. (956) 682-6005
FAX (956) 213-1179

LOCATION OF ALARM DEVICES

Physical Address same City State Zip
Directions to Subscriber's Location:

CONDITIONS MONITORED

☑ Fire ☐ Hold-up ☐ Burglar ☐ Panic ☐ Low Battery ☐ Medical ☐ Close ☐ Open ☐ Other

TYPE OF INSTALLATION

☐ Business ☐ Warehouse ☐ Office ☐ Store ☐ Factory ☐ Other

CODES ZONES / DESCRIPTIONS (ATTACH SEPARATE SHEET OF PAPER IF NECESSARY)

ALARM CODE	ALARM ZONE	CONDITION	COMMENTS / AREA PREMISES INSTRUCTIONS	VERIFY YES	VERIFY NO	AUDIBLE YES	AUDIBLE NO	ALARM CODE	ALARM ZONE	CONDITION	COMMENTS / AREA PREMISES INSTRUCTIONS	VERIFY YES	VERIFY NO	AUDIBLE YES	AUDIBLE NO

LOCAL AUTHORITIES TO BE NOTIFIED

CODE	AUTHORITY	NAME	TELEPHONE NUMBER
	Local Police Department		( )
	Local Fire Department	Edinburg F.D.	( )
	Other		( )
	Other		( )

AUTHORIZED INDIVIDUALS TO BE NOTIFIED

IN ORDER OF PRIORITY (individuals to be notified in the event of an alarm condition. Calls are made in sequence until contact is made.)

	NAME	PRIMARY PHONE # (Desc)	ALTERNATE PHONE # (Desc)	CODE WORD
1		( )	( )	
2		( )	( )	
3		( )	( )	
4		( )	( )	
5		( )	( )	

Phone Descriptions are: B = Beeper, C = Car, D = Digital Pager, H = Home, W = Work, V = Voice Pager

FOR OPEN / CLOSE MONITORING ONLY

Check for appropriate open/close:
☐ Log only (no action) ☐ Supervised (action outside specified timed) Action to be taken

Supervised schedule below: use your local time.

	SUN	MON.	TUES.	WED.	THURS.	FRI.	SAT.
OPEN							
CLOSE							

Early Open Allowance
Late Open Allowance
Late Close Allowance
Mailed to:

Activity Report ☐ Yes ☐ No ☐ Monthly

FEES • TERMS • PAYMENTS

INITIAL TERM: 3 Year(s) Annual Fee $ 660.00 + tax

6 No. of payments equal payments of $ 330.00, each payable semi on the 1st day of March, Aug., beginning March 1, 2017 and continuing regularly and semi thereafter.

Subject to Terms and Conditions of this Agreement (including those on the reverse side), the Subscriber agrees to subscribe for monitoring by Company.

SUBSCRIBER MUST SIGN IN THREE PLACES

X
SIGNATURE OF SUBSCRIBER — DATE

ACCEPTED:
By — Title VP Admin
Date 1/17/17
For Office Use Only Typed by — Checked by

WHITE - SUPERIOR ALARMS PINK - CUSTOMER COPY

FOR SUPERIOR CENTRAL STATION, INC. USE ONLY REV. A

Monitoring Information Approved By — Date
Monitoring Information Entered By — Date
Billing Information Completed By — Date
Billing Information Entered By — Date
Form Filed in Customer File By — Date

Approved by:
Date

T S MOORE PRINTING 956.687.6868 5/11

TERMS AND CONDITIONS OF ALARM MONITORING AGREEMENT

I. Introductory Provision

This Alarm Monitoring Agreement (hereinafter called this "Agreement") is entered into the date of acceptance thereof by the Company between the Company and the Subscriber indicated on the front page of this Agreement.

II. Monitoring Service

A. Subscriber has furnished Company on the front page of this Agreement under heading "Authorized Individuals To Be Notified" with a written list, in order of priority, of the names and telephone numbers (hereinafter called a "station" in the singular, and "stations" in the plural) of those responsible parties Subscriber designates Company notify (in sequence until contact is made) if Company receives any emergency signal emanating from an alarm protective device (hereinafter called "alarm devices") located on the premises of Subscriber as described under heading "Location of Alarm Devices" on the front page of this Agreement (hereinafter called the "Premises"). Company shall have no responsibility for the failure, neglect or refusal of any party at a station to respond to the condition nor for errors or mistakes made by Subscriber in the names or telephone numbers of the stations. All changes and revisions to stations shall be supplied to Company in writing, signed by Subscriber and shall be effective only after a reasonable time (but not less than 5 days) after the notification is received by Company.

B. Company shall only monitor the occurrence of conditions and events marked under heading "Conditions Monitored" on the front page of this Agreement; and Company disclaims (and Subscriber accepts that Company is disclaiming) any obligation to monitor the occurrence of any other conditions on the Premises. Company agrees only (i) to monitor signals to Company from alarm devices of Subscriber, (ii) to respond to an alarm condition by a direct telephone call to a station or stations designated by the Subscriber, and (iii) to notify the local authorities (depending on the alarm condition reported) listed under heading "Local Authorities to Be Notified" on the front page of this Agreement by direct telephone call in the event the response received from the Subscriber's designated station so contacted is unsatisfactory in the sole discretion of Company (hereinafter, collectively, call the "Service"); provided, however that Company shall have absolute discretion to determine which appropriate local authorities are to be notified depending on the alarm condition reported; and further provided; and further provided that Company shall not be required to give notification of an emergency signal from the alarm devices of Subscriber if Company has reasonable grounds to believe that an emergency condition does not exist.

C. This Agreement as to Subscriber shall become effective only when (i) Subscriber shall have completed, to the extent satisfactory to Company, the information required of Subscriber on the front page of this Agreement and shall have signed this Agreement in the two indicated places, (ii) an authorized agent of Company shall have signed this Agreement after completion of the information on the front page required of Subscriber, (iii) Company shall have accepted payment of the initial installment of the fee (as hereinafter defined) to be paid for the Service by Subscriber, and (iv) when the installer (or other qualified individual) of the alarm devices on the Premises of Subscriber shall have sent an acceptable test signal received and acknowledged as acceptable by Company on the alarm devices of Subscriber which monitors the occurrence of Conditions Monitored.

III. Monitoring Service Fees and Renewal

A. For the Service required of Company under this Agreement, Subscriber agrees to pay Company the fee (hereinafter call the "fee") set forth under heading "Fees - Terms - Payments", on the front page of this Agreement in the manner likewise set forth on the front page of this Agreement. In the event any installment of the fee is not paid within 10 days after due, Company may impose and collect from Subscriber a delinquency charge of 5% of the matured amount or $5.00, whichever is more.

B. This Agreement shall be for the initial Term set forth in the heading "Fees - Terms - Payments" on the front page of this Agreement, and shall be automatically renewed for successive like periods of time thereafter on the same terms and conditions (except for the fee and method of payment thereof to Company) unless either Subscriber or Company shall have notified the other of its decision to the contrary at least thirty (30) days prior to the expiration of initial Term or the next renewal period of this Agreement, as applicable. If, for any renewed period after the initial Term, Company shall determine an increase in the fee is appropriate, or a change in the method of payment is proper, Company shall notify Subscriber prior to the expiration of the period for cancellation of this Agreement, with respect to the next renewal period, and if this Agreement is not so canceled by Subscriber, the new fee and new payment schedule shall be deemed accepted by Subscriber and shall be applicable during the next renewal period and all subsequent renewal periods until again changed in accordance with this Agreement.

C. Subscriber shall be in default under this Agreement (i) if Subscriber shall fail to pay any installment of the fee within ten (10) days after due; (ii) if Subscriber shall fail to comply with any term, provision or covenant of this Agreement, other than the payment of installment of the fee, and shall not cure such failure within ten (10) days after written notice thereof to Subscriber, or (iii) to the extent permitted by law, if bankruptcy or insolvency proceedings are commenced against Subscriber.

Upon the occurrence of any of such events of default, Company shall have the option, in its sole discretion to, without any notice or demand whatsoever; (i) terminate this Agreement, discontinue the service to the Subscriber and recover then matured installments of the fee due from Subscriber and all other loss and damage with Company may suffer reason of such termination, including the cost of discontinuance of the Service to Subscriber or (ii) recover then matured installments of the fee due from Subscriber and continue the Service to Subscriber in which case, Company shall be entitled to recover, in addition to the matured installments of the fee due, the fees due under this Agreement for the continued Service. Pursuit by Company of any of the aforegoing remedies shall not preclude pursuit of any of the other remedies herein provided or any other remedies provided by law, nor shall pursuit of any remedy herein provided constitute a forfeiture or waiver of any damages accruing to Company by reason of the violation of any of the terms, provisions and covenants of this Agreement. Forbearance by Company to enforce one or more of the remedies herein provided upon default by Subscriber shall not be deemed or construed to constitute a waiver of such default.

IV. Limitation on Liability

A. Company owns none of the alarm devices located on the Premises and has no responsibility for the condition and/or functioning thereof; and the maintenance, repair, service, replacement or insurance of the alarm devices are not the obligation or responsibility of Company. After written notice (stating an effective date) to Subscriber, this Agreement may be suspended, in Company's sole discretion, should the alarm devices located on the Premises become so disabled or so substantially damaged that further Service to the Subscriber is reasonable impracticable. The Company has and assumes no liability for interruption of service due to strike, riots, floods, fires, casualty, failure of equipment, acts of God, or any other causes beyond the reasonable control of Company. Company will not be required to supply Service to a Subscriber while interruption of Service is due to any such cause whether at the Premises or the monitoring location of Company. Since signals from alarm devices to company are usually received by means of the telephone system, Company shall not be responsible for interruption in Service due to any telephone or telephone service failure. The availability of Service and response times are, in the main, governed by the telephone system; and Company assumes no liability for delays caused by said system regardless of where such failure be located.

B. Subscriber is responsible for complying with any local or other governmental ordinances or laws which may require a license, permit, fee or other charge with respect to alarm devices. Subscriber understands that local governments or entities may imposes fines, penalties or charges for any false alarm or signal which summons emergency aid unnecessarily. SUBSCRIBER AGREES TO ASSUME ALL RESPONSIBILITY FOR ANY FALSE ALARM OR EMERGENCY SIGNAL GIVEN BY THE ALARM DEVICES ON THE PREMISES. Subscriber agrees to indemnify Company against and hold Company harmless from any Losses (as hereinafter defined) with respect thereto. If Company reasonably determines that the alarm devices of Subscriber are generating an excessive number of false alarms or emergency signals, Company may, after written notice to Subscriber, require Subscriber to pay a reasonable surcharge fee for processing false alarms or emergency signals, if Company determines in its sole discretion that excessive generation continues after such notice to Subscriber.

C. EVEN IF THE ALARM DEVICES OF SUBSCRIBER ARE TESTED REGULARLY AND THE COMPONENTS ARE OPERATING IN ACCORDANCE WITH SPECIFICATIONS, THERE CAN BE NO WARRANTY, REPRESENTATION OR GUARANTY THAT IT WILL NOT BE COMPROMISED OR CIRCUMVENTED BEFORE THE ALARM DEVICES COMMUNICATE AN EMERGENCY SIGNAL TO COMPANY OR THAT IT WILL PROVIDE ADEQUATE WARNING IN ANY GIVEN SITUATION. For all these reasons, Subscriber is responsible for insuring life and property with the types and amounts of insurance that Subscriber deems appropriate.

D. Company assumes no liability to Subscriber, or to anyone claiming through Subscriber whatsoever for the Service, except to the extent specified in Paragraph E. below. Subscriber acknowledges and agrees that Company is not an insurer and that the fee is not designed to provide insurance coverage. COMPANY MAKES NO GUARANTY, REPRESENTATION OR WARRANTY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, TO SUBSCRIBER, THAT THE SERVICE WILL PREVENT LOSS OF LIFE, PERSONAL INJURY, PROPERTY DAMAGE, ECONOMIC OR ANY OTHER LOSS BY BURGLARY, ROBBERY, FIRE OR OTHERWISE, OR THAT THE SERVICE WILL IN ALL CASES PROVIDE ADEQUATE WARNING OR PROTECTION, NOR DOES COMPANY HAVE OR ASSUME ANY RESPONSIBILITY TO SUBSCRIBER, OR TO ANYONE CLAIMING THROUGH SUBSCRIBER, WHATSOEVER FOR ANY LOSS OF LIFE, PERSONAL INJURY, PROPERTY DAMAGE, ECONOMIC OR OTHER LOSS SUSTAINED AS A RESULT OF ANY CAUSE WHATSOEVER INCLUDING THE NEGLIGENT PERFORMANCE BY COMPANY OR FAILURE TO PERFORM BY COMPANY ANY OBLIGATION UNDER THIS AGREEMENT. IF COMPANY OR COMPANY'S RELATED PARTIES (AS THAT TERM IS HEREINAFTER DEFINED) SHOULD, NEVERTHELESS, BE FOUND LIABLE TO SUBSCRIBER, OR TO ANYONE CLAIMING THROUGH SUBSCRIBER, WHETHER DIRECTLY OR INDIRECTLY, FOR ANY LOSS OF LIFE, PERSONAL INJURY, PROPERTY DAMAGE, ECONOMIC OR OTHER LOSS ARISING UNDER OR RESULTING FROM THIS AGREEMENT OR OTHERWISE, REGARDLESS OF CAUSE OR ORIGIN, ON ANY BASIS WHATSOEVER, EVEN IF THE RESULT OF THE NEGLIGENCE OF COMPANY AND/OR COMPANY'S RELATED PARTIES, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE, ORDINARY OR GROSS, COMPANY'S AND COMPANY'S RELATED PARTIES' COLLECTIVE TOTAL MAXIMUM LIABILITY IS LIMITED TO AND SHALL NOT IN ANY CASE EXCEED THE GREATER OF AN AMOUNT EQUAL TO ONE-HALF (1/2) THE FEE OR $250.00, WHICH SHALL BE THE COMPLETE AND EXCLUSIVE REMEDY AGAINST COMPANY AND COMPANY'S RELATED PARTIES.

E. Subscriber acknowledges that it is impractical and extremely difficult to fix the actual damage, if any, which may proximately result from a failure by Company to perform any of the obligations contained in this Agreement, because of, among other things:

(1) the uncertain amount of value of a Subscriber's property or the property of others kept on the Premises which may be lost, stolen, destroyed, damaged or otherwise affected by occurrences which the Service is designed to detect or avert;

(2) the uncertainty of the response time of any police or fire department, should the police or fire department be dispatched by Company; and

(3) the inability to ascertain what portion, if any, of any loss would be proximately caused by Company's failure to perform.

SUBSCRIBER UNDERSTANDS AND AGREES THAT IF COMPANY OR COMPANY'S RELATED PARTIES SHOULD BE FOUND LIABLE TO SUBSCRIBER OR TO ANYONE CLAIMING THROUGH SUBSCRIBER, WHETHER DIRECTLY OR INDIRECTLY, FOR LOSS OF LIFE, PERSONAL INJURY, PROPERTY DAMAGE, ECONOMIC OR OTHER LOSS ARISING UNDER OR RESULTING FROM THIS AGREEMENT OR OTHERWISE, REGARDLESS OF CAUSE OR ORIGIN, ON ANY BASIS WHATSOEVER. EVEN IF THE RESULT OF THE NEGLIGENCE OF COMPANY AND/OR COMPANY'S RELATED PARTIES, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE, ORDINARY OR GROSS, COMPANY'S AND COMPANY'S RELATED PARTIES' COLLECTIVE TOTAL MAXIMUM LIABILITY TO SUBSCRIBER AND ANYONE CLAIMING THROUGH SUBSCRIBER IS LIMITED TO AND SHALL NOT IN ANY CASE EXCEED THE GREATER OF AN AMOUNT EQUAL TO ONE-HALF (1/2) THE FEE RECEIVABLE BY COMPANY UNDER THIS AGREEMENT OR $250.00, AS LIQUIDATED DAMAGES AND NOT AS A PENALTY, AND THIS LIABILITY SHALL BE EXCLUSIVE, COMPANY AND COMPANY'S RELATED PARTIES SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES EXCEPT TO THE EXTENT OF THE LIQUIDATED DAMAGES HEREIN PROVIDED.

F. In the event any third party, including any insurance carrier of Subscriber, a person claiming through Subscriber or any other third party, makes any claim or commences any action against Company related in any manner to this Agreement or the Service regardless of cause or origin, whether based upon or due to alleged defects, acts or omissions, active or passive negligence, strict or product liability, breach of warranty or contract, or otherwise, Subscriber agrees to indemnify Company and to hold Company harmless against all Losses in excess of the monetary limits provided in Paragraph D and E of this Section.

G. WHEN SUBSCRIBER AGREES TO INDEMNIFY COMPANY IN THIS AGREEMENT, SUBSCRIBER (AT HIS SOLE COST AND EXPENSE) AGREES TO INDEMNIFY, KEEP INDEMNIFIED, DEFEND AND HOLD COMPANY, AND ANY OF ITS PRESENT OR FUTURE OFFICERS, DIRECTORS, EMPLOYEES, PARENTS, SUBSIDIARIES, AGENTS, SUCCESSORS, ASSIGNEES, CONTRACTORS, LICENSEES OR AFFILIATES AND ANY OTHER PERSON WHOMSOEVER ACTING FOR OR ON BEHALF OF COMPANY (COLLECTIVELY, HEREIN CALLED "COMPANY'S RELATED PARTIES") HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS, ACTIONS, CAUSES OF ACTION, DAMAGES, LOSSES, LIABILITIES, FEES (INCLUDING ATTORNEY'S FEES), COSTS (INCLUDING COSTS OF COURT), AND EXPENSES (COLLECTIVELY, HEREIN CALLED "LOSSES") IN ANY WAY OR MANNER WHATSOEVER ARISING FROM OR ATTIRBUTABLE TO THE MATTER(S) BEING INDEMNIFIED AGAINST EVEN IF THE RESULT OF THE NEGLIGENCE OF COMPANY AND/OR COMPANY'S RELATED PARTIES, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE, ORDINARY OR GROSS. EACH AND EVERY COVENANT BY SUBSCRIBER TO INDEMNIFY AND HOLD COMPANY HARMLESS SHALL SURVIVE THE EXPIRATION, TERMINATION OR CANCELLATION OF THIS AGREEMENT.

ACKNOWLEDGMENT OF CUSTOMER

SUBSCRIBER SPECIFICALLY ACKNOWLEDGES THAT THE LIMITED LIABILITY ASPECT OF THIS AGREEMENT CONSTITUTES THE ESSENCE OF SAME AND SUBSCRIBER SPECIFICALLY AGREES TO BE BOUND, WITHOUT LIMITATION OR RESERVATION, TO EACH AND EVERY PROVISION OF THE PARAGRAPHS CONTAINED IN THE "LIMITATION ON LIABILITY" SECTION OF THIS AGREEMENT INCLUDING THOSE PARAGRAPHS REDUCING, LIMITING OR ELIMINATING WARRANTIES, REPRESENTATIONS, CONTRACTUAL OBLIGATIONS AND DAMAGES AND REQUIRING INDEMNIFICATION. SUBSCRIBER FULLY UNDERSTANDS THAT EXECUTION OF THIS ACKNOWLEDGEMENT CONSTITUTES A SPECIFIC INDUCEMENT FOR COMPANY TO EFFECTUATE THIS AGREEMENT.

X _____

SUBSCRIBER

V. Assignment, Transfer or Subcontracting

A. Company may assign its rights, obligations under this Agreement, in whole or in part, without any written consent of Subscriber. Subscriber hereby consents to and shall acknowledge every such assignment or subcontract as shall be requested by written notice given by Company to Subscriber. Subscriber further covenants and agrees that, (i) any such assignee or subcontractor shall have and be entitled to exercise any and all discretion, rights and powers of Company, under this Agreement, but such subcontractor's or assignee's liability shall be limited as set forth in this Agreement to the same extent as Company's (ii) after notice from Company to do so, Subscriber will perform all of his obligations under this agreement for the benefit of the subcontractor or assignee, and will pay all installments of the fee and any and all other amounts payable to Company by Subscriber under this Agreement to such subcontractor or assignee or to any other party designated by such subcontractor of assignee, notwithstanding any defense or claim of whatever nature, either by reason of breach of this Agreement or otherwise which Subscriber may not or hereafter have as against Company (Subscriber reserving his right to have recourse directly against Company on account of any such defenses or claims), and (iii) if Company shall fully assign its rights under this Agreement and give written notice thereof to Subscriber, then Company shall be released from and after the date of such Assignment of further responsibility under this Agreement (such provision not altering the provisions of clause (ii) afore) and, (iv) Subscriber shall execute and deliver to Company and its assignee or subcontractor such documentation or instruments as Company or its assignee or subcontractor may reasonably require.

B. This Agreement is not assignable by Subscriber except upon the written consent of Company, which shall be at Company's sole discretion.

VI. Miscellaneous

A. Any notice required or permitted to be given hereunder by one party to the other shall be in writing and shall be mailed by first class or express mail, postage prepaid, registered or certified with return receipt requested, or sent by telex, telegram, telecopy or other similar form of rapid transmission, or personally delivered to the receiving party. All such communications shall be mailed, sent or delivered at the physical address indicated on the first page of this agreement or at such other address as either party may have furnished the other party in writing. Any communication so addressed and mailed shall be deemed to be given when so mailed, and any notice so sent by rapid transmission shall be deemed to be given when receipt of such transmission is acknowledged by the receiving operator or equipment, and any communication so delivered in person shall be deemed to be given when receipted for by Subscriber or Company, as the case may be. All invoices by Company notifying Subscriber that an installment of the fee is due shall be mailed by first class mail, postage prepaid, to the billing address of Subscriber indicated in the introductory provision of this Agreement (or such other address as Subscriber has furnished pursuant to the provisions of this Paragraph A) and such invoices so addressed and mailed shall be deemed to be given when so mailed.

B. This Agreement shall be governed by the laws of the State of Texas and the United States of America. This Agreement may not be changed orally, but only by an agreement in writing signed by the party against whom enforcement of any waiver, change, modification or discharge is sought. This Agreement sets forth the entire agreement and understanding between the parties as to the subject matter of this Agreement, and merges and shall supersede all prior agreements, commitments, representations, writings, negotiations and discussions between them except that all acknowledgments, representations and warranties made to Company herein shall survive the execution and delivery of this Agreement. Headings to Sections of this Agreement have been inserted for convenient reference only and shall not modify, define, limit or expand the express provisions hereof. The pronouns used in this Agreement shall be construed as masculine, feminine or neuter, singular or plural, as the occasion may require. Unless the context otherwise specifies or requires, the informational terms delineated, defined and amplified on the first page of this Agreement shall have the same meaning throughout this Agreement. All schedules or exhibits annexed hereto and all documents referred to herein are hereby incorporated in and made a part of this Agreement as set forth in full herein. Each individual signing this Agreement represents and warrants to every party hereto that he is duly authorized to execute same in the capacity stated and as an act of the entity for whom he signs. Time is of the essence to this Agreement and each and every provision thereof. If any provision of this Agreement is held illegal, invalid or unenforceable under present or future laws, such provision shall be fully severable, and this Agreement shall be construed and enforced as if such illegal, invalid or unenforceable provision had never been a part hereof, and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid or unenforceable provision or by its severance therefrom. Furthermore, in lieu of such illegal, invalid or unenforceable provision, there shall be automatically added as a part of this Agreement a provision as similar in terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable. This provision shall be deemed paramount and control over all other provisions of this Agreement. This Agreement shall be binding on the heirs, personal representatives, successors and assigns of the parties hereto. This agreement may be executed in several counterparts, each of which shall be fully effective as an original and all of which, together, shall constitute one and the same instrument. Whenever Company is entitled to consent to any act, matter or thing, "with or without cause" or whenever in this Agreement any act, matter or thing is to be "satisfactory to Company", "acceptable to Company", "approved by Company", or words of similar import, or whenever in this Agreement Company is entitled to act or not to act "in its sole discretion" or otherwise whenever in this Agreement Company is granted discretion, such discretion, acceptance, consent, approval or satisfaction (or lack thereof) may be withheld or exercised by Company, as the case may be, for any reason or for no reason, whether or not such refusal or exercise is arbitrary, uncontrolled or unreasonable, and any such refusal or exercises shall not be subject to appeal to or to adjudication by courts of law or otherwise.

C. This Agreement is binding on Company only if signed on the first page of this Agreement by a duly authorized representative of Company. This Agreement may only be altered or modified by a document in writing signed by both parties hereto.

AI-58904 **IT Department** **16. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Renan Ramirez, IT DEPARTMENT

Submitted By: Griselda Salazar, IT DEPARTMENT

Department: IT DEPARTMENT

Information

CAPTION

BOOT CAMP / PCT. #2 / PCT. #4:
Authorization and approval to continue with existing service and purchase new wireless service through the County's membership/participation (CONTRACT: DIR-TSO-3415) with VERIZON WIRELESS for the following:

Qty:	Description:	Department:	User:	Service Plan:	MDN:
2	Cont. Cell Phone Service	Juvenile Det.	Office Use	Nationwide 1000 Share N&W+M2M Unl 200 Msgs @ $39.99 + $5.00 each per month	956-219-9921 & 956-219-9925
3	Cont. Data Card Service	Juvenile Det.	Office Use	4G Mobile Broadband Unl. @ $37.99 each per month	956-578-1993, 956-578-2401 & 956-578-2827
4	Cont. GPS Service	Comm. Pct. 2	Office Use	Machine to Machine Account Share 5MB @ $7.00 each per month	See Comm.Pct.2 Backup
11	Cont. GPS Service	Comm. Pct. 2	Office Use	Machine to Machine Account Share 1MB @ $5.00 each per month	See Comm.Pct.2 Backup
1	New Activation	Comm. Pct. 4	Mariano Manzano 113379	4G Mobile Broadband Unl. @ $37.99 per month	

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1200-431-00-124-007-0-532

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funds Available as of 03/16/2017.

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-423-78-330-028-0-532

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funds available through PO#758465

FISCAL YEAR: 2017 **ACCT. #:** 7-1200-431-00-122-005-0-532

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funds available through PO#758289

Attachments

Comm. Pct. 4 backup
Juvenile Det backup
Comm. Pct. 2 backup

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/10/2017 11:06 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Griselda Salazar		Started On: 03/10/2017 08:39 AM
Final Approval Date: 03/17/2017		

WIRELESS DEVICE REQUEST FORM W.2011.2

TYPE OF REQUEST

County Owned Wireless Device:	Wireless Data Device:	Stipend:
☐ Office Use *or* ☑ Individual	☑ Data Card	☐ Cellular Telephone $50/mo
☐ Name Change	☐ Blackberry	☐ Data Pad $25/mo
☐ Equipment Change	☐ Other:	
☐ Plan Change		
☐ Delete Service		

COUNTY OWNED WIRELESS DEVICE

Office Use / Employee: Mariano Manzano Employee ID# 115379 Signature: [signature]

Department: Precinct 4 Dept#: 124

Quantity: 1

Service: $37.99/mo (x) 10 months = 455.88 Account: 7-1200-431-00-124-007-0- -532

Service: $ /mo (x) months = Account: -619/664

Requisition Total: $379.90 Requisition Number: 315896

STIPEND

(1) Employee: Employee ID# Signature:

Department: Dept#:

Quantity:

Service: $ /mo (x) months = Account: -532

Total:

(2) Elected Official/Department Head Authorization for Request:

[signature] Joseph Palacios 3-1-17

Signature | Print Name | Date

(3) Executive Office Authorization (Commissioner's Court Departments Only):

Signature | Print Name | Date

(4) IT DEPARTMENT ONLY:

Service Type Codes: 4G Mobile Broadband Unl. @ $37.99/mo

Commissioner's Court Action: **Commissioner's Court Date:**

☐ **Approved Date:** ☐ **Disapproved**

Current County cell phone policy stipulates that employees that have cell phones assigned to them will be taxed the value of the service. Please see the following IRS document for more information: http://www.irs.gov/govt/slg/article/0,,id=167154,00.html, EXAMPLE 2.

Revised: 03/09/2011



Wireless Telecom Proposal for:
State of Texas DIR Contract No. DIR-TSO-3415 for Wireless Voice, Data Services and Equipment

Date:	January 26, 2017
Customer Name:	Hidalgo County
Sales Representative:	Carlos Zavala

Pricing provided is for Government Liability Accounts Only and is subject to the terms, provisions and conditions of the Contract for Wireless Voice & Data Services and Equipment between State of Texas, Department of Information Resources and Verizon Wireless, DIR Contract No. DIR-TSO-3415. Full terms and conditions, along with additional information and ordering instructions can be found on the Internet website at: http://www.dir.state.tx.us/store/tsd/telephony/wireless.htm#cing
Prices quoted do not reflect applicable fees, charges, or pass-through assessments.
This Quotation is valid for ninety (90) days from date listed on quote (except for promotional pricing which may expire sooner). Data furnished in this document shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the document.

STATE OF TEXAS DIR CONTRACT NO. DIR-TSO-3415
WIRELESS TELECOM PROPOSAL FOR WIRELESS VOICE, DATA SERVICES AND EQUIPMENT

WIRELESS PROPOSAL FOR: Hidalgo County
SERVICE PLAN, CALLING FEATURES, AND EQUIPMENT QUOTES

QUOTE ID 17126153539
DATE 1/26/2017
TERM Annual (12 Months)

RATE PLAN AND FEATURES

RATE PLAN - SHARE	Line Count	Discounted Monthly Access	Plan Included Minutes	Included TEXT / PIX / FLIX	Included Data	Total Shared Minutes	Voice Overage	Monthly Cost	Term Cost
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
								$0.00	$0.00

RATE PLAN - NON SHARE	Line Count	Discounted Monthly Access	Plan Included Minutes	Included TEXT / PIX / FLIX	Included Data	Voice Overage	Monthly Cost	Term Cost
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
							$0.00	$0.00

RATE PLAN - MOBILE BROADBAND	Line Count	Discounted Monthly Access		Included TEXT / PIX / FLIX	Included Data		Data Overage	Monthly Cost	Term Cost
4G MOBILE BROADBAND UNLIMITED $37.99	1	$37.99		N	Unlimited		$0.00	$37.99	$455.88
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
	1							$37.99	$455.88

MACHINE TO MACHINE	Line Count	Discounted Monthly Access			Included Data	Shared Data / Group	Data Overage	Monthly Cost	Term Cost
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
								$0.00	$0.00

FEATURES	Line Count	Discounted Monthly Access						Monthly Cost	Term Cost
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
								$0.00	$0.00

RATE PLANS AND FEATURES - ESTIMATED COST FOR TERM [Annual (12 Months)] $455.88

SEE SECOND PAGE FOR EQUIPMENT COSTS AND TOTALS

EQUIPMENT AND ACCESSORIES

QUARTERLY DEVICE PROMOTIONS	Line Count	Cost per Unit	Subtotal
Verizon AC791L (PP $19.99+)	1	$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
	1		$0.00

DEVICE	Line Count	Cost per Unit	Subtotal
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
			$0.00

Eligible accessories receive a 35% discount

ACCESSORIES AND FULL-RETAIL (NO CONTRACT) EQUIPMENT	Line Count	Cost per Unit	Cost per Unit after Discount	Subtotal
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
				$0.00

EQUIPMENT AND ACCESSORIES ESTIMATED COST	$0.00

INVESTMENT ESTIMATE	Monthly	Term Total
RATE PLAN AND FEATURES ESTIMATED COST FOR TERM [Annual (12 Months)]:	$37.99	$455.88
EQUIPMENT AND ACCESSORIES ESTIMATED COST:		$0.00
INVESTMENT TOTAL		$455.88

1Q17 BUSINESS BILL INCENTIVE CREDIT (BIC) PROMOTIONS	Line Count	BIC Amount	BIC Total
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
			$0.00

QUOTE ID 17126153539

Additional Notes:

* Charge does not include roaming charges, minutes used over allowance, etc. Please consult with your Sales Representative for more information.

** Equipment pricing and availability is subject to change.

*** All applicable price plan and feature discounts have already been applied

Service Pricing provided is for Government Liability Accounts Only and is subject to the terms, provisions and conditions of the State of Texas Department of Information Resources (DIR) Contract No. DIR-TSO-3415 Coverage, service and offers not available in all areas. Full terms and conditions, along with additional price plans offered by Verizon Wireless can be found on the http://www.dir.state.tx.us/ Internet website. Price quotes do not reflect Federal Universal Service, E911 and Regulatory Fees, charges, or pass-through assessments. Please see information on Regulatory Surcharges and Fees below for additional details.

All quotes contained in this proposal are subject to the terms and conditions of the State of Texas DIR contract. Your accounts must be in good standing with Verizon wireless to migrate your existing lines of service to the pricing offered in this proposal if your Agency currently has service with Verizon Wireless.

Price Plan changes and discounts may take up to two bill cycles to appear on your Verizon Wireless billing statement for accounts transitioning to an approved State of Texas contract vehicle. As part of our compliance with FCC requirements, Verizon Wireless allows only GPS-compliant devices to be activated on our network. If your current device is not GPS-compliant you will not be able to activate service on our network with your existing equipment.

This Quotation is valid for ninety (90) days from date listed on quote (except for promotional pricing which may expire sooner). Data furnished in this document shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the document.

Updated 01/03/2017

Requisition

Req # 00315896

PO #

Date: 02/27/17

Bill To: x
x

Vendor : 287024
VERIZON WIRELESS
P.O. BOX 660108
DALLAS TX 75266-0108

Ship To: HIDALGO CO. PCT 4
1051 N. DOOLITTLE
EDINBURG TX 78542

Contact: VLopez
956-383-3112

Contract No: DIR-TSO-3415

Special Instructions:
Pct. # 305

QUANTITY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
		DIR-TSO-3415 Approved: CC AI- For: Mariano Manzano DO NOT DUPLICATE ORDER		
10.00	MONTH	CO 46 Mobile Broadband Unlimited	37.99	379.90
		Account No	Encumbrance	
		7-1200-431-00-124-007-0-532	379.90	
			Freight	.00
			Total	379.90

Authorized By: _____

Requisition

Req # 00315896

PO #

Date: 02/27/17

Bill To: x
x

Vendor : 287024
VERIZON WIRELESS
P.O. BOX 660108
DALLAS TX 75266-0108

Ship To: HIDALGO CO. PCT 4
1051 N. DOOLITTLE
EDINBURG TX 78542

Contact: VLopez
956-383-3112

Contract No: DIR-TSO-3415

Special Instructions:
Pct. # 305

QUANTITY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
		DIR-TSO-3415 Approved: CC AI- For: Mariano Manzano DO NOT DUPLICATE ORDER		
10.00	MONTH	CO 46 Mobile Broadband Unlimited	37.99	379.90
		Account No	Encumbrance	
		7-1200-431-00-124-007-0-532	379.90	
			Freight	.00
			Total	379.90
		REPORT ROAD HAZARDS 1-866-HCR-SAFE OR 1-866-427-7233		

Authorized By: _____

WIRELESS DEVICE REQUEST FORM W.2011.2

TYPE OF REQUEST

County Owned Wireless Device:	Wireless Data Device:	Stipend:
X Office Use *or* ☐ Individual	☐ Data Card	☐ Cellular Telephone $50/mo
☐ Name Change	☐ Blackberry	☐ Data Pad $25/mo
☐ Equipment Change	☐ Other:	
☐ Plan Change		
☐ Delete Service		

COUNTY OWNED WIRELESS DEVICE

Office Use / Employee: Office Use Employee ID#___ Signature:___

Department: Boot Camp Dept#: 330

Quantity: 2 956-219-9921 and 956-219-9925

Service: $79.98 mo (x) 12 months = 959.76 Account: 7-1100-423-78-330-028-0-532

Service: $____/mo (x) ____months = ____ Account:____-619/664

Requisition Total:____ Requisition Number:____

STIPEND

(1) Employee:____ Employee ID#____ Signature:____

Department:____ Dept#:____

Quantity:____

Service: $____/mo (x) ____months = ____ Account:____-532

Total:____

(2) Elected Official/Department Head Authorization for Request:

Signature | Israel "Buddy" Silva, Jr (Print Name) | 02/08/2017 (Date)

(3) Executive Office Authorization (Commissioner's Court Departments Only):

Signature | Print Name | Date

(4) IT DEPARTMENT ONLY:

Service Type Codes: Nationwide 1000 Share N&W+M2M Unl. 200 MSGS @ $139.99 each per month

Commissioner's Court Action: **Commissioner's Court Date:** ____

☐ **Approved Date:** ____ ☐ **Disapproved**

Current County cell phone policy stipulates that employees that have cell phones assigned to them will be taxed the value of the service. Please see the following IRS document for more information: http://www.irs.gov/govt/fslg/article/0,,id=167154,00.html, EXAMPLE 2.

Revised: 03/09/2011

WIRELESS DEVICE REQUEST FORM W.2011.2

TYPE OF REQUEST

County Owned Wireless Device:	Wireless Data Device:	Stipend:
☐ Office Use *or* ☐ Individual	x Data Card	☐ Cellular Telephone $50/mo
☐ Name Change	☐ Blackberry	☐ Data Pad $25/mo
☐ Equipment Change	☐ Other:	
☐ Plan Change		
☐ Delete Service		

COUNTY OWNED WIRELESS DEVICE

Office Use / Employee: Office Use Employee ID#_____ Signature:_____

Department: Juvenile Probation Dept#: 330

Quantity: 3 : 956-578-1993, 956-5782401 and 956-578-2827

Service: $ 37.99 /mo (x) 12 months = 455.88*3 Account: 7-1100-423-71-330-001-0--532

Service: $_____/mo (x) ____months = _____ Account:_____-619/664

Requisition Total:_____ Requisition Number:_____

STIPEND

(1) Employee: _____ Employee ID#_____ Signature:_____

Department:_____ Dept#:_____

Quantity:_____

Service: $_____/mo (x) ____months = _____ Account:_____-532

Total:_____

(2) Elected Official/Department Head Authorization for Request:

Signature — Israel "Buddy" Silva, Jr. (Print Name) — 02/08/17 (Date)

(3) Executive Office Authorization (Commissioner's Court Departments Only):

_____ _____ _____

Signature Print Name Date

(4) IT DEPARTMENT ONLY:

Service Type Codes: 4G Mobile Broadband Und. @ $37.99 each per month

Commissioner's Court Action: **Commissioner's Court Date:** _____

☐ **Approved Date:** _____ ☐ **Disapproved**

Current County cell phone policy stipulates that employees that have cell phones assigned to them will be taxed the value of the service. Please see the following IRS document for more information: http://www.irs.gov/govt/fslg/article/0,,id=167154,00.html, EXAMPLE 2.

Revised: 03/09/2011

verizon

Wireless Telecom Proposal for:
State of Texas DIR Contract No. DIR-TSO-3415 for Wireless Voice, Data Services and Equipment

Date: February 27, 2017

Customer Name: Hidalgo County

Sales Representative: Carlos Zavala

Pricing provided is for Government Liability Accounts Only and is subject to the terms, provisions and conditions of the Contract for Wireless Voice & Data Services and Equipment between State of Texas, Department of Information Resources and Verizon Wireless, DIR Contract No. DIR-TSO-3415. Full terms and conditions, along with additional information and ordering instructions can be found on the Internet website at: http://www.dir.state.tx.us/store/tsd/telephony/wireless.htm#cing
Prices quoted do not reflect applicable fees, charges, or pass-through assessments.
This Quotation is valid for ninety (90) days from date listed on quote (except for promotional pricing which may expire sooner). Data furnished in this document shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the document.

STATE OF TEXAS DIR CONTRACT NO. DIR-TSO-3415
WIRELESS TELECOM PROPOSAL FOR WIRELESS VOICE, DATA SERVICES AND EQUIPMENT

WIRELESS PROPOSAL FOR: Hidalgo County
SERVICE PLAN, CALLING FEATURES, AND EQUIPMENT QUOTES

QUOTE ID 17227092111
DATE 2/27/2017
TERM Annual (12 Months)

RATE PLAN AND FEATURES

RATE PLAN - SHARE	Line Count	Discounted Monthly Access	Plan Included Minutes	Included TEXT / PIX / FLIX	Included Data	Total Shared Minutes	Voice Overage	Monthly Cost	Term Cost
NATIONWIDE 1000 SHARE N&W+M2M UNL 200 MSGS $39.99	2	$39.99	1,000	200 (Txt/Pix/Flix)	N	2,000	$0.25	$79.98	$959.76
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
	2					2000		$79.98	$959.76

RATE PLAN - NON SHARE	Line Count	Discounted Monthly Access	Plan Included Minutes	Included TEXT / PIX / FLIX	Included Data	Voice Overage	Monthly Cost	Term Cost
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
							$0.00	$0.00

RATE PLAN - MOBILE BROADBAND	Line Count	Discounted Monthly Access	Included TEXT / PIX / FLIX	Included Data	Data Overage	Monthly Cost	Term Cost
4G MOBILE BROADBAND UNLIMITED $37.99	3	$37.99	N	Unlimited	$0.00	$113.97	$1,367.64
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
		$0.00		-		$0.00	$0.00
		$0.00				$0.00	$0.00
	3					$113.97	$1,367.64

MACHINE TO MACHINE	Line Count	Discounted Monthly Access	Included Data	Shared Data / Group	Data Overage	Monthly Cost	Term Cost
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
						$0.00	$0.00

FEATURES	Line Count	Discounted Monthly Access	Monthly Cost	Term Cost
		$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00
			$0.00	$0.00

RATE PLANS AND FEATURES - ESTIMATED COST FOR TERM [Annual (12 Months)] **$2,327.40**

SEE SECOND PAGE FOR EQUIPMENT COSTS AND TOTALS

EQUIPMENT AND ACCESSORIES

QUARTERLY DEVICE PROMOTIONS	Line Count	Cost per Unit	Subtotal
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
			$0.00

DEVICE	Line Count	Cost per Unit	Subtotal
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
			$0.00

Eligible accessories receive a 35% discount

ACCESSORIES AND FULL-RETAIL (NO CONTRACT) EQUIPMENT	Line Count	Cost per Unit	Cost per Unit after Discount	Subtotal
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
				$0.00

EQUIPMENT AND ACCESSORIES ESTIMATED COST	$0.00

INVESTMENT ESTIMATE	Monthly	Term Total
RATE PLAN AND FEATURES ESTIMATED COST FOR TERM [Annual (12 Months)]:	$193.95	$2,327.40
EQUIPMENT AND ACCESSORIES ESTIMATED COST:		$0.00
INVESTMENT TOTAL		$2,327.40

1Q17 BUSINESS BILL INCENTIVE CREDIT (BIC) PROMOTIONS	Line Count	BIC Amount	BIC Total
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
			$0.00

QUOTE ID 17227092111

Additional Notes:

* Charge does not include roaming charges, minutes used over allowance, etc. Please consult with your Sales Representative for more information.
** Equipment pricing and availability is subject to change.
*** All applicable price plan and feature discounts have already been applied

Service Pricing provided is for Government Liability Accounts Only and is subject to the terms, provisions and conditions of the State of Texas Department of Information Resources (DIR) Contract No. DIR-TSO-3415 Coverage, service and offers not available in all areas. Full terms and conditions, along with additional price plans offered by Verizon Wireless can be found on the http://www.dir.state.tx.us/ internet website. Price quotes do not reflect Federal Universal Service, E911 and Regulatory Fees, charges, or pass-through assessments. Please see information on Regulatory Surcharges and Fees below for additional details.

All quotes contained in this proposal are subject to the terms and conditions of the State of Texas DIR contract. Your accounts must be in good standing with Verizon wireless to migrate your existing lines of service to the pricing offered in this proposal if your Agency currently has service with Verizon Wireless.

Price Plan changes and discounts may take up to two bill cycles to appear on your Verizon Wireless billing statement for accounts transitioning to an approved State of Texas contract vehicle. As part of our compliance with FCC requirements, Verizon Wireless allows only GPS-compliant devices to be activated on our network. If your current device is not GPS-compliant you will not be able to activate service on our network with your existing equipment.

This Quotation is valid for ninety (90) days from date listed on quote (except for promotional pricing which may expire sooner). Data furnished in this document shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the document.

'Updated 01/03/2017'

Requisition

Req # 00311098

PO #

Date: 01/03/17

Bill To: x
x

Vendor : 287024
VERIZON
P.O. BOX 740407
CINCINNATI OH 45274-0407

Ship To: JUVENILE PROBATION DEPT.
1001 NORTH DOOLITTLE
EDINBURG TX 78540-0267

Contact: CINDY PASLAK
956-587-6200

Contract No:

Special Instructions:

QUANTITY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
		DIR-TSO 3415		
		CONFIRMING ORDER; DO NOT DUPLICATE		
12.00	MONTH	VERIZON NATIONWIDE 1000 SHARE N&W+M2M UNL200 - FOR OFFICE USE AT THE WESLACO BOOTCAMP FOR JANUARY- DECEMBER 2017; 956-219-9921	39.99	479.88
12.00	MONTH	VERIZON NATIONWIDE 1000 SHARE N&W+M2M UNL20-FOR OFFICE USE AT THE WESLACO BOOTCAMP FOR JANUARY - DECEMBER 2017;956-219-9925	39.99	479.88
12.00	MONTH	4G UNLIMITED MOBILE BROADBAND PLAN (BGSA 666)- $37.99 CARDS P/MONTH 956-578-1993	37.99	455.88
12.00	MONTH	4G UNLIMITED MOBILE BROADBAND PLAN (BGSA 666)- $37.99 CARDS P/MONTH 956-578-2401	37.99	455.88
12.00	MONTH	4G UNLIMITED MOBILE BROADBAND PLAN (BGSA 666)- $37.99 CARDS P/MONTH 956-578-2827	37.99	455.88
24.00	MONTH	tax-on cell phones	2.15	51.60
		Account No	Encumbrance	
			Freight	.00
			Total	2,379.00

Authorized By: _____

WIRELESS DEVICE REQUEST FORM W.2011.2

TYPE OF REQUEST

County Owned Wireless Device:	Wireless Data Device:	Stipend:
☑ Office Use *or* ☐ Individual	☐ Data Card	☐ Cellular Telephone $50/mo
☐ Name Change	☐ Blackberry	☐ Data Pad $25/mo
☐ Equipment Change	☒ Other: GPS	
☐ Plan Change		
☐ Delete Service		

COUNTY OWNED WIRELESS DEVICE

Office Use / Employee: Office Use Employee ID# N/A Signature: N/A

Department: Precinct 2 Dept#: 122

Quantity: 4

Service: $ 7.00 /mo (x) 12 months = 336.00 Account: 7-1200-431-00-122-005-0 -532

Service: $_____/mo (x) ____ months = _____ Account: _____ -619/664

Requisition Total: $1,096.00 **Requisition Number:** 310892

STIPEND

(1) Employee: _____ Employee ID#_____ Signature:_____

Department:_____ Dept#:_____

Quantity:_____

Service: $_____/mo (x) ____ months = _____ Account:_____ -532

Total:_____

(2) **Elected Official/Department Head Authorization for Request:**

Signature	Eduardo Cantu Print Name	03/09/17 Date

(3) **Executive Office Authorization (Commissioner's Court Departments Only):**

Signature	Print Name	Date

(4) **IT DEPARTMENT ONLY:**

Service Type Codes: 42H Account Share 5MB @ $7.00 each per month

Commissioner's Court Action: **Commissioner's Court Date:** _____

☐ **Approved Date:** _____ ☐ **Disapproved**

Current County cell phone policy stipulates that employees that have cell phones assigned to them will be taxed the value of the service. Please see the following IRS document for more information: http://www.irs.gov/govt/fslg/article/0,,id=167154,00.html, EXAMPLE 2.

Revised: 03/09/2011

WIRELESS DEVICE REQUEST FORM W.2011.2

TYPE OF REQUEST

County Owned Wireless Device:	Wireless Data Device:	Stipend:
☑ Office Use *or* ☐ Individual	☐ Data Card	☐ Cellular Telephone $50/mo
☐ Name Change	☐ Blackberry	☐ Data Pad $25/mo
☐ Equipment Change	☒ Other: GPS	
☐ Plan Change		
☐ Delete Service		

COUNTY OWNED WIRELESS DEVICE

Office Use / Employee: Office Use Employee ID# N/A Signature: N/A

Department: Precinct 2 Dept#: 122

Quantity: 11

Service: $ 5.00 /mo (x) 12 months = 660.00 Account: 7-1200-431-00-122-005-0 -532

Service: $_____/mo (x) ____ months = _____ Account: _____ -619/664

Requisition Total: $1,096.00 **Requisition Number:** 310892

STIPEND

(1) Employee: _____ Employee ID#_____ Signature:_____

Department:_____ Dept#:_____

Quantity:_____

Service: $_____/mo (x) ____ months = _____ Account:_____ -532

Total:_____

(2) Elected Official/Department Head Authorization for Request:

Signature	Eduardo Cantu Print Name	03/09/17 Date

(3) Executive Office Authorization (Commissioner's Court Departments Only):

Signature	Print Name	Date

(4) IT DEPARTMENT ONLY:

Service Type Codes: M2M Account Share 1MB @ $5.00 each per month

Commissioner's Court Action: **Commissioner's Court Date:** _____

☐ **Approved Date:** _____ ☐ **Disapproved**

Current County cell phone policy stipulates that employees that have cell phones assigned to them will be taxed the value of the service. Please see the following IRS document for more information: http://www.irs.gov/govt/fslg/article/0,,id=167154,00.html, EXAMPLE 2.

Revised: 03/09/2011

Wireless Telecom Proposal for:
State of Texas DIR Contract No. DIR-TSO-3415 for Wireless Voice, Data Services and Equipment

Date:	March 7, 2017
Customer Name:	Hidalgo County
Sales Representative:	Carlos Zavala

Pricing provided is for Government Liability Accounts Only and is subject to the terms, provisions and conditions of the Contract for Wireless Voice & Data Services and Equipment between State of Texas, Department of Information Resources and Verizon Wireless, DIR Contract No. DIR-TSO-3415. Full terms and conditions, along with additional information and ordering instructions can be found on the Internet website at: http://www.dir.state.tx.us/store/tsd/telephony/wireless.htm#cing
Prices quoted do not reflect applicable fees, charges, or pass-through assessments.
This Quotation is valid for ninety (90) days from date listed on quote (except for promotional pricing which may expire sooner). Data furnished in this document shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the document.

STATE OF TEXAS DIR CONTRACT NO. DIR-TSO-3415
WIRELESS TELECOM PROPOSAL FOR WIRELESS VOICE, DATA SERVICES AND EQUIPMENT

WIRELESS PROPOSAL FOR: Hidalgo County
SERVICE PLAN, CALLING FEATURES, AND EQUIPMENT QUOTES

QUOTE ID 1737130857
DATE 3/7/2017
TERM Annual (12 Months)

RATE PLAN AND FEATURES

RATE PLAN - SHARE	Line Count	Discounted Monthly Access	Plan Included Minutes	Included TEXT / PIX / FLIX	Included Data	Total Shared Minutes	Voice Overage	Monthly Cost	Term Cost
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
		$0.00						$0.00	$0.00
								$0.00	$0.00

RATE PLAN - NON SHARE	Line Count	Discounted Monthly Access	Plan Included Minutes	Included TEXT / PIX / FLIX	Included Data	Voice Overage	Monthly Cost	Term Cost
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
		$0.00					$0.00	$0.00
							$0.00	$0.00

RATE PLAN - MOBILE BROADBAND	Line Count	Discounted Monthly Access	Included TEXT / PIX / FLIX	Included Data	Data Overage	Monthly Cost	Term Cost
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
						$0.00	$0.00

MACHINE TO MACHINE	Line Count	Discounted Monthly Access	Included Data	Shared Data / Group	Data Overage	Monthly Cost	Term Cost
MACHINE TO MACHINE ACCOUNT SHARE 5MB $0.0009765/KB $7.00 (M2M ASH)	4	$7.00	5 MB	20 MB / Low Usage	$1 / MB	$28.00	$336.00
MACHINE TO MACHINE ACCOUNT SHARE 1MB $0.0009765/KB $5.00 (M2M ASH)	11	$5.00	1 MB	11 MB / Low Usage	$1 / MB	$55.00	$660.00
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
		$0.00				$0.00	$0.00
	15					$83.00	$996.00

FEATURES	Line Count	Discounted Monthly Access	Monthly Cost	Term Cost
		$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00
		$0.00	$0.00	$0.00
			$0.00	$0.00

RATE PLANS AND FEATURES - ESTIMATED COST FOR TERM [Annual (12 Months)] $996.00

SEE SECOND PAGE FOR EQUIPMENT COSTS AND TOTALS

EQUIPMENT AND ACCESSORIES

QUARTERLY DEVICE PROMOTIONS	Line Count	Cost per Unit	Subtotal
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
			$0.00

DEVICE	Line Count	Cost per Unit	Subtotal
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
			$0.00

Eligible accessories receive a 35% discount

ACCESSORIES AND FULL-RETAIL (NO CONTRACT) EQUIPMENT	Line Count	Cost per Unit	Cost per Unit after Discount	Subtotal
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
				$0.00

EQUIPMENT AND ACCESSORIES ESTIMATED COST	$0.00

INVESTMENT ESTIMATE	Monthly	Term Total
RATE PLAN AND FEATURES ESTIMATED COST FOR TERM [Annual (12 Months)]:	$83.00	$996.00
EQUIPMENT AND ACCESSORIES ESTIMATED COST:		$0.00
INVESTMENT TOTAL		$996.00

1Q17 BUSINESS BILL INCENTIVE CREDIT (BIC) PROMOTIONS	Line Count	BIC Amount	BIC Total
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
		$0.00	$0.00
			$0.00

QUOTE ID 1737130857

Additional Notes:

* Charge does not include roaming charges, minutes used over allowance, etc. Please consult with your Sales Representative for more information.

** Equipment pricing and availability is subject to change.

*** All applicable price plan and feature discounts have already been applied

Service Pricing provided is for Government Liability Accounts Only and is subject to the terms, provisions and conditions of the State of Texas Department of Information Resources (DIR) Contract No. DIR-TSO-3415 Coverage, service and offers not available in all areas. Full terms and conditions, along with additional price plans offered by Verizon Wireless can be found on the http://www.dir.state.tx.us/ internet website. Price quotes do not reflect Federal Universal Service, E911 and Regulatory Fees, charges, or pass-through assessments. Please see information on Regulatory Surcharges and Fees below for additional details.

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Price Plan changes and discounts may take up to two bill cycles to appear on your Verizon Wireless billing statement for accounts transitioning to an approved State of Texas contract vehicle. As part of our compliance with FCC requirements, Verizon Wireless allows only GPS-compliant devices to be activated on our network. If your current device is not GPS-compliant you will not be able to activate service on our network with your existing equipment.

This Quotation is valid for ninety (90) days from date listed on quote (except for promotional pricing which may expire sooner). Data furnished in this document shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate the document.

Updated 01/03/2017

Requisition

Req # 00310892

PO #

Date: 01/03/17

Bill To: x
x

Vendor : 287024
VERIZON WIRELESS
P.O. BOX 660108
DALLAS TX 75266-0108

Ship To: HIDALGO CO. PCT 2
300 WEST HALL ACRES, SUITE G
PHARR TX 78577

Contact: E. CASAS
956-787-1891

Contract No: DIR-TSO-3415

Special Instructions:

QUANTITY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
		DIR-TSO-3415 - EXP:4/27/2020		
		PRECINCT 2 ADMINISTRATION DEPARTMENT DATA SERVICE FOR GPS UNITS ON EQUIPMENT & VEHICLES (JANUARY - DECEMBER 2017) DO NOT DUPLICATE ORDER		
12.00	MONTH	MACHINE TO MACHINE ACCOUNT SHARE 1MB - (DATA SERVICE FOR GPS UNITS) 11 UNITS @ $5.00/PER MONTH X 12 MONTHS (JANUARY - DECEMBER 2017)	55.00	660.00
12.00	MONTH	MACHINE TO MACHINE ACCOUNT SHARE 5MB - (DATA SERVICE FOR GPS UNITS) 4 UNITS @ $7.00/PER MONTH X 12 MONTHS (JANUARY - DECEMBER 2017)	28.00	336.00
1.00	LOT	DATA USAGE AND PURCHASE CHARGES	100.00	100.00
		Account No	Encumbrance	
		7-1200-431-00-122-005-0-532	1,096.00	
			Freight	.00
			Total	1,096.00
		REPORT ROAD HAZARDS 1-866-HCR-SAFE OR 1-866-427-7233		

Authorized By: _____

M2M ACCOUNT SHARE 1MB @ $5.00	956-310-2604
M2M ACCOUNT SHARE 1MB @ $5.00	956-310-2774
M2M ACCOUNT SHARE 1MB @ $5.00	956-310-2735
M2M ACCOUNT SHARE 1MB @ $5.00	956-310-2175
M2M ACCOUNT SHARE 1MB @ $5.00	956-310-2149
M2M ACCOUNT SHARE 1MB @ $5.00	956-310-1973
M2M ACCOUNT SHARE 1MB @ $5.00	956-310-1949
M2M ACCOUNT SHARE 1MB @ $5.00	956-310-1347
M2M ACCOUNT SHARE 1MB @ $5.00	956-249-0339
M2M ACCOUNT SHARE 1MB @ $5.00	956-310-8602
M2M ACCOUNT SHARE 1MB @ $5.00	956-249-0152
M2M ACCOUNT SHARE 5MB @ $7.00	956-310-3775
M2M ACCOUNT SHARE 5MB @ $7.00	956-310-3748
M2M ACCOUNT SHARE 5MB @ $7.00	956-310-3597
M2M ACCOUNT SHARE 5MB @ $7.00	956-310-3987

AI-58661 **Urban County** **17. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Olga Lerma, URBAN COUNTY **Submitted By:** Olga Lerma, URBAN COUNTY

Department: URBAN COUNTY

Information

CAPTION

1. Hold a Public Hearing to consider public comments for Hidalgo county Precinct No. 4's proposed budget and program amendment for fiscal years 28 & 29 (2015 & 2016).

2. Requesting approval of a budget and program amendment for Hidalgo County Precinct No. 4 for fiscal years 28 & 29. (2015 & 2016). Amendment will delete two Street Improvements (street Lighting) projects and the Substance Abuse Services line items and add funding to the Parks, Recreational Facility Improvements Project for Brewster Park.

BACKGROUND

A Public Hearing was held on March 21, 2017 at 9:30 A.M. and citizen participation requirements have been met. Budget & Program Amendment will Delete the two street improvements projects (street lighting) and the Substance Abuse Services to A Vision For You, and add the funding into the Parks, Recreational Facility Improvements Project which includes the purchase of additional park equipment for Sunflower Park and the complete development of Brewster Park in the Linn/San Manuel area, located within Precinct No. 4 boundaries. This project is already environmentally cleared. See attached Public Hearing Notice published in The Monitor on February 10, 2017.

Fiscal Impact

Attachments

Budget & Program Amendment Public Hearing Notice for Pct No. 4

Form Review

Inbox	Reviewed By	Date

Budget & Management	Veronica Ortiz	02/23/2017 08:51 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Olga Lerma Started On: 02/22/2017 01:32 PM

Final Approval Date: 03/17/2017

PUBLIC HEARING NOTICE
HIDALGO COUNTY PRECINCT NO. 4

Published On: FEBRUARY 10, 2017

BUDGET & PROGRAM AMENDMENT

In compliance with Community Development Block Grant (CDBG) requirements, **PRECINCT NO. 4** will conduct a Public Hearing to solicit input from interested parties on the Precinct's proposed budget & program amendment to its Urban County Program, **Year 28 & 29 (2015 & 2016).**

En cumplimiento de los requisitos de Programa del desarrollo comunitario de beca de bloque (CDBG), El Pricinto #4 llevará a cabo una audiencia pública para solicitar la opinión de las partes interesadas en el Presupuesto de los proyectos en el Precinto y la modificación del Programa Urbano del Condado Hidalgo, para los años 28 & 29 (2015 & 2016) de fondos.

The Public Hearing will be held on, **Tuesday, March 21, 2017 at 9:30 A.M. at the Hidalgo County Commissioner's Court located at 100 E. Cano Street, Edinburg, Texas 78539.**

*La Audiencia Pública se llevará a cabo en **martes, 21 de marzo de 2017** a las **9:30 A.M.** en la **Corte de Commissionados del Condado de Hidalgo ubicada en 100 E. Cano Street, Edinburg Texas 78539.***

Existing Budget	**Year 28 (2015) Activities**	**Proposed Budget**
Porsupuesto Existente	***Año y Actividad***	***Porsupuesto Propuesto***
$163,351.79	Street Improvements */Mejoras de Calles* (-163,351.79)	$ 0.00
$212,412.00	Parks, Recreational Facility Improvements */Mejoras de Parques* (+163,351.79)	$375,763.79
$375,763.79	**TOTALS:**	**$375,763.79**

Existing Budget	**Year 29 (2016) Activities**	**Proposed Budget**
Porsupuesto Existente	***Año y Actividad***	***Porsupuesto Propuesto***
$83,597.00	Street Improvements */Mejoras de Calles* (-$83,597.00)	$ 0.00
$ 5,000.00	Substance Abuse Services */Servicios Para Abuso de Substancias* (-5,000.00)	$ 0.00
$ 3,000.00	Parks, Recreational Facility Improvements */Mejoras de Parques*(+88,597.00)	$ 91,597..00
$91,597.00	**TOTALS:**	**$ 91,597.00**

The proposed amendment will DELETE the 2015 Street Improvements line item, (Street Lights Project) and INCREASE the Parks, Recreational Facility Improvements line item to include the continuation of funding for the complete development of Sunflower Park (Phase II), an already environmentally cleared project. The Splash Pad included in Phase II will also be deleted, however additional playground equipment will be purchased. The proposed amendment will DELETE the 2016 Street Improvements line item, (Street Lights Project) and DELETE the Substance Abuse Services line item and INCREASE the Parks, Recreational Facility Improvements line item to include the continuation of funding for the complete development of Brewster, an already environmentally cleared project.

La enmienda propuesta ELIMINARA Mejoras de la Calle en el año 2015 (Proyecto de Luces de la Calle) y AUMENTARA Mejoras de las Instalaciones Recreativas para incluir la continuación del financiamiento para el desarrollo completo de Sunflower Park (Fase II) . El Splash Pad incluido en la Fase II se eliminará, sin embargo, se comprarán equipos adicionales para el patio de recreo. La enmienda propuesta ELIMINARA Mejoras de Calles en el año 2016 (Proyecto de luces de calle) e ELIMINARA Servicios Para Abuse de Substancias e AUMENTARA Mejoras de Facilidades Recreativas para incluir la continuación del financiamiento para el desarrollo completo de Brewster Park, un proyecto ya ambientalmente despejado.

Accommodations for individuals with handicaps shall be provided upon request.
Alojamiento para las personas con discapacidad se puede proporcionar a petición.

Presentation may be presented in English or Spanish as requested by persons present at Hearing.
Las presentaciones se haran en espanol o ingles para aquellas personas que asi lo deseen.

For more information, please come by our office at: or call (956) 787-8127.
Para obtener más información, por favor venga a nuestra oficina localisada: o llame al (956) 787-8127.
427 E. Duranta Avenue, Suite 107, Alamo, Texas 78516.

Written comments may be forwarded to:
Los comentarios escritos pueden ser enviados a:
Commissioner/Comisionado: Joseph Palacios at 1015 N. Doolittle Road, Edinburg, Texas 78542

AI-58925 **Urban County** **17. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Olga Lerma, URBAN COUNTY **Submitted By:** Olga Lerma, URBAN COUNTY

Department: URBAN COUNTY

Information

CAPTION

"Subject to: HB 1295 Compliance." Requesting authority to purchase playground equipment through the County's Membership/Participation with BuyBoard's awarded vendor, Park Place Recreation Designs, Inc. (contract # 512-16), in the amount of $11,840.15 for Mercedes Sports Complex Park located in Mercedes (FY 2016).

BACKGROUND

The playground equipment purchased will be utilized at Mercedes Sports Complex Park located in Mercedes. See attached quote and back up documentation.

Vendor: Park Place Recreation Designs, Inc.
Purchase Amount: **$11,840.15**
Funds Available: $ 5,482.44 FY 29 (2016) Mercedes Parks, Recreational Facility
$ 7,355.25 FY 29 (2016) Pct. 1 - Forfeited Funds - Parks, Recreational Facility
$ 154.26 City of Mercedes Pooled Cash Account
Total: $12,991.95

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** Urban. Co. funds

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Urban Co. funds

Attachments

Park Place Recreations Designs, Inc price proposal & Form 1295

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/10/2017 04:12 PM
Ivan Cantu	Ivan Cantu	03/13/2017 11:53 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Olga Lerma		Started On: 03/10/2017 03:58 PM
Final Approval Date: 03/17/2017		

COUNTY OF HIDALGO - URBAN COUNTY PROGRAM

Price Proposal Form

Price Proposal Form must be submitted to Urban County for pre-approval prior to the purchase. Use additional forms as needed.

Name Of Cooperative: BuyBoard
Contacted: Bob Ahrens
Name: Park Place Recreation Designs, Inc.
512-16
Phone: 1-800-626-0238

Item #	Description of Items	Quantity	List Price Per Unit	COOP Price Per Unit	Miracle Sale Price	Total Amount
1	#1226 6" Inground Benches	12	4,944.00	4,696.80	4,260.00	4,260.00
2	#11045 60" Super Park Grill	2	1,130.00	1,073.50	1,073.50	1,073.50
3	#1116 6' Portable Picnic Table	4	3,172.00	3,013.40	3,013.40	3,013.40
	#1182-FI 32 Gallon Litter Receptacle w/ Flat Top Inward					
4	Slope Surface	5	2,675.00	2,541.25	2,541.25	2,541.25
	Shipping/Freight - No BuyBoard Discount		952.00	952.00	952.00	**952.00**
					TOTAL	**11,840.15**

Recommendation: The City recommends purchase of the park equipment for the Sports Complex Park.

Requested By: 03/09/17
(USE BLUE INK) Date

(USE BLUE INK) 3-10-17 Date

Requested By: 03/09/17
(USE BLUE INK Date

RECEIVED
MAR 09 2017
Urban County Program

PARK PLACE
RECREATION DESIGNS, INC.
The Fun Starts Here!

PARK PLACE
RECREATION DESIGNS, INC.
210-821-5878 • 800-626-0238
FAX: 210-832-0115
www.miracleparkplace.com
BuyBoard® Cooperative Purchasing
Approved Vendor-Proposal # 512-16
www.buyboard.com

City of Mercedes
SPORTS COMPLEX PARK
Quote#: **0917-0004**
March 9, 2017

Park Place Recreation Designs, Inc.
PO Box 18186
San Antonio, TX 78218
800-626-0238 Fax 210-832-0115

QTY	DESCRIPTION	LIST PRICE	BUY BOARD PRICE (#512-16)	MIRACLE SALE PRICE
12	#1266 6' INGROUND PUNCHED STEEL BENCH - 12 EACH	$ 4,944.00	$ 4,696.80	$ 4,260.00
2	#11045 60" SUPER PARK GRILL - 2 EACH *	$ 1,130.00	$ 1,073.50	$ 1,073.50
4	#1116 6' PICNIC TABLE, PORTABLE - 4 EACH *	$ 3,172.00	$ 3,013.40	$ 3,013.40
5	#1182-FI 32 GALLON RECEPTACLE W/FLAT TOP INWARD SLOPE SURFACE - 5 EACH *	$ 2,675.00	$ 2,541.25	$ 2,541.25
1	FREIGHT	$ 952.00	$ 952.00	$ 952.00
	TOTAL PRICE	$ 12,873.00	$ 12,276.95	$ 11,840.15

* Item not currently on sale, so BuyBoard Price is used.

Vendor Contract Information

Back

Search:

- All
- Vendor Discounts Only
- Catalog Pricing Only

Refine Your Search:

Vendors
Park Place Recreation Designs Inc. [X]
Price Range
Show all prices
Category
None Selected
Contract
None selected

Additional Searches:

Search by Vendor

Browse Contracts

Additional Resources

Vendor Name:	Park Place Recreation Designs Inc.
Address:	4225 Woodburn Drive San Antonio, TX 78218
Phone Number:	(210) 821-5878
Email:	marilyn@miracleparkplace.com
Website:	http://www.miracleparkplace.com
Federal ID:	74-2336170
Contact:	Marilyn Ahrens
Accepts RFQs:	Yes
Minority Owned:	No
Women Owned:	No
Service-Disabled Veteran Owned:	No
EDGAR:	Yes
Contract Name:	Parks and Recreation Equipment and Field Lighting Products and Installation
Contract Description:	Playground, skate park, aquatic/waterpark equipment; safety surface products; park furnishing/fountains; shade canopies; lake/river/waterway docks; outdoor bleachers; scoreboards/marquees/signs; portable restrooms/shelters; service/repair & installation
Contract#:	512-16
Effective Date:	10/01/2016
Expiration Date:	09/30/2019
Payment Terms:	Net 30 days
Delivery Days:	30
Shipping Terms:	Pre-paid and added to invoice
Freight Terms:	FOB Destination
Ship Via:	Common Carrier
Region Served:	Texas Regions 1, 2, 3, 13, 15, 20
States Served:	Texas
Additional Info:	EDGAR Compliance documents (2 CFR Part 200 & Appendix II) are included in the Vend response document, and can be found in the Vendor Proposal File link near the bottom o page.
Quote Reference Number:	512-16
Return Policy:	20% restocking fee plus freight

Contract Documents

EDGAR Notice:	Click to view EDGAR Notice
Proposal Documents:	Click to view BuyBoard Proposal Documents
Regulatory Notice:	Click to view Bonding Regulatory Notice
Construction Services Advisory:	Click to view the Construction Related Goods and Services Advisory
Proposal Files:	Click to view Vendor Proposal Files Documents

Phone: 800-695-2919
Fax: 800-211-5454
Email: info@buyboard.com

Search Results

Search:

- All
- Vendor Discounts Only
- Catalog Pricing Only

Show 25 results

Narrow Results: tables

Vendor	Description	Pricing Sheet	Price
Park Place Recreation Designs Inc.	5% Discount Off Miracle Recreation pricelist for Playground and Park Amenities (tables, benches, litter receptacles and similar related equipment). Line Item 10	Pricing Sheet	$0.00

Showing 1 to 1 of 1 entries (filtered from 25 total entries)

First Previous 1 Next Last

Refine Your Search:

Vendors
Park Place Recreation Designs Inc.
[X]
Price Range
Show all prices
Category
None Selected
Contract
None selected

Additional Searches:

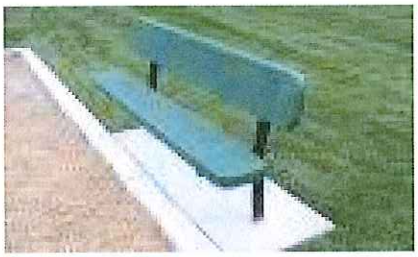
Search by Vendor

Browse Contracts

Additional Resources

Playground Equipment





Qty: 12

Sale Price: $355

6' Inground Punched Steel Bench

Model#: 1266J

Categories: Park Benches, Site Amenities, Steel Series.

CONTACT YOUR REP

VIEW ALL SALE ITEMS

Playground Equipment



60" Super Park Grill

Qty: 2

Model#: 1104-5

Categories: Grills, Grills & Fire Rings, Site Amenities.

Has a cooking area of 840 sq. in.

CONTACT YOUR REP

Specifications

Weight: 200 lbs (91 kg)

Additional Notes: Inground Mounting required

View Available Color Schemes

YOU MAY ALSO LIKE THESE PRODUCTS

Playground Equipment



6′ Picnic Table, Portable

Qty: 4

Model#: 1116J (1116C)

Categories: Site Amenities, Steel Series, Tables.

CONTACT YOUR REP

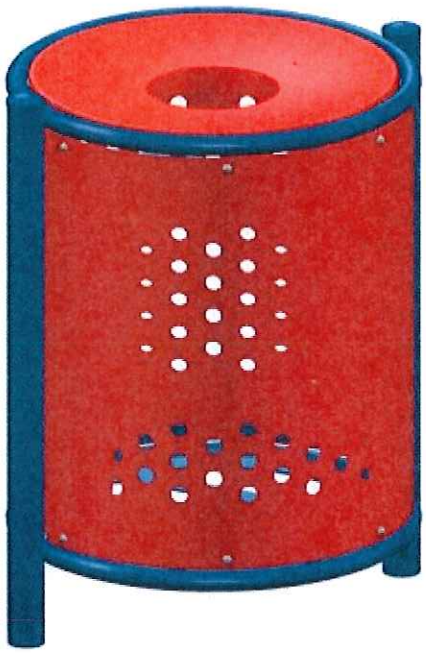
Specifications

Weight: 225 lbs (102 kg)

View Available Color Schemes

YOU MAY ALSO LIKE THESE PRODUCTS

Playground Equipment



32 Gallon Receptacle with Flat Top Inward Slope – Surface Mount/Inground

Model#: 1182FI

Categories: Litter Receptacles, Playground Series, Site Amenities.

Qty: 5

CONTACT YOUR REP

Specifications

Weight: 130 lbs (59 kg)

View Available Color Schemes

YOU MAY ALSO LIKE THESE PRODUCTS

city of mercedes
It Starts Here!

MEMO

TO: **Monica Leal, UCP Coordinator**

FROM: **Olga Rosas, Grants Coord.** OR.

DATE: **March 09, 2017**

RE: **Mercedes Park, Recreational Facility Project**

Attached please find the price proposal form for the Mercedes Park, Recreational Facility Project for the purchase of a park equipment for the Mercedes Sports Complex Park. The equipment to be purchased through this contract will be utilizing FY (29) 2015-2016 City-CDBG funds in the amount of $4,330.64, FY (29) 2016-2017 PCT #1-CDBG funds in the amount of $7,355.25 and City General funds in the amount of $154.26 for a total purchase price of $11,840.15. Please review and upon approval please forward us a copy of the purchase order so that the order can be placed.

Should you have any questions or require further documentation, please contact me at (956) 565-3114, Ext. 129.

RECEIVED
MAR 09 2017
Urban County Program

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-177174

Date Filed:
03/10/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Park Place Recreation Designs, Inc.
San Antonio, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County Urban County Program

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
501691030650009100
Precinct No. 1 & City of Mercedes Parks, Recreational Facility Project

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

Marilyn Ahrens
Signature of authorized agent of contracting business entity

NATHAN C. HASTINGS NOTARY PUBLIC STATE OF TEXAS EXPIRES 06-11-2019

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Marilyn Ahrens, this the 10th day of March, 20 17, to certify which, witness my hand and seal of office.

Nathan C Hastings
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
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2017-177174

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Park Place Recreation Designs, Inc.
San Antonio, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County Urban County Program

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

501691030650009100
Precinct No. 1 & City of Mercedes Parks, Recreational Facility Project

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER

CITY OF MERCEDES
POOLED CASH
400 SOUTH OHIO
MERCEDES, TEXAS 78570

TEXAS NATIONAL BANK
MERCEDES, TEXAS

88-2012/1149

09939

DATE 03/09/2017

AMOUNT ******154.26

Security Features Included Details on back.

WZ484798-04-16

PAY ---- ONE HUNDRED FIFTY FOUR & 26/100 DOLLARS ----

TO THE ORDER OF
** URBAN COUNTY PROGRAM **
427 E DURANTA, STE 107
ALAMO, TX 78516

VOID AFTER 90 DAYS

Henry Rojas

Jose M. Bonilla

THE BACK OF THIS DOCUMENT CONTAINS CHECK SECURITY WATERMARK AND CONSUMER ACTIVE INK

⑈009939⑈ ⑆114920128⑆ 0150001808⑈

CITY OF MERCEDES • POOLED CASH ACCOUNT

09939

009939 03/09/2017

99-04229 ** URBAN COUNTY PROGRAM **

DATE	I.D.	PO #	DESCRIPTION	AMOUNT
3/09/2017	MAR2017		PARK EQUIPMENT	154.26

CDBG FUNDING LEVERAGED BY THE CITY FOR THE PURCHASE OF PARK EQUIPMENT FOR THE MERCEDES SPORTS COMPLEX PARK

CHECK TOTAL 154.26

AI-58924 **Urban County** **17. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Olga Lerma, URBAN COUNTY **Submitted By:** Olga Lerma, URBAN COUNTY

Department: URBAN COUNTY

Information

CAPTION

"Subject to: HB 1295 Compliance." Requesting authority to purchase playground equipment through the County's Membership/Participation with BuyBoard's awarded vendor, Park Place Recreation Designs, Inc. (contract # 512-16), in the amount of $1,968.00 for Goza Park located in Mercedes (FY 2016).

BACKGROUND

The playground equipment purchased will be utilized at Goza Park located in Mercedes. See attached quote and back up documentation.

Vendor: Park Place Recreation Designs, Inc.
Purchase Amount: **$1,968.00**
Funds Available: $ 816.20 FY 28 (2015) Mercedes Parks, Recreational Facility
$ 5,482.44 FY 29 (2016) Mercedes Parks, Recreational Facility
Total: $6,298.64

Fiscal Impact

Attachments

Park Place proposal & form 1295

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/10/2017 04:04 PM
Merlen P. Munoz	Merlen P. Munoz	03/14/2017 01:17 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Olga Lerma		Started On: 03/10/2017 03:51 PM
Final Approval Date: 03/17/2017		

COUNTY OF HIDALGO - URBAN COUNTY PROGRAM

Price Proposal Form

Price Proposal Form must be submitted to Urban County for pre-approval prior to the purchase. Use additional forms as needed.

Name Of Cooperative: BuyBoard Contacted: Bob Ahrens

Name: Park Place Recreation Designs, Inc. 512-16 Phone: 1-800-626-0238

Item #	Description of Items	Quantity	List Price Per Unit	COOP Price Per Unit	Miracle Sale Price	Total Amount
1	#718-852-4SJ Swing Set Tots Choice Arch 4 seats	1	2,078.00	1,974.10	1,750.00	1,750.00
	Shipping/Freight - No BuyBoard Discount		218.00	218.00	218.00	**218.00**
					TOTAL	**1,968.00**

Recommendation: The City recommends purchase of the swings for Goza Park.

Requested By: Olga Tosas 03/09/17

(USE BLUE INK Date

(USE BLUE INK) 3-10-17

Date

RECEIVED
MAR 09 2017
Urban County Program

PARK PLACE
RECREATION DESIGNS, INC.
210-821-5878 • 800-626-0238
FAX: 210-832-0115
www.miracleparkplace.com
BuyBoard® Cooperative Purchasing
Approved Vendor-Proposal # 512-16
www.buyboard.com

City of Mercedes
GOZA PARK
Quote#: **0917-**
March 7, 2017

Park Place Recreation Designs, Inc.
PO Box 18186
San Antonio, TX 78218
800-626-0238 Fax 210-832-0115

QTY	DESCRIPTION	LIST PRICE	BUY BOARD PRICE (#512-16)	MIRACLE SALE PRICE
1	2-BAY ARCH SWING W/4 BELT SEATS	$ 2,078.00	$ 1,974.10	$ 1,750.00
1	FREIGHT	$ 218.00	$ 218.00	$ 218.00
	TOTAL PRICE	$ 2,296.00	$ 2,192.10	$ 1,968.00



A.



B.

A. TEN SPIN
SALE PRICE $2,480
LIST PRICE: $2,880
MODEL#: 304J
FOR KIDS AGES: 2 TO 12
PROTECTIVE AREA: 20' X 20'
PLAY AREA CAPACITY: 10

B. 6' INGROUND PUNCHED STEEL BENCH
SALE PRICE $355
LIST PRICE: $412
MODEL#: 1266J



C.



D.

C. LUCKY THE LADYBUG
SALE PRICE $1,099
LIST PRICE: $1,293
MODEL#: 960J
FOR KIDS AGES: 2 TO 5

D. JAX WEB
SALE PRICE $6,499
LIST PRICE: $7,364
MODEL#: 477-210J
FOR KIDS AGES: 5 TO 12



E.

E. 2- BAY ARCH SWING W/4 BELT SEATS
SALE PRICE $1,750
LIST PRICE: $2,078
MODEL#: 718-852-4SJ
FOR KIDS AGES: 2 TO 12
PROTECTIVE AREA: 32' X 36'
PLAY AREA CAPACITY: 4

ALSO AVAILABLE ONLINE!
3-BAY ARCH SWING W/6 BELT SEATS
SALE PRICE $2,550



F.

F. FREESTANDING TYPHOON SLIDE 855°
SALE PRICE $7,499
LIST PRICE: $8,890
MODEL#: 65-769J
FOR KIDS AGES: 5 TO 12

ALSO AVAILABLE ONLINE!
FREESTANDING TYPHOON SLIDE 630°
SALE PRICE $6,099

FREESTANDING TYPHOON SLIDE 360°
SALE PRICE $4,499

FREESTANDING TYPHOON SLIDE 405°
SALE PRICE $4,499

Vendor	Description	F
Park Place Recreation Designs Inc.	5% Discount Off Elephant Play pricelist for Playground Equipment, Attachments, and Accessories. Line Item 7	
Park Place Recreation Designs Inc.	5% Discount Off Climbinet pricelist for Playground Equipment, Attachments, and Accessories. Line Item 7	
Park Place Recreation Designs Inc.	15% Discount Off Miracle Recreation pricelist for Playground Equipment, Attachments, and Accessories. Line Item 7	

Extended Product Information

Reference Number: 512-16

Vendor Website: http://www.miracleparkplace.com

Full Description: 15% Discount Off Miracle Recreation pricelist for Playground Equipment, Attachments, and Accessorie

Park Place Recreation Designs Inc.	11% Discount Off Bison Inc. pricelist for Playground Sports Equipment Line Item 8
Park Place Recreation Designs Inc.	10% Discount Off Groundsmart Rubber Mulch pricelist for Playground Safety Surfacing Line Item 11
Park Place Recreation Designs Inc.	0% Discount Off Fibrart pricelist for Water Park Products, Attachments, and Accessories Line Item 15
Park Place Recreation Designs Inc.	4% Discount Off Berliner Seilfabrik Play Equipment pricelist for Playground Equipment, Attachments, and Accessories. Line Item 7

Showing 1 to 25 of 25 entries

First Previous 1 Next Last

Vendor Contract Information

Back

Search:

All
Vendor Discounts Only
Catalog Pricing Only

Refine Your Search:

Vendors
Park Place Recreation Designs Inc.
[X]
Price Range
Show all prices
Category
None Selected
Contract
None selected

Additional Searches:

Search by Vendor

Browse Contracts

Additional Resources

Vendor Name:	Park Place Recreation Designs Inc.
Address:	4225 Woodburn Drive San Antonio, TX 78218
Phone Number:	(210) 821-5878
Email:	marilyn@miracleparkplace.com
Website:	http://www.miracleparkplace.com
Federal ID:	74-2336170
Contact:	Marilyn Ahrens
Accepts RFQs:	Yes
Minority Owned:	No
Women Owned:	No
Service-Disabled Veteran Owned:	No
EDGAR:	Yes
Contract Name:	Parks and Recreation Equipment and Field Lighting Products and Installation
Contract Description:	Playground, skate park, aquatic/waterpark equipment; safety surface products; park furnishing/fountains; shade canopies; lake/river/waterway docks; outdoor bleachers; scoreboards/marquees/signs; portable restrooms/shelters; service/repair & installation
Contract#:	512-16
Effective Date:	10/01/2016
Expiration Date:	09/30/2019
Payment Terms:	Net 30 days
Delivery Days:	30
Shipping Terms:	Pre-paid and added to invoice
Freight Terms:	FOB Destination
Ship Via:	Common Carrier
Region Served:	Texas Regions 1, 2, 3, 13, 15, 20
States Served:	Texas
Additional Info:	EDGAR Compliance documents (2 CFR Part 200 & Appendix II) are included in the Vend response document, and can be found in the Vendor Proposal File link near the bottom o page.
Quote Reference Number:	512-16
Return Policy:	20% restocking fee plus freight

Contract Documents

EDGAR Notice:	Click to view EDGAR Notice
Proposal Documents:	Click to view BuyBoard Proposal Documents
Regulatory Notice:	Click to view Bonding Regulatory Notice
Construction Services Advisory:	Click to view the Construction Related Goods and Services Advisory
Proposal Files:	Click to view Vendor Proposal Files Documents

city of mercedes
It Starts Here!

MEMO

TO: **Monica Leal, UCP Coordinator**

FROM: **Olga Rosas, Grants Coord.** OR.

DATE: **March 09, 2017**

RE: **Mercedes Park, Recreational Facility Project**

Attached please find the price proposal form for the Mercedes Park, Recreational Facility Project for the purchase of a Swing set for Goza Park. The equipment to be purchased through this contract will be utilizing FY (28) 2015-2016 City-CDBG funds in the amount of $816.20 and FY (29) 2016-2017 City-CDBG funds in the amount of $1,151.80 for a total purchase price of $1,968.00. Please review and upon approval please forward us a copy of the purchase order so that the order can be placed.

Should you have any questions or require further documentation, please contact me at (956) 565-3114, Ext. 129.

RECEIVED
MAR 09 2017
Urban County Program

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-177172

Date Filed:
03/10/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Park Place Recreation Designs, Inc.
San Antonio, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County Urban County Program

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
501650030650005000
City of Mercedes Parks, Recreational Facility Project

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

Marilyn Ahrens
Signature of authorized agent of contracting business entity

NATHAN C. HASTINGS
NOTARY PUBLIC
STATE OF TEXAS
EXPIRES
6 - 11 - 2019

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Marilyn Ahrens, this the 10th day of March, 20 17, to certify which, witness my hand and seal of office.

Nathan C. Hastings
Signature of officer administering oath

Printed name of officer administering oath

Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-177174

Date Filed:
03/10/2017

Date Acknowledged:
03/10/2017

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Park Place Recreation Designs, Inc.
San Antonio, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County Urban County Program

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501691030650009100
Precinct No. 1 & City of Mercedes Parks, Recreational Facility Project

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

AI-58894 **Urban County** **17. D.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Olga Lerma, URBAN COUNTY **Submitted By:** Olga Lerma, URBAN COUNTY

Department: URBAN COUNTY

Information

CAPTION

1. Subject to Compliance with HB 1295, when and if Applicable, the Urban County Program on behalf of the City of Peñitas is requesting approval of a best and final negotiated contract for Construction Material Testing Services with Raba-Kistner Consultants, Inc., in the amount of $22,726.55 utilizing CDBG FY 24, 25 & 26(2011, 2012 & 2013) Street Improvement funds.

2. Approval of Work Authorization No. 1 for Raba-Kistner Consultants, Inc. in the amount of $22,726.55.

BACKGROUND

On September 13, 2016, Commissioner's Court ranked and approved contract negotiations with Raba-Kistner Consultants, Inc., for Professional Service-Construction Material Testing Services. See attached Contract, Exhibits, Certificate of Liability Insurance and Work Authorization No. 1.

Contract Amount: $22,726.55

Available Funds: $3,353.40 2011 Street Improvements
$11,105.92 2012 Street Improvements
$67,678.12 2013 Street Improvements
$82,137.44 Total

Approved as to form
Atlas, Hall & Rodriguez, L.L.P.
By: Stephen L. Crain, attorney
On: March 6, 2017

Fiscal Impact

Attachments

Agreement Raba Kistner Consultants, Inc for City of Penitas
Raba Kistner Consultants Work Authorization
Certificate of Insurance & Form 1295

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/10/2017 09:10 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Olga Lerma		Started On: 03/09/2017 11:39 AM
Final Approval Date: 03/17/2017		

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made effective the **21th day of March , 2017** by and between **HIDALGO COUNTY, TEXAS, acting by and thru Urban County Program** ("County") and **Raba Kistner Consultants, Inc.** of **McAllen,** a Texas Corporation ("Engineer").

WITNESSETH:

WHEREAS, the County is vested with the responsibility of providing **"CONSTRUCTION MATERIALS TESTING SERVICES" (on an as needed basis)** for projects with **HIDALGO COUNTY URBAN COUNTY PROGRAM** (the "Services");

WHEREAS, the County has determined that the services of a professional engineering company is necessary to carry out the required Services;

WHEREAS, pursuant to Texas Government Code Chapter 2254.002, (the "Texas Professional Services Procurement Act"), the County requested Statements of Qualifications (SOQ's) from a professional engineering to assist the County by providing the Services; and

WHEREAS, Urban County Program has selected the "Engineer" from the "Pool" of pre-qualified Engineering from response to the Request for Qualifications (RFQ) to provide the Services for the **City of Peñitas- 2014/2015 Street Improvements Project.**

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained, County and Engineer do mutually agree as follows:

1. Scope of Services. The County will provide to Engineer the services described in **Exhibit "A"** attached hereto and entitled "Services to be performed by County." Engineer

agrees to provide to County with the work described in Exhibit "B", "Services to be performed by the Engineer".

2. Non-Exclusive Services of Engineer. Hidalgo County reserves the right to request these services from other sources other than the Engineer and shall not be in violation of any terms or conditions of this Agreement.

3. Term. This Agreement is for a period of **one (1) year**, effective **March 21, 2017,** and will expire **March 21, 2018** or unless sooner terminated as provided herein. The Engineer will not begin to work or incur costs until authorized in writing by the County with each "Work Authorization" particularly described in Exhibit "D".

4. Compensation. As consideration for rendering the Services provided for in this Agreement, the County agrees to pay the Engineer the amounts specified in Exhibit "C" attached hereto payable against written invoice submitted by Engineer. The maximum amount payable under this Agreement shall not exceed the amount for each work authorization unless an amendment is executed as provided hereinafter. The Engineer shall submit periodic requests for payment within (30) thirty days after completion of each Work Authorization. The request for payment shall be made using forms acceptable to the County and shall show the total amount earned to the date of submission and the amount due and payable as of the date of the current billing. Upon receipt of said request for payment, County shall submit a requisition for payment for said Services in the customary manner provided for payments utilized by Hidalgo County, Texas. Engineer agrees to separately account for the receipt and/or expenditure of funds received pursuant to this Agreement and to keep accurate books and records of all such receipts and/or expenditures. All payments to Engineer shall be mailed to the address shown in numbered paragraph 24 herein.

5. Inspection of Work. The County has the right at all reasonable times to inspect or otherwise evaluate the work performed hereunder and the premises in which it is being performed. If any inspection or evaluation is made on the premises of the Engineer, or of a subcontractor, the Engineer shall provide and require its subcontractor to provide all reasonable facilities and assistance for the safety and convenience of the inspectors in the performance of their duties. All inspections and evaluations shall be performed in such a manner as will not unduly delay their work.

6. Amendments. If it becomes necessary at any time during this Agreement to change the scope of Services, the Agreement term, the maximum amount payable, the complexity, or the character of this Agreement, an amendment shall be executed by use of a (Supplemental Agreement Form) more particularly described in Exhibit "E" attached to this Agreement. The County retains the right to reject any such amendment proposed by the Engineer. Any such amendments shall be made in writing, agreed to by all parties hereto, and duly executed before the end of the Agreement as specified. If the County finds it necessary to require changes in completed work because of errors made by the Engineer, the County shall require the Engineer to correct the work at no cost to the County and without amendment to the Agreement. If the changes are made at the request of the County and are not due to errors of the Engineer, the County will reimburse the Engineer for the additional work at the same rate of pay established in Exhibit "C," "Engineering Rates." If payment for the additional work will cause the maximum amount payable under this Agreement to be exhausted, an amendment shall be proposed in accordance with all State procurement laws.

7. Reporting. The Engineer shall promptly advise the County in writing of events which have a significant impact upon the Agreement, including:

a. Problems, delays, or adverse conditions which will materially affect the ability to meet time schedules and goals, or preclude the attainment of project work units by established time periods. This disclosure shall be accompanied by a statement of the action taken, or contemplated and any County or, if Federal Funds are involved, Federal assistance needed to resolve the situation.

b. Favorable developments or events which enable meeting time schedules and goals to be met sooner than anticipated or which are producing more work units than originally projected.

8. Ownership of Documents. Upon completion or termination of this Agreement, all documents prepared by the Engineer or furnished to the Engineer by the County shall be delivered to and become the property of the County. All sketches, photographs, calculations, and other data prepared under this Agreement shall be made available, upon request, to the County without restriction or limitation on their further use. The Engineer may, at its own expense, have copies made of the documents or any other data furnished to the County under this Agreement.

9. Suspension of Work. Should County desire to suspend the work under this Agreement, but not terminate this Agreement, the County shall provide thirty (30) calendar days verbal notification to Engineer, followed by written confirmation from the County to Engineer to that effect. The thirty-day notice may be waived as agreed in writing by both the County and Engineer to that effect. The work under this Agreement may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from the County to the Engineer. The sixty-day notice may be waived as agreed in writing by both the County and Engineer. If the County suspends the work, the Termination Date as identified above is not affected and this Agreement will terminate on the date specified.

10. Progress and Coordination. The Engineer shall, from time to time during the progress of the work, confer with the County. The Engineer shall prepare and present such information as may be pertinent and necessary, or as may be requested by the County, in order to evaluate features of the Engineer's services and work.

At the request of the County or the Engineer, conferences shall be provided at the Engineer's office, the offices of the County, or at other locations designated by the County. These conferences shall also include evaluation of the Engineer's services and work when requested by the County.

All applicable study reports shall be submitted in preliminary form for approval by the County before the final report is issued. The County's comments regarding the Engineer's preliminary report will be addressed by the Engineer in the final report.

If funds by other agencies or entities are to be used for the development of the project under this Agreement, the Engineer's Services and work will be subject to periodic review and approval by other agencies or entities, including those of the city, county, state and/or federal agencies.

Should it be determined that the progress in the production of the Engineer's Services and work does not satisfy the requirements of the approved Work Authorization as provided by Exhibit "D", attached hereto, the County shall review the approved Work Authorization with the Engineer to determine the corrective action needed by either the County or the Engineer.

The Engineer shall promptly advise the County in writing of events which have a significant impact upon the progress of the Engineer's Services and work and the approved Work Schedule, including:

a. problems, delays, adverse conditions which will materially affect the ability to attain Agreement objectives, prevent the meeting of time schedules and

goals, or preclude the timely completion and submittal of Project deliverables by the Engineer within established time periods; this disclosure will be accompanied by a statement by the Engineer of recommended or immediate action taken, or contemplated, and any County or other agency or entity assistance needed to resolve the situation: and

b. favorable developments or events which enable meeting the Work Schedule goals sooner than anticipated.

11. Independent Contractor. Engineer must comply with all applicable Hidalgo County policies and with any applicable federal, state or local laws, regulations, orders or ordinances applicable to the Services provided by Engineer under this Agreement. Notwithstanding the foregoing sentence, Engineer represents and maintains that it is an Independent Contractor and is not an employee of Hidalgo County, Texas or any agency thereof, and represents and warrants that it does not desire or request any fringe benefits provided to employees of Hidalgo County, Texas, and/or any agency thereof, including, but not limited to benefits associated with Hidalgo County's civil service program. Engineer agrees to be responsible for any federal income tax, withholding or social security tax liability that might arise from payments received hereunder.

12. Subcontracting and Assignment. The Engineer shall not assign subconsultant or transfer the Engineer's interest in this Agreement without the prior written consent of the County. The Engineer shall bind every subconsultant by written agreement to observe all the terms of this Agreement to the extent that they may be applicable to each subconsultant. No subcontractor relieves the Engineer of any responsibilities under this Agreement.

13. Voluntary Termination. County may terminate this Agreement at any time for any reason or no reason at all upon giving thirty (30) days prior written notice to the Engineer.

14. Insurance. Engineer agrees to provide liability insurance covering its activities in providing the Services for County in an amount not less than the minimum amounts prescribed by the Texas Tort Claims Act, §100.001, et seq., Texas Civil Practices and Remedies Code, and shall furnish County a certificate issued by the insurer that such insurance is in full force and effect.

15. Payment of Franchise Tax. The Engineer hereby certifies that the Engineer is not delinquent in Texas franchise tax payments, or that the Engineer is exempt from, or not subject to, such tax. A false statement concerning corporation's franchise tax status shall constitute grounds for termination of the Agreement at the sole option of the County.

16. No Assignment. Except as otherwise herein provided, Engineer may not assign the obligations or rights under this Agreement to any person without the prior written consent of County.

17. Conflict. Nothing in this Agreement shall be construed so as to require the commission of any act contrary to law, and whenever there is any conflict between any provision of this Agreement and any present or future law, ordinance or administrative, executive or judicial regulation, order or decree, or amendment thereof, contrary to which the parties have no legal right to Agreement, the latter shall prevail, but in such event the affected provision or provisions of this Agreement shall be modified only to the extent necessary to bring them the legal requirements and only during the time such conflict exists.

18. Termination by County. If Engineer fails to deliver quality Services, fails to achieve the defined goals, outcomes, strategies and outputs required by County, or if Engineer fails to comply with any conditions in this Agreement, then County shall have the right to terminate this Agreement upon the giving of ten (10) days prior written notice to Engineer.

19. No Waiver. No waiver by County of any breach of any provision of this Agreement shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision hereof.

20. Entire Agreement. This Agreement contains the entire agreement between the parties hereto, and each party acknowledges that neither has made (either directly or through any agent or representative) any representations or agreements in connection with this Agreement not specifically set forth herein. This Agreement may be modified or amended only by agreement in writing executed by County and Engineer, and not otherwise.

21. VENUE. THIS AGREEMENT SHALL BE CONSTRUED UNDER AND IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, AND ALL OBLIGATIONS OF THE PARTIES CREATED HEREUNDER ARE PERFORMABLE IN HIDALGO COUNTY, TEXAS. THE PARTIES HEREBY CONSENT TO PERSONAL JURISDICTION IN HIDALGO COUNTY, TEXAS.

22. Hold Harmless. In the event Engineer should cause, either directly or indirectly, damage, loss, destruction, liability, or claims against the other party as a result of intentional conduct, negligence or otherwise, Engineer shall hold harmless and indemnify County from any and all obligations, liabilities, cause of action, lawsuits, damages, and assessments, including legal fees, etc., that from the Engineer's intentional actions or negligence. This indemnification clause shall survive this Agreement and be enforceable as a separate agreement in the event its survival and enforcement becomes necessary.

23. Attorney's Fees. In the unlikely event that a dispute occurs which is litigated, or a cause of action in law or equity is filed concerning the operation, construction, interpretation, or enforcement of this Agreement, the losing party shall bear the cost of the attorney's fees incurred by the prevailing party and any and all costs applicable thereto,

including, but not limited to, court costs, deposition fees, expert witness fees, out-of-pocket expenses and travel expenses which are incurred by the prevailing party.

24. Notices. Expect as may be otherwise specifically provided in this Agreement, all notices, demands, requests or communications required or permitted hereunder shall be in writing and shall either be (i) personally delivered against a written receipt, or (ii) sent by a registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

If to County: **HIDALGO COUNTY URBAN COUNTY PROGRAM**
Attn: Diana R. Serna, UCP Director
427 East Duranta Avenue, Suite 107
Alamo, Texas 78516

If to Engineer: **RABA-KISTNER CONSULTANTS, INC.**
Attn: Jorge L. Perez, Supervisor, CME
800 E. Hackberry,
McAllen, Texas 78501

Each notice, demand, request or communication which shall be delivered or mailed in the manner described above shall be deemed sufficiently given for all purposes at such time as it is personally delivered to the addresses or, if mailed at such time as it is deposited in the United States mail.

25. Executions of Documents. The parties hereto covenant and agree that they will execute such other and further instruments and documents as are or may become necessary or convenient to effectuate and carry out the terms of this Agreement.

26. Binding Agreement. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, legal representatives, successors, and assigns where permitted by this Agreement.

27. Gender. All pronouns used in this Agreement shall include the other gender, whether used in the masculine, feminine or neutral gender, and the singular shall include the plural whenever and as often as may be appropriate.

28. Authority. The execution and performance of this Agreement by County and Engineer have been duly authorized by all necessary laws, resolutions or corporate action, and this Agreement constitutes the valid and enforceable obligations of County and Engineer in accordance with its terms.

29. Professional Seal. All documents and data furnished by the Engineer to the County shall bear Professional seal of a licensed Engineer employed by the Engineer.

30. Commitment of Current Revenues Only. In the event that, during any term hereof, the Commissioners Court does not appropriate sufficient funds to meet the obligations of County under this Agreement, County may terminate this Agreement upon ninety (90) days written notice to the Engineer. County agrees, however, to use reasonable efforts to secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of County pursuant to the provisions of Tex. Loc. Govt. Code Ann. ' 271.903 (Vernon Supp. 1996).

31. Immunities. Nothing in this Agreement is intended to and County does not hereby waive, release or relinquish any right to assert any of the defenses County enjoys by virtue of the state or federal constitution, laws, rules or regulations, and any sovereign, official or qualified immunity available to County as to any claim or action of any person, entity, or individual against County.

EXECUTED as of the day and year first written above.

HIDALGO COUNTY

By: _____
Ramon Garcia, County Judge

ENGINEER:
RABA KISTNER CONSULTANTS, INC.

By: _____

Printed Name Jorge L. Perez

Title: Supervisor, CME

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

Approved by Commissioners' Court on: March 21, 2017.

APPROVED AS TO FORM:
Atlas, Hall & Rodriguez, L.L.P.
By: Stephen L. Crain, Attorney
On: February 6, 2017

ATTACHMENTS:

EXHIBIT A	-Scope of Services to be provided by the County
EXHIBIT B	-Scope of Services to be provided by the Engineer
EXHIBIT C	-Engineer's Rates
EXHIBIT D	-Work Authorization Form
EXHIBIT E	-Supplemental Agreement Form
EXHIBIT F	-Certificates of Insurance

EXHIBIT A

-Scope of Services to be provided by the County

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General:

The Owner will provide to the Engineer the following:

1) Provide the authorization to proceed with services through coordination with the project consulting and design Engineer.
2) Payment for work performed by the Engineer and accepted by the Owner in accordance with Article 3 of this Agreement.
3) Assistance to the Engineer, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Engineer cannot easily obtain.
4) Provide any available relevant data the Owner may have on file concerning the projects.
5) Provide timely review and decisions in response to the Engineer's request for information and/or required submittals and deliverables, in order for the Engineer to maintain the agreed upon work schedule prepared in accordance with Exhibit "A" attached to this Agreement.
6) Attend and participate in progress meetings as required and as coordinated and conducted by Engineer.
7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Engineer.

RABA KISTNER
CONSULTANTS

Raba Kistner
Consultants, Inc.
800 E. Hackberry
McAllen, TX 78501
www.rkci.com

P 956.682.5332
F 956.682.5487
TBPE Firm F-3257
TBPLS Firm 10193784

Proposal No. PMD17-011-00
March 3, 2017

Exhibit B

Mr. P.R. Avila II, Assistant Deputy Director
Hidalgo County – Urban County Program
427 E. Duranta Avenue
Alamo, Texas 78516

RE: Construction Materials Observation and Testing Services
Hidalgo County Urban County
La Joya, Ave, Mezquite Ave, and Pike Ave Street Improvements
Hidalgo County, Texas

Dear Mr. Avila:

RABA KISTNER Consultants, Inc. (RKCI) is pleased to have been selected to provide Construction Materials Observation and Testing Services for the above referenced project. **RKCI is the Geotechnical Engineer of record for this project and would be a valuable team member during the construction of this project.**

Our opinion of probable cost of services for this project is as follows:

Pike Avenue:	$ 9,324.15
La Joya:	$ 6,701.20
Mezquite Avenue:	$ 6,701.20
Total	**$ 22,726.55**

Our proposed scope of services and estimated item quantities are based upon our interpretation of the project plans and specifications provided to us via electronic-mail attachment provided to us on Monday, February 6, 2017, from Mr. Victor Trevino, EIT, with South Texas Infrastructure Group, the project's civil engineering firm. Charges will be assessed only for actual services rendered. All services authorized or requested by you or your representatives in excess of the quantities of observation and testing services shown herein will be charged at the appropriate unit rate for such services. Charges will be invoiced on a monthly basis and will show a computerized composite total of services rendered for each service category.

Invoices will be submitted monthly for work in progress in our standard format. Our invoices are due and payable within 30 days upon receipt at P.O. Box 971037, Dallas, Dallas County, Texas 75397-1037. All parties hereby agree that this contract upon acceptance will be performable in Hidalgo County, Texas. In the event that the State of Texas legislates a sales tax on professional services, the amount of tax applicable will be added to the appropriate service rate charged by **RKCI.**

We appreciate the opportunity of submitting this proposal and look forward to working with you during the construction of this project. Please return one signed copy of this letter proposal to provide written authorization for our firm to commence work on the services outlined herein. Please complete the attached Project Data Sheet for invoicing and reporting information.

Very truly yours,

RABA KISTNER Consultants, Inc.

Jorge L. Perez
Supervisor, CME

JLP/EA

Attachments: Basic Charges
Project Data Sheet

Copies submitted: Above (1)

Accepted By _____
(Signature)

_____
(Typed or Printed Name)

_____
(Title)

Date _____

BASIC CHARGES

1. A vehicle travel charge will be assessed for round trip travel from our office to the project site, material supplier, etc. and back to our office. The charges for travel from our office to the project site and return to our office will be as follows:

   Travel Time (round trip) ..... 1.00 /hour(s)

   Vehicle Trip Charge ..... $ 48.25/trip

2. Service Charges are based on the hourly rates stated herein and will be assessed from the time the Engineer or Technician leaves our office until he returns from the project.

3. Any engineering and/or technical services provided on Saturday, Sunday and all work in excess of "normal" work hours, as stated herein, Monday through Friday, will be charged at an overtime rate of 1.5 times the appropriate hourly rate. Our total cost of services is based upon the assumption most services will be provided during "normal" work hours. Providing an excessive amount of services during days and/or hours requiring overtime rates may significantly increase the total cost of services shown herein.

4. "Normal" work hours are between 7:00 a.m. and 6:00 p.m., including travel time to and from the site unless stated otherwise. Overtime charges will be assessed after eight (8) continuous hours of service rendered during "normal" work hours.

5. Minimum of 2 hours billing per visit to project site.

6. A ten (10) percent project management and administration cost will be added to all invoices.

7. Our opinion of probable cost for each proposal to be submitted is based upon an estimate of the construction materials observation and testing services required to meet the project requirements. Because the general contractor has control over the project and determines the means and methods used to build/construct the project, our proposed scope of services is an estimate. On the basis of the general contractor's schedule, potential retesting of non-compliance items, weather related issues, the actual total services and fees may be higher or lower than the estimates in our proposal. **RKCI** will keep you CLIENT appraised of our billings in comparison to our opinion of probable cost (project budget) over the life of the project. All tests noted as retests of previously non-complaint areas will be billed to the CLIENT. **RKCI** will invoice these tests separately to allow CLIENT to segregate the charges from our normal charges. This will allow CLIENT to back charge the general contractor as necessary. CLIENT will be responsible for payment of all services rendered by **RKCI** for the project.

8. **RKCI** will utilize the on-site initial field curing facilities provided by the contractor. The cost of providing and maintaining these initial curing facilities is not included in our proposal.

Exhibit C

CONSTRUCTION MATERIALS TESTING UNIT RATES
Hidalgo County Urban County
Pike Avenue
Hidalgo County, Texas

SERVICE	UNIT RATE		QUANTITY	TOTAL
Civil Earthwork:				
1. Moisture-Density Relationship (Proctor)	$239.00	each	3	$717.00
2. Atterberg Limits Determinations (P.I.) (ASTM/AASHTO)	$87.25	each	3	$261.75
3. Sieve Analysis -200	$56.00	each	1	$56.00
4. Sieve Analysis - Flexible Base Material	$26.00	each	1	$26.00
5. Technician Time Sampling	$51.00	hour	5	$255.00
6. Field Density Test - Roadway Crossings	$17.00	each	22	$374.00
7. Technician Time - Density Testing - Roadway	$51.00	hour	30	$1,530.00
8. Vehicle Travel Charge	$48.25	trip	15	$723.75
Subtotal				**$3,943.50**
Concrete for Sidewalks and Curb and Gutter				
1. Concrete Compressive Strength Tests	$16.00	each	35	$560.00
2. Technician Time for Concrete Testing	$51.00	hour	18	$918.00
3. Air Content	$30.00	each	7	$210.00
4. Vehicle Travel Charge - Sampling	$48.25	trip	7	$337.75
5. Technician Time - Pick Up Specimens	$51.00	hour	8	$408.00
6. Vehicle Travel Charge - Pick Up	$48.25	trip	12	$579.00
Subtotal				**$3,012.75**
Asphalt:				
1. Asphaltic Concrete Laydown Observation	$61.25	hour	4	$245.00
2. In Place Density	$17.00	each	4	$68.00
2. Extraction, Gradation, Bitumen Content and Laboratory Density of Asphaltic Concrete	$295.00	each	1	$295.00
3. Maximum Theoretical Specific Gravity of Asphalt	$151.00	each	1	$151.00
5. Asphaltic Concrete Coring:				
a.) Two Men	$105.25	hour	3	$315.75
b.) Coring Rig	$117.75	day	1	$117.75
c.) Generator	$99.25	day	1	$99.25
d.) Bit Wear - Quartz Aggregate (River Gravel)	$5.50	in.-in.	16	$88.00
6. Core Density	$22.00	each	2	$44.00
4. Vehicle Travel Charge	$48.25	trip	2	$96.50
Subtotal				**$1,520.25**
Other:				
1. Overtime Technician Charge	$71.63	hour		
2. Project Administration(Markup of Invoiced Billing Cycle)	10%			$847.65
Subtotal				**$847.65**
			GRAND TOTAL	**$9,324.15**

CONSTRUCTION MATERIALS TESTING UNIT RATES
Hidalgo County Urban County
La Joya Avenue
Hidalgo County, Texas

SERVICE	UNIT RATE		QUANTITY	TOTAL
Civil Earthwork:				
1. Moisture-Density Relationship (Proctor)	$239.00	each	2	$478.00
2. Atterberg Limits Determinations (P.I.) (ASTM/AASHTO)	$87.25	each	2	$174.50
3. Sieve Analysis -200	$56.00	each	0	$0.00
4. Sieve Analysis - Flexible Base Material	$26.00	each	1	$26.00
5. Technician Time Sampling	$51.00	hour	4	$204.00
6. Field Density Test - Roadway Crossings	$17.00	each	15	$255.00
7. Technician Time - Density Testing - Roadway	$51.00	hour	12	$612.00
8. Vehicle Travel Charge	$48.25	trip	6	$289.50
Subtotal				**$2,039.00**
Concrete for Sidewalks and Curb and Gutter				
1. Concrete Compressive Strength Tests	$16.00	each	40	$640.00
2. Technician Time for Concrete Testing	$51.00	hour	16	$816.00
3. Air Content	$30.00	each	8	$240.00
4. Vehicle Travel Charge - Sampling	$48.25	trip	8	$386.00
5. Technician Time - Pick Up Specimens	$51.00	hour	6	$306.00
6. Vehicle Travel Charge - Pick Up	$48.25	trip	3	$144.75
Subtotal				**$2,532.75**
Asphalt:				
1. Asphaltic Concrete Laydown Observation	$61.25	hour	4	$245.00
2. In Place Density	$17.00	each	4	$68.00
2. Extraction, Gradation, Bitumen Content and Laboratory Density of Asphaltic Concrete	$295.00	each	1	$295.00
3. Maximum Theoretical Specific Gravity of Asphalt	$151.00	each	1	$151.00
5. Asphaltic Concrete Coring:				
a.) Two Men	$105.25	hour	3	$315.75
b.) Coring Rig	$117.75	day	1	$117.75
c.) Generator	$99.25	day	1	$99.25
d.) Bit Wear - Quartz Aggregate (River Gravel)	$5.50	in.-in.	16	$88.00
6. Core Density	$22.00	each	2	$44.00
4. Vehicle Travel Charge	$48.25	trip	2	$96.50
Subtotal				**$1,520.25**
Other:				
1. Overtime Technician Charge	$71.63	hour		
2. Project Administration(Markup of Invoiced Billing Cycle)	10%			$609.20
Subtotal				**$609.20**
			GRAND TOTAL	**$6,701.20**

CONSTRUCTION MATERIALS TESTING UNIT RATES
Hidalgo County Urban County
Mezquite Avenue
Hidalgo County, Texas

SERVICE	UNIT RATE		QUANTITY	TOTAL
Civil Earthwork:				
1. Moisture-Density Relationship (Proctor)	$239.00	each	2	$478.00
2. Atterberg Limits Determinations (P.I.) (ASTM/AASHTO)	$87.25	each	2	$174.50
3. Sieve Analysis -200	$56.00	each	0	$0.00
4. Sieve Analysis - Flexible Base Material	$26.00	each	1	$26.00
5. Technician Time Sampling	$51.00	hour	4	$204.00
6. Field Density Test - Roadway Crossings	$17.00	each	15	$255.00
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2. Technician Time for Concrete Testing	$51.00	hour	16	$816.00
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2. In Place Density	$17.00	each	4	$68.00
2. Extraction, Gradation, Bitumen Content and Laboratory Density of Asphaltic Concrete	$295.00	each	1	$295.00
3. Maximum Theoretical Specific Gravity of Asphalt	$151.00	each	1	$151.00
5. Asphaltic Concrete Coring:				
a.) Two Men	$105.25	hour	3	$315.75
b.) Coring Rig	$117.75	day	1	$117.75
c.) Generator	$99.25	day	1	$99.25
d.) Bit Wear - Quartz Aggregate (River Gravel)	$5.50	in.-in.	16	$88.00
6. Core Density	$22.00	each	2	$44.00
4. Vehicle Travel Charge	$48.25	trip	2	$96.50
Subtotal				**$1,520.25**
Other:				
1. Overtime Technician Charge	$71.63	hour		
2. Project Administration(Markup of Invoiced Billing Cycle)	10%			$609.20
Subtotal				**$609.20**
			GRAND TOTAL	**$6,701.20**

PROJECT DATA SHEET

PROJECT DATA SHEET

Project Name: _____

Client Project No: _____ **Purchase Order No.:** _____

Invoicing Information: Company Name: _____

Address: _____

_____

Attention: _____

Report Distribution Information (Please provide required report distribution and requested number of copies of each)

No. Copies ( ) _____

_____

_____

Contact: _____ e-mail: _____

Phone No.: _____ Fax No.: _____

No. Copies ( ) _____

_____

_____

Contact: _____ e-mail: _____

Phone No.: _____ Fax No.: _____

No. Copies ( ) _____

_____

_____

Contact: _____ e-mail: _____

Phone No.: _____ Fax No.: _____

No. Copies ( ) _____

_____

_____

Contact: _____ e-mail: _____

Phone No.: _____ Fax No.: _____

RABA KISTNER

STANDARD TERMS AND CONDITIONS

1. **SERVICES.** Raba Kistner, Inc., by and through one of its subsidiaries (Raba Kistner Consultants, Inc., Raba Kistner Environmental, Inc., Raba Kistner Facilities, Inc. or Raba Kistner Infrastructure, Inc.) (the relevant subsidiary, being engaged to provide the services to CLIENT in connection with the delivery of this instrument, is referred to as "RK" herein) is being engaged by the CLIENT to render professional services ("Services") involving only RK's advice, judgment and opinion. RK may subcontract all or a portion of the Services performed hereunder. RK shall apply professional judgment in determining the extent to which RK complies with any given standard identified in RK's instruments of professional services. CLIENT expressly acknowledges that RK makes no warranties or guarantees, expressed or implied, regarding the Services.

2. **INFORMATION PROVIDED BY CLIENT.** CLIENT may provide or direct RK to utilize or rely upon certain information ("CLIENT Information") in the performance of RK's services. RK shall be entitled to rely upon such CLIENT Information. RK will not conduct an independent evaluation of the accuracy or completeness of such CLIENT Information and shall not be responsible for any errors or omissions in such information. . RK's report, as well as any recommendations, findings, and conclusions made by RK, are dependent on information received from CLIENT. Changes or modifications to the information provided by CLIENT can affect RK's evaluation, recommendations, findings and conclusions, and CLIENT agrees—as a material term of this Agreement—to notify RK immediately, in writing, if CLIENT becomes aware of any such changes or modifications, including changes to the size, scope, location, or other material characteristics of CLIENT's project. The CLIENT shall be responsible for providing the location of all underground utilities and other structures in the vicinity of RK borings or excavations. RK will not accept responsibility and will not be liable for affecting or damaging any underground utility, underground storage tank, or other subsurface condition not previously identified and located, or improperly located, by the CLIENT, a utility, or a utility locating agency.

3. **SITE ACCESS AND SITE SAFETY.** CLIENT shall provide right-of-entry to the buildings and sites which are the subjects of RK's services. CLIENT represents that it possesses authority for such right-of-entry and that the building/site operator(s) possess the necessary permits and licenses for current activities at the site. RK shall be responsible for supervision and site safety measures of its own employees and subconsultants, but shall not be responsible for the supervision or health and safety precautions of any other parties, including CLIENT, CLIENT'S contractors, subcontractors, or other parties present at the site.

4. **SUBSURFACE EXPLORATIONS.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. CLIENT understands RK's layout of boring and test locations is approximate and that RK may deviate a reasonable distance from those locations. RK will take reasonable precautions to reduce damage to the site when performing services; however, CLIENT accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the scope of services.

5. **CHANGED CONDITIONS.** If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to RK are uncovered or revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks or other material terms of this Agreement, RK may call for renegotiation of appropriate portions of this Agreement. RK shall notify the CLIENT of the changed conditions necessitating renegotiation, and RK and the CLIENT shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If changes cannot be agreed to with respect to changed conditions, the parties shall utilize the Dispute Resolution/Litigation procedures in this Agreement.

6. **TESTING AND OBSERVATIONS.** CLIENT understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. RK will provide test results and opinions based on tests and field observations only for the work tested. CLIENT understands that testing and observation are not continuous or exhaustive, and are conducted to reduce – not eliminate – project risk. CLIENT agrees to the level or amount of testing performed and the associated risk. CLIENT is responsible (even if delegated to contractor) for notifying and scheduling RK so RK can perform these services. RK shall not be responsible for the quality and completeness of contractor's work or their adherence to the project documents, and RK's performance of testing and observation services shall not relieve contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. CLIENT acknowledges that RK will not supervise or direct the work performed by contractor or its subcontractors and is not responsible for their means and methods.

7. **ESTIMATE OF FEES FOR CONSTRUCTION AND MATERIALS TESTING SERVICES.** If included as part of RK's proposal, RK will, to the best of its ability, perform the scope of services related to Construction and Materials Testing Services within the proposed fee estimate provided by RK. RK's proposal fees are based upon an estimate of the services required to meet the specifications for the project and following generally accepted engineering practices. The CLIENT recognizes that unforeseen circumstances along with changes in scope and project/contractor's schedules can influence the successful completion of the scope of services within the estimated proposed fees. Because the contractor has sole control over the project and determines the means and methods used to build/construct the project, RK's service fees are estimates and not lump sum or guaranteed maximum fees. The CLIENT is fully responsible for payment of all services provided, including retests of contractor's failed areas.

8. **REPORTS.** RK may provide CLIENT with written reports in connection with the Services performed. Such reports will present such findings and conclusions as RK may reasonably make with the information gathered while performing its services, and provided by CLIENT. The reports may be copied for inclusion in other documents related to the project provided it is reproduced in its entirety; however reports and other instruments of service are prepared for, and made available for, the sole use of the CLIENT, and the contents thereof may not be used or relied upon by others without the express written authorization of RK. Any unauthorized use or distribution shall be at the CLIENT's sole risk and without liability to RK..

9. **TOXIC AND HAZARDOUS MATERIALS.** CLIENT shall provide RK with all information within CLIENT'S possession or knowledge as to the potential or presence of toxic or hazardous materials or pollutants at the site. CLIENT agrees that RK neither created nor contributed to the creation or existence of any toxic or hazardous

materials or pollutants. In no event shall RK be required to sign a hazardous waste manifest or take ownership of any toxic or hazardous materials or pollutants. If unanticipated toxic or hazardous materials or pollutants are encountered while performing RK's services, RK reserves the right to stop field operations and notify the CLIENT and CLIENT assumes responsibility to notify appropriate regulatory agencies. RK and CLIENT must mutually agree to remobilize.

10. NO THIRD-PARTY BENEFICIARIES. The services and any report(s) prepared under this Agreement are for the sole benefit and sole use of CLIENT and are not for the use of any other party or person. Only CLIENT may rely upon the services and any report or work product. Nothing in this Agreement, or any subsequent amendments or modifications, or in any report issued under this Agreement, shall create a contractual relationship with or a cause of action in the favor of any third party against either RK or CLIENT. If CLIENT provides a copy of any report prepared by RK to others, it shall advise the recipient that the information contained in the report is provided for information only and is not to be relied upon by third parties.

11. LEED PROJECTS. Unless specifically addressed elsewhere in this agreement, RK has no responsibility or liability, including duty to defend or duty to indemnify, any party (including but not limited to CLIENT, owner, owner's agents, architects, engineers, contractors, construction managers, subcontractors) for the LEED certification process including: developing, producing, or retaining any documentation relating to the calculation of LEED points; and attainment of LEED certification points or LEED ratings.

12. STANDARD OF CARE. RK shall perform its professional services in accordance with the standard of care and diligence normally practiced by professional firms in performing services of a similar nature, in the same locality, under similar circumstances. CLIENT expressly acknowledges that RK makes no other warranties or guarantees, expressed or implied, regarding its professional services or its work product.

13. RISK ALLOCATION. RK will be responsible only for its own work, and that of its sub-consultants, and not for defects in the work designed or built by others.

14. LIMITATION OF LIABILITY. **CLIENT AND RK HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING RK'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE RISKS SO, TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF RK (AND ITS RELATED ENTITIES, EMPLOYEES, OWNERS, AGENTS, AND REPRESENTATIVES) TO CLIENT (AND THIRD PARTIES GRANTED RELIANCE ON RK'S WORK PRODUCT, OR OTHERWISE SEEKING RECOVERY UNDER THIS AGREEMENT) IS LIMITED TO THE GREATER OF $100,000 OR THE FEE PAID RK UNDER THIS AGREEMENT, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF RK'S SERVICES OR THIS AGREEMENT REGARDLESS OF CAUSE(S) OR THE THEORY OF LIABILITY,**

15. CONSEQUENTIAL DAMAGES. Neither CLIENT nor RK will be liable to the other for any special, consequential, indirect, incidental or penal losses or damages of any kind, nor will CLIENT or RK be liable to the other for losses, damages, or claims, regardless of how defined, related to: lost profits; unavailability of property or facilities; shutdowns or service interruptions; loss of use, , revenue, opportunity, or inventory; use charges, carrying costs, cost of substitute facilities, goods, or services; cost of capital, or claims of any other party and/or its customers.

16. SUSPENSION OF SERVICES. If the CLIENT fails to make payments when due or otherwise is in breach of this Agreement, RK may suspend performance of services upon seven (7) calendar days' notice to the CLIENT. RK shall have no liability whatsoever to the CLIENT for any costs or damages as a result of such suspension. Upon payment in full by the CLIENT, RK may resume services under this Agreement, and the time schedule and compensation shall be equitably adjusted to compensate for the period of suspension plus any other reasonable time and expense necessary for RK to resume performance. Payment of invoices shall not be subject to any discounts or set-offs by the CLIENT unless agreed to in writing by RK. Payment to RK for services rendered and expenses incurred will be due and payable regardless of any subsequent suspension or termination of this Agreement by either party.

17. WAIVER OF SUBROGATION. To the extent damages are covered by property insurance, or any other available insurance coverage, CLIENT and RK waive all rights against each other and against the contractors, consultants, agents and employees of the other for damages. CLIENT agrees that CLIENT shall procure, or cause to be procured builder's risk insurance or other property insurance for its project. RK and CLIENT waive all rights against each other and any of their consultants, contractors, subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, flood, or other causes of loss to the extent covered by CLIENT's or CLIENT's Contractor's builder's risk insurance, or other available insurance coverage. The policies shall provide waivers of subrogation by endorsement or otherwise. CLIENT shall require of its contractors, consultants, agents and employees similar waivers in favor of RK and its subconsultants. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

18. OWNERSHIP OF DOCUMENTS. R-K's reports, drawings, plans, specifications, and other documents and deliverables are instruments of professional service ("Instruments of Service") developed by RK in contemplation of a wide array of project-specific variables, including how the documents will be used and by whom. RK shall be the author, owner and custodian of the Instruments of Service, and shall retain all common law, statutory, and other reserved rights, including copyright. By execution of this Agreement, RK grants to CLIENT a limited, nonexclusive license to use the Instruments of Service for purposes of constructing, using, and maintaining the project for which the services are performed, provided CLIENT substantially performs its obligations, including prompt payment of all sums when due, under this agreement.

Upon completion of the services, and payment in full of all monies due RK, CLIENT may retain copies of all such documents. **THE INSTRUMENTS OF SERVICE ARE NOT INTENDED NOR REPRESENTED TO BE SUITABLE FOR REUSE ON EXTENSIONS, MODIFICATIONS, OR ADAPTATIONS OF THE PROJECT, OR ANY OTHER PROJECT, ANY REUSE OF SUCH DOCUMENTS, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY RK FOR THE SPECIFIC PURPOSE INTENDED, WILL BE AT CLIENT'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO RK, AND CLIENT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY, DEFEND, AND HOLD HARMLESS RK, ITS OFFICERS, DIRECTORS, EMPLOYEES, AND CONSULTANTS AGAINST ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES, DEFENSE COSTS, AND COURT COSTS) ARISING FROM OR ALLEGEDLY ARISING FROM OR IN ANY WAY CONNECTED WITH THE UNAUTHORIZED REUSE OR MODIFICATION OF THE DOCUMENTS BY CLIENT OR ANY PERSON OR ENTITY THAT ACQUIRES OR OBTAINS THE DOCUMENTS FROM OR THROUGH THE CLIENT WITHOUT THE WRITTEN AUTHORIZATION OF R-K REGARDLESS OF WHETHER SUCH CLAIMS, DEMANDS, OR ACTIONS ARE FOUNDED IN WHOLE OR IN PART UPON ALLEGED NEGLIGENCE OF RK, ITS OFFICERS, DIRECTORS, EMPLOYEES, OR CONSULTANTS.**

Parties other than CLIENT and RK may apply to use an Instrument, using a form prepared by RK for that purpose. Others' use of an Instrument shall be permitted only when CLIENT and RK both so agree; either shall have the right to forbid use by others. In

addition, R-K shall make its permission contingent upon the satisfaction of certain conditions when, in RK's professional judgment, such a contingency is necessary.

19. **DISPUTE RESOLUTION/LITIGATION.** All claims, disputes, and other controversy between RK and CLIENT arising out of or in any way related to the services provided by RK shall be submitted to mediation, before and as a condition precedent to other remedies provided by law. If a dispute at law arises related to these services and that dispute requires litigation as provided above, the CLIENT assents to personal jurisdiction in the State of Texas; the claim will be brought and tried in Bexar County, the county where RK's principal place of business is located, and CLIENT waives the right to remove or transfer the action to any other county or jurisdiction. The prevailing party will be entitled to recovery of all court costs, attorneys' fees, and other legally recoverable claim-related expenses. As a condition precedent to mediation of any claim arising out of the services provided under this Agreement, CLIENT shall obtain the written opinion from a registered, independent, and reputable professional engineer that RK has violated the standard of care applicable to RK's performance of services, in a form that meets the requirements of Texas Civil Practice & Remedies Code Chapter 150.

20. **TERMINATION OF CONTRACT.** CLIENT and RK may terminate services at any time upon ten (10) calendar days' written notice. In the event of termination, CLIENT agrees to fully compensate RK for services performed including reimbursable expenses through the termination date, as well as reasonable demobilization expenses. RK will terminate services without waiving any claims or incurring any liability.

21. **STATUTE OF LIMITATIONS.** Any applicable statute of limitations will commence to run and any cause of action shall be deemed to have accrued not later than the earlier of the following: (1) the date of the report issued by RK giving rise to the cause of action; (2) the date on which RK issues its last report under this Agreement; or (3) if RK is retained to perform construction observation, the date of substantial completion of the project.

22. **FORCE MAJEURE.** Neither party shall be liable in damages or have the right to terminate this Agreement for any delay or default in performing hereunder if such delay or default is caused by conditions beyond its control ("Force Majeure") including, but not limited to Acts of God, Government restrictions (including the denial or cancellation of any export or other necessary license), wars, insurrections and/or any other cause beyond the reasonable control of the party whose performance is affected. Force Majeure may not be claimed as a cause for delay in payment of money due and payable hereunder.

23. **NO ASSIGNMENT.** Neither RK nor CLIENT shall assign, sublet, or transfer its interest in this Agreement without the express written consent of the other.

24. **SEVERABILITY.** Each provision of this Agreement is intended to be severable. If any terms or provisions of this agreement shall be held to be invalid, illegal, or unenforceable for any reason whatsoever, the validity, legality, and enforceability of the remaining provisions hereof shall remain in full force and effect and shall not in any way be affected or impaired thereby. Moreover, to the maximum extent allowed by law, the Parties hereto stipulate that any offending provisions will be modified or altered, as necessary, so as to give such provision the maximum permissible effect and application intended.

25. **ENTIRE AGREEMENT.** This Agreement, and all of its attachments, constitutes the entire, integrated Agreement between the Parties to it, and this Agreement supersedes all other Agreements, oral or written between the Parties, concerning the subject set forth in this Agreement. This Agreement may not be amended except in writing, with that amendment being signed by both Parties.

Proposal No. PMD17-011-00
March 3, 2017

Attachment II

RABA KISTNER

SCHEDULE OF FEES FOR PROFESSIONAL SERVICES

PERSONNEL:

Principal	$135 to $250/hour
Professional	$70 to $200/hour
Auto Cad Operator	$65 to $110/hour
Technical/Clerical/Administrative	$40 to $80/hour

The specific hourly rate within each classification listed above depends on the experience, special training, and qualifications of the personnel needed for the project. For projects requiring work at any hazardous waste site, there will be a $10 per hour surcharge added to the normal billing rate for all personnel. Consultants to Raba Kistner (RK) will be charged according to their professional classification.

EXPENSES: Use of company automobiles will be charged at $1.00 per mile. Automobiles and light trucks assigned to field sites will be charged at $70.00 per day, plus $1.00 per mile over 50 miles per day. Copies will be charged at $0.25 per page.

Other project specific charges for use of RK equipment or for RK testing will be in accordance with established fee schedules. All other project specific, third-party costs will be charged at cost plus 15 percent.

Invoices will be submitted monthly for work in progress in our standard format. They are due and payable upon receipt and become past due 30 days after the billing date. Past due invoices may be subject to late charges at the rate of 1-1/2 percent per month (18 percent per annum). In the event that the State of Texas legislates a sales tax on Professional Services, the amount of the tax will be PAYMENT added to the appropriate service rate charged. Our invoices are due and payable upon receipt at P.O. Box 971037, Dallas, Texas 75397-1037.

Preparation of non-standard invoice will be charged on a time and materials basis in accordance with the rates in this fee schedule.

CONDITIONS: Services will be performed in accordance with our Standard Terms and Conditions.

The proposal to which this schedule is an attachment is valid for 90 days from the date of the proposal.

EXHIBIT D

-Work Authorization Form

HIDALGO COUNTY
Professional Construction
Material Testing Engineer Services

WORK AUTHORIZATION NO. _____

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, acting by and through the **Hidalgo County Urban County Program**, hereinafter called the "**Owner**," and, _____. professional engineers of _____, _____ Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the "engineering services" to provide **Construction material testing engineer services**.

The scope of services to be provided by the **Owner** is identified in **EXHIBIT "A" – Scope of Services to be provided by the Owner** attached hereto.

The scope of services to be provided by the **Engineer** is identified in **EXHIBIT "B" – Scope of Services to be provided by the Engineer** attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **$**_____.This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D".**

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No._____ shall be funded through funding source:
Account No. _____
PURCHASE ORDER NUMBER: _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of scopes of the work authorization**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and Confirmation by Hidalgo County Urban County Program, Diana Serna (Director) as to content and detail of this **Work Authorization No. _____.**

HIDALGO COUNTY
URBAN COUNTY PROGRAM

BY: _____
DIANA R. SERNA, UCP DIRECTOR

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____ as indicated below and effective as of _____day of _____, 201_____.

THE ENGINEER:

_____
By: Jorge L. Perez, Supervisor, CME

THE OWNER:
HIDALGO COUNTY

_____
By: Ramon Garcia, County Judge

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

EXHIBIT E

-Supplemental Agreement Form

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO. ____
TO AGREEMENT FOR PROFESSIONAL
"CONSTRUCTION MATERIAL TESTING SERVICES"

THIS SUPPLEMENTAL AGREEMENT is made pursuant to the terms and conditions of paragraph 5 of the Agreement made by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", a **Raba Kistner Consultants, Inc.**, Professional Engineers of **McAllen,** Texas, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the ____ day of _____ **20** _____ concerning Engineering for **Construction Material Testing Services** hereinafter referred to as the ("**Project**"); and,

WHEREAS, Paragraph ___ of the **Agreement**, (paragraph title), establishes _____; and,

WHEREAS, it has become necessary to amend the Agreement to _____

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said **Agreement** is amended as follows:

I. Paragraph ___ of the **Agreement**, (paragraph title), is revised to

_____
_____
_____
_____
_____
_____

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 20__.

THE ENGINEER:

_____
By: Jorge L. Perez, Supervisor, CME

THE OWNER:
HIDALGO COUNTY

_____
By: Ramon Garcia, County Judge

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

LIST OF ATTACHMENTS

(as required)

WORK AUTHORIZATION NO. 1

HIDALGO COUNTY
Professional Construction
Material Testing Engineer Services

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, acting by and through the **Hidalgo County Urban County Program**, hereinafter called the "**Owner**," and, **Raba-Kistner Consultants, Inc.** professional engineers of **McAllen ,** Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK
The purpose of this Work Authorization is for the "engineering services" to provide **Construction material testing engineer services**.

PART 2. ESTIMATED COST
The estimated cost for services under this Work Authorization is **$22,726.55**. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "A".**

PART 3. PAYMENT
Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section **4** of the Agreement.

PART 4. FUNDING
WORK AUTHORIZATION NO. **1** shall be funded through funding source:
ACCOUNT NO. **5014/2015-60-0311-5000-6000-UCP-GVG**
PURCHASE ORDER NUMBER: _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of scope of the work authorization**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION
Acknowledgement and Confirmation by Hidalgo County Urban County Program, Diana Serna (Director) as to content and detail of this **Work Authorization No. 1 .**

HIDALGO COUNTY
URBAN COUNTY PROGRAM

BY: _____
DIANA R. SERNA, UCP DIRECTOR

PART 8. ACCEPTANCE AND APPROVAL
This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on March 21, 2017 as indicated below and effective as of 21st day of March, 2017 .

THE ENGINEER:

_____
By: Jorge L. Perez, Supervisor, CME

THE OWNER:
HIDALGO COUNTY

_____
By: Ramon Garcia, County Judge

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

APPROVED AS TO FORM:
Atlas, Hall & Rodriguez, L.L.P.

By: _____

Exhibit A: Cost Proposal : (Best & Final Offer Letter & Cost Breakdown)

RABA KISTNER
CONSULTANTS

Proposal No. PMD17-011-00
March 3, 2017

Exhibit B

Raba Kistner
Consultants, Inc.
800 E. Hackberry
McAllen, TX 78501
www.rkci.com

P 956.682.5332
F 956.682.5487
TBPE Firm F-3257
TBPLS Firm 10193784

Mr. P.R. Avila II, Assistant Deputy Director
Hidalgo County – Urban County Program
427 E. Duranta Avenue
Alamo, Texas 78516

RE: Construction Materials Observation and Testing Services
Hidalgo County Urban County
La Joya, Ave, Mezquite Ave, and Pike Ave Street Improvements
Hidalgo County, Texas

Dear Mr. Avila:

RABA KISTNER Consultants, Inc. (RKCI) is pleased to have been selected to provide Construction Materials Observation and Testing Services for the above referenced project. **RKCI is the Geotechnical Engineer of record for this project and would be a valuable team member during the construction of this project.**

Our opinion of probable cost of services for this project is as follows:

Pike Avenue:	$ 9,324.15
La Joya:	$ 6,701.20
Mezquite Avenue:	$ 6,701.20
Total	**$ 22,726.55**

Our proposed scope of services and estimated item quantities are based upon our interpretation of the project plans and specifications provided to us via electronic-mail attachment provided to us on Monday, February 6, 2017, from Mr. Victor Trevino, EIT, with South Texas Infrastructure Group, the project's civil engineering firm. Charges will be assessed only for actual services rendered. All services authorized or requested by you or your representatives in excess of the quantities of observation and testing services shown herein will be charged at the appropriate unit rate for such services. Charges will be invoiced on a monthly basis and will show a computerized composite total of services rendered for each service category.

Invoices will be submitted monthly for work in progress in our standard format. Our invoices are due and payable within 30 days upon receipt at P.O. Box 971037, Dallas, Dallas County, Texas 75397-1037. All parties hereby agree that this contract upon acceptance will be performable in Hidalgo County, Texas. In the event that the State of Texas legislates a sales tax on professional services, the amount of tax applicable will be added to the appropriate service rate charged by **RKCI.**

We appreciate the opportunity of submitting this proposal and look forward to working with you during the construction of this project. Please return one signed copy of this letter proposal to provide written authorization for our firm to commence work on the services outlined herein. Please complete the attached Project Data Sheet for invoicing and reporting information.

Very truly yours,

RABA KISTNER Consultants, Inc.

Jorge L. Perez
Supervisor, CME

JLP/EA

Attachments: Basic Charges
Project Data Sheet

Copies submitted: Above (1)

Accepted By _____
(Signature)

_____
(Typed or Printed Name)

_____
(Title)

Date _____

BASIC CHARGES

1. A vehicle travel charge will be assessed for round trip travel from our office to the project site, material supplier, etc. and back to our office. The charges for travel from our office to the project site and return to our office will be as follows:

   Travel Time (round trip) ..... 1.00 /hour(s)

   Vehicle Trip Charge ..... $ 48.25/trip

2. Service Charges are based on the hourly rates stated herein and will be assessed from the time the Engineer or Technician leaves our office until he returns from the project.

3. Any engineering and/or technical services provided on Saturday, Sunday and all work in excess of "normal" work hours, as stated herein, Monday through Friday, will be charged at an overtime rate of 1.5 times the appropriate hourly rate. Our total cost of services is based upon the assumption most services will be provided during "normal" work hours. Providing an excessive amount of services during days and/or hours requiring overtime rates may significantly increase the total cost of services shown herein.

4. "Normal" work hours are between 7:00 a.m. and 6:00 p.m., including travel time to and from the site unless stated otherwise. Overtime charges will be assessed after eight (8) continuous hours of service rendered during "normal" work hours.

5. Minimum of 2 hours billing per visit to project site.

6. A ten (10) percent project management and administration cost will be added to all invoices.

7. Our opinion of probable cost for each proposal to be submitted is based upon an estimate of the construction materials observation and testing services required to meet the project requirements. Because the general contractor has control over the project and determines the means and methods used to build/construct the project, our proposed scope of services is an estimate. On the basis of the general contractor's schedule, potential retesting of non-compliance items, weather related issues, the actual total services and fees may be higher or lower than the estimates in our proposal. **RKCI** will keep you CLIENT appraised of our billings in comparison to our opinion of probable cost (project budget) over the life of the project. All tests noted as retests of previously non-complaint areas will be billed to the CLIENT. **RKCI** will invoice these tests separately to allow CLIENT to segregate the charges from our normal charges. This will allow CLIENT to back charge the general contractor as necessary. CLIENT will be responsible for payment of all services rendered by **RKCI** for the project.

8. **RKCI** will utilize the on-site initial field curing facilities provided by the contractor. The cost of providing and maintaining these initial curing facilities is not included in our proposal.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/8/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Catto & Catto LLP
One Alamo Center
106 S. St. Mary's Street, Ste. 800
San Antonio TX 78205

CONTACT NAME: Nancy Pruski
PHONE (A/C, No, Ext): 210-222-2161 x 262 **FAX (A/C, No):** 210-222-1618
E-MAIL ADDRESS: npruski@catto.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Travelers Indemnity of America	25666
INSURER B : Travelers Casualty Ins Co of	19046
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Raba Kistner Inc.
P.O. Box 690287
San Antonio TX 78269-0287

COVERAGES **CERTIFICATE NUMBER:** 537273984 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			630-6H263592-TAI-16	10/1/2016	10/1/2017	EACH OCCURRENCE	$1,000,000
	CLAIMS-MADE [X] OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$300,000
	X Contract. Liab.						MED EXP (Any one person)	$10,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY	$1,000,000
	POLICY [X] PRO-JECT [ ] LOC						GENERAL AGGREGATE	$2,000,000
	OTHER:						PRODUCTS - COMP/OP AGG	$2,000,000
							Deductible	$0
A	AUTOMOBILE LIABILITY			P-810-6H263592-TAI-16	10/1/2016	10/1/2017	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS [ ] SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS [X] NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB [ ] OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB [ ] CLAIMS-MADE						AGGREGATE	$
	DED [ ] RETENTION $							$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N			UB-6H31004A-43-G	10/1/2016	10/1/2017	X PER STATUTE [ ] OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [N] N / A (Mandatory in NH)						E.L. EACH ACCIDENT	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$1,000,000
							E.L. DISEASE - POLICY LIMIT	$1,000,000
A	Auto Physical Damage			P-810-6H263592-TIA-16	10/1/2016	10/1/2017	Comp. Deductible Collision Deductible	$1,000 $1,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Named Insureds: Raba Kistner, Inc dba Raba Kistner Consultants, Inc., Raba Kistner Environmental, Inc, Raba Kistner Facilities, Inc., Raba Kistner Infrastructure and Raba Ingenieros S. de R.L. de C.V.
Project Name City of Penitas Street Improvements Project in Penitas, TX
Project Descriptions Construction Materials Engineering and Testing Services for City of Penitas Street Improvements Project in Penitas, TX
Project NO. PMS17-011-00

CERTIFICATE HOLDER

Hidalgo County Urban County Program
427 E. Duranta Avenue
Alamo TX 78516

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-175328

Date Filed:
03/07/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Raba Kistner, Inc.
San Antonio, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County Urban County Program

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

5014-40-0311-5000-4000-UCP-GVG
Construction Materials Testing

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Raba, William L.	San Antonio, TX United States	X	
Raba, Gary W.	San Antonio, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

ROSIE OLEARY
Notary Public, State of Texas
Comm. Expires 07-05-2020
Notary ID 12017765

William L. Raba

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said William L. Raba, this the 7th day of March, 20 17, to certify which, witness my hand and seal of office.

Rosie O'Leary — Signature of officer administering oath

ROSIE O'Leary — Printed name of officer administering oath

Notary — Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
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Raba Kistner, Inc.
San Antonio, TX United States

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Hidalgo County Urban County Program

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5014-40-0311-5000-4000-UCP-GVG
Construction Materials Testing

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Raba, William	San Antonio, TX United States	X	
Raba, Gary	San Antonio, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

AI-58875 **Urban County** **17. E.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Olga Lerma, URBAN COUNTY **Submitted By:** Olga Lerma, URBAN COUNTY

Department: URBAN COUNTY

Information

CAPTION

1. Subject to Compliance with HB 1295 requesting approval of a best and final negotiated contract for Professional Engineering Services with STRADA Engineering and Consulting, LLC, in the amount of $21,395.00 utilizing CDBG FY 2016.

2. Requesting approval of Work Authorization No. 1- "2016 Sullivan City Drainage Improvements" in the amount of $21,395.00.

BACKGROUND

Hidalgo County Commissioner's Court approved authority to negotiate contract with the firm of STRADA Engineering and Consulting, LLC, for the purpose of professional engineering services for the 2016 Sullivan City Drainage Improvement Project. See attached negotiated Contract and Work Authorization No. 1.

CONTRACT AMOUNT: $21,395.00

FUNDS AVAILABLE: $216,727.00 Sullivan City -2016 Drainage Improvements

APPROVED AS TO FORM:
BY: STEVE CRAIN, ATTORNEY
ON: FEBRUARY 6, 2017

Fiscal Impact

Attachments

STRADA services agreement & Form 1295

STRADA Work Authorization No.1 & breakdown

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/09/2017 12:15 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Olga Lerma		Started On: 03/07/2017 03:41 PM
Final Approval Date: 03/17/2017		

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made effective the **21ST day of March, 2017** by and between 21**HIDALGO COUNTY, TEXAS, acting by and thru Urban County Program** ("County") and **STRADA Engineering and Consulting, LLC** of Mission, a Texas Corporation ("Engineer").

WITNESSETH:

WHEREAS, the County is vested with the responsibility of providing **"Engineering Services"** for projects with **HIDALGO COUNTY URBAN COUNTY PROGRAM** (the "Services");

WHEREAS, the County has determined that the services of a professional engineering company is necessary to carry out the required Services;

WHEREAS, pursuant to Texas Government Code Chapter 2254.002, (the "Texas Professional Services Procurement Act"), the County requested Statements of Qualifications (SOQ's) from a professional engineering to assist the County by providing the Services;

WHEREAS, Urban County Program has selected the "Engineer" from the "Pool" of pre-qualified Engineering from response to the Request for Qualifications (RFQ) to provide the Services for the **City of Sullivan City -2016 Drainage Improvements Project.**

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained, County and Engineer do mutually agree as follows:

1. **Scope of Services.** The County will provide to Engineer the services described in **Exhibit "A"** attached hereto and entitled "Services to be performed by County." Engineer agrees to provide to County with the work described in Exhibit "B", "Services to be performed by the Engineer".

2. **Non-Exclusive Services of Engineer.** Hidalgo County reserves the right to request these services from other sources other than the Engineer and shall not be in violation of any terms or conditions of this Agreement.

3. **Term.** This Agreement is for a period of **one (1) year**, effective **March 21, 2017,** and will expire **March 20, 2018** or unless sooner terminated as provided herein. The Engineer will not begin to work or incur costs until authorized in writing by the County with each "Work Authorization" particularly described in Exhibit "D".

4. **Compensation.** As consideration for rendering the Services provided for in this Agreement, the County agrees to pay the Engineer the amounts specified in Exhibit "C" attached hereto payable against written invoice submitted by Engineer. The maximum amount payable under this Agreement shall not exceed the amount for each work authorization unless an amendment is executed as provided hereinafter. The Engineer shall submit periodic requests for payment within (30) thirty days after completion of each Work Authorization. The request for payment shall be made using forms acceptable to the County and shall show the total amount earned to the date of submission and the amount due and payable as of the date of the current billing. Upon receipt of said request for payment, County shall submit a requisition for payment for said Services in the customary manner provided for payments utilized by Hidalgo County, Texas. Engineer agrees to separately account for the receipt and/or expenditure of funds received pursuant to this Agreement and to keep accurate books and records of all such receipts and/or expenditures. All payments to Engineer shall be mailed to the address shown in numbered paragraph 24 herein.

5. **Inspection of Work.** The County has the right at all reasonable times to inspect or otherwise evaluate the work performed hereunder and the premises in which it is being performed. If any inspection or evaluation is made on the premises of the Engineer, or of a subcontractor, the Engineer shall provide and require its subcontractor to provide all reasonable facilities and assistance for the safety and convenience of the inspectors in the performance of their duties. All inspections and evaluations shall be performed in such a manner as will not unduly delay their work.

6. Amendments. If it becomes necessary at any time during this Agreement to change the scope of Services, the Agreement period, the maximum amount payable, the complexity, or the character of this Agreement, an amendment shall be executed by use of a (Supplemental Agreement Form) more particularly described in Exhibit "E" within the agreement. The County retains the right to reject any such amendment proposed by the Engineer. Any such amendments shall be made in writing, agreed to by all parties hereto, and duly executed before the end of the Agreement as specified. If the County finds it necessary to require changes in completed work because of errors made by the Engineer, the County shall require the Engineer to correct the work at no cost to the County and without amendment to the Agreement. If the changes are made at the request of the County and are not due to errors of the Engineer, the County will reimburse the Engineer for the additional work at the same rate of pay established in Exhibit "C," "Engineer's Rates." If payment for the additional work will cause the maximum amount payable under this Agreement to be exhausted, an amendment shall be proposed in accordance with all State procurement laws.

7. Reporting. The Engineer shall promptly advise the County in writing of events which have a significant impact upon the Agreement, including:

a. Problems, delays, or adverse conditions which will materially affect the ability to meet time schedules and goals, or preclude the attainment of project work units by established time periods. This disclosure shall be accompanied by a statement of the action taken, or contemplated and any County or, if Federal Funds are involved, Federal assistance needed to resolve the situation.

b. Favorable developments or events which enable meeting time schedules and goals to be met sooner than anticipated or which are producing more work units than originally projected.

8. Ownership of Documents. Upon completion or termination of this Agreement, all documents prepared by the Engineer or furnished to the Engineer by the County shall be delivered to and become the property of the County. All sketches, photographs, calculations, and other data prepared

under this Agreement shall be made available, upon request, to the County without restriction or limitation on their further use. The Engineer may, at its own expense, have copies made of the documents or any other data furnished to the County under this Agreement.

9. Suspension of Work. Should County desire to suspend the work under this Agreement, but not terminate this Agreement, the County shall provide thirty (30) calendar days verbal notification to Engineer, followed by written confirmation from the County to Engineer to that effect. The thirty-day notice may be waived as agreed in writing by both the County and Engineer to that effect. The work under this Agreement may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from the County to the Engineer. The sixty-day notice may be waived as agreed in writing by both the County and Engineer. If the County suspends the work, the Termination Date as identified above is not affected and this Agreement will terminate on the date specified.

10. Progress and Coordination. The Engineer shall, from time to time during the progress of the work, confer with the County. The Engineer shall prepare and present such information as may be pertinent and necessary, or as may be requested by the County, in order to evaluate features of the Engineer's services and work.

At the request of the County or the Engineer, conferences shall be provided at the Engineer's office, the offices of the County, or at other locations designated by the County. These conferences shall also include evaluation of the Engineer's services and work when requested by the County.

All applicable study reports shall be submitted in preliminary form for approval by the County before the final report is issued. The County's comments regarding the Engineer's preliminary report will be addressed by the Engineer in the final report.

If funds by other agencies or entities are to be used for the development of the project under this Agreement, the Engineer's Services and work will be subject to periodic review and approval by other agencies or entities, including those of the city, county, state and/or federal agencies.

Should it be determined that the progress in the production of the Engineer's Services and work does not satisfy the requirements of the approved Work Authorization as provided by Exhibit "D",

attached hereto, the County shall review the approved Work Authorization with the Engineer to determine the corrective action needed by either the County or the Engineer.

The Engineer shall promptly advise the County in writing of events which have a significant impact upon the progress of the Engineer's Services and work and the approved Work Schedule, including:

a. problems, delays, adverse conditions which will materially affect the ability to attain Agreement objectives, prevent the meeting of time schedules and goals, or preclude the timely completion and submittal of Project deliverables by the Engineer within established time periods; this disclosure will be accompanied by a statement by the Engineer of recommended or immediate action taken, or contemplated, and any Owner or other agency or entity assistance needed to resolve the situation: and

b. favorable developments or events which enable meeting the Work Schedule goals sooner than anticipated.

11. Independent Contractor. Engineer must comply with all applicable Hidalgo County policies and with any applicable federal, state or local laws, regulations, orders or ordinances applicable to the Services provided by Engineer under this Agreement. Notwithstanding the foregoing sentence, Engineer represents and maintains that it is an Independent Contractor and is not an employee of Hidalgo County, Texas or any agency thereof, and represents and warrants that it does not desire or request any fringe benefits provided to employees of Hidalgo County, Texas, and/or any agency thereof, including, but not limited to benefits associated with Hidalgo County's civil service program. Engineer agrees to be responsible for any federal income tax, withholding or social security tax liability that might arise from payments received hereunder.

12. Subcontracting and Assignment. The Engineer shall not assign subconsultant or transfer the Engineer's interest in this Agreement without the prior written consent of the County. The Engineer shall bind every subconsultant by written agreement to observe all the terms of this Agreement

to the extent that they may be applicable to each subconsultant. No subcontractor relieves the Engineer of any responsibilities under this Agreement.

13. Voluntary Termination. County may terminate this Agreement at any time for any reason or no reason at all upon giving thirty (30) days prior written notice to the Engineer.

14. Insurance. Engineer agrees to provide liability insurance covering its activities in providing the Services for County in an amount not less than the minimum amounts prescribed by the Texas Tort Claims Act, §100.001, et seq., Texas Civil Practices and Remedies Code, and shall furnish County a certificate issued by the insurer that such insurance is in full force and effect.

15. Payment of Franchise Tax. The Engineer hereby certifies that the Engineer is not delinquent in Texas franchise tax payments, or that the Engineer is exempt from, or not subject to, such tax. A false statement concerning corporation's franchise tax status shall constitute grounds for termination of the Agreement at the sole option of the County.

16. No Assignment. Except as otherwise herein provided, Engineer may not assign the obligations or rights under this Agreement to any person without the prior written consent of County.

17. Conflict. Nothing in this Agreement shall be construed so as to require the commission of any act contrary to law, and whenever there is any conflict between any provision of this Agreement and any present or future law, ordinance or administrative, executive or judicial regulation, order or decree, or amendment thereof, contrary to which the parties have no legal right to Agreement, the latter shall prevail, but in such event the affected provision or provisions of this Agreement shall be modified only to the extent necessary to bring them the legal requirements and only during the time such conflict exists.

18. Termination by County. If Engineer fails to deliver quality Services, fails to achieve the defined goals, outcomes, strategies and outputs required by County, or if Engineer fails to comply with any conditions in this Agreement, then County shall have the right to terminate this Agreement upon the giving of ten (10) days prior written notice to Engineer.

19. No Waiver. No waiver by County of any breach of any provision of this Agreement shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision hereof.

20. Entire Agreement. This Agreement contains the entire agreement between the parties hereto, and each party acknowledges that neither has made (either directly or through any agent or representative) any representations or agreements in connection with this Agreement not specifically set forth herein. This Agreement may be modified or amended only by agreement in writing executed by County and Engineer, and not otherwise.

21. Venue. This Agreement shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Hidalgo County, Texas. The parties hereby consent to personal jurisdiction in Hidalgo County, Texas.

22. Hold Harmless. In the event Engineer should cause, either directly or indirectly, damage, loss, destruction, liability, or claims against the other party as a result of intentional conduct, negligence or otherwise, Engineer shall hold harmless and indemnify County from any and all obligations, liabilities, cause of action, lawsuits, damages, and assessments, including legal fees, etc., that from the Engineer's intentional actions or negligence. This indemnification clause shall survive this Agreement and be enforceable as a separate agreement in the event its survival and enforcement becomes necessary.

23. Attorney's Fees. In the unlikely event that a dispute occurs which is litigated, or a cause of action in law or equity is filed concerning the operation, construction, interpretation, or enforcement of this Agreement, the losing party shall bear the cost of the attorney's fees incurred by the prevailing party and any and all costs applicable thereto, including, but not limited to, court costs, deposition fees, expert witness fees, out-of-pocket expenses and travel expenses which are incurred by the prevailing party.

24. Notices. Expect as may be otherwise specifically provided in this Agreement, all notices, demands, requests or communications required or permitted hereunder shall be in writing and shall either be (i) personally delivered against a written receipt, or (ii) sent by a registered or certified mail, return

receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

If to County: **Hidalgo County Urban County**
Attn: Diana R. Serna, UCP Director
427 East Duranta Avenue, Suite 107
Alamo, Texas 78516

If to Engineer: **STRADA Engineering and Consulting, LLC.**
Attn: Oscar Cancino, P.E. President
3317 Alberta Street,
Edinburg, Texas 78539

Each notice, demand, request or communication which shall be delivered or mailed in the manner described above shall be deemed sufficiently given for all purposes at such time as it is personally delivered to the addresses or, if mailed at such time as it is deposited in the United States mail.

25. Executions of Documents. The parties hereto covenant and agree that they will execute such other and further instruments and documents as are or may become necessary or convenient to effectuate and carry out the terms of this Agreement.

26. Binding Agreement. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, legal representatives, successors, and assigns where permitted by this Agreement.

27. Gender. All pronouns used in this Agreement shall include the other gender, whether used in the masculine, feminine or neutral gender, and the singular shall include the plural whenever and as often as may be appropriate.

28. Authority. The execution and performance of this Agreement by County and Engineer have been duly authorized by all necessary laws, resolutions or corporate action, and this Agreement constitutes the valid and enforceable obligations of County and Engineer in accordance with its terms.

29. Professional Seal. All documents and data furnished by the Engineer to the County shall bear Professional seal of a licensed Engineer employed by the Engineer.

30. Commitment of Current Revenues Only. In the event that, during any term hereof, the Commissioners Court does not appropriate sufficient funds to meet the obligations of County under this Agreement, County may terminate this Agreement upon ninety (90) days written notice to the Engineer. County agrees, however, to use reasonable efforts to secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of County pursuant to the provisions of Tex. Loc. Govt. Code Ann. ' 271.903 (Vernon Supp. 1996).

31. Immunities. Nothing in this Agreement is intended to and County does not hereby waive, release or relinquish any right to assert any of the defenses County enjoys by virtue of the state or federal constitution, laws, rules or regulations, and any sovereign, official or qualified immunity available to County as to any claim or action of any person, entity, or individual against County.

EXECUTED as of the day and year first written above.

HIDALGO COUNTY

By: _____
Ramon Garcia, County Judge

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

Approved by Commissioners' Court on: March 21, 2017.

ENGINEER:
STRADA Engineering and Consulting, LLC

By: _____

Printed Name Oscar Cancino, P.E.

Title: President

APPROVED AS TO FORM:
Atlas, Hall & Rodriguez, L.L.P.
By: Stephen L. Crain, Attorney
On this: July 12, 2016.

ATTACHMENTS:

EXHIBIT A	-Scope of Services to be provided by the County
EXHIBIT B	-Scope of Services to be provided by the Engineer
EXHIBIT C	-Engineer's Rates
EXHIBIT D	-Work Authorization Form
EXHIBIT E	-Supplemental Agreement Form
EXHIBIT F	-Certificates of Insurance

EXHIBIT A

-Scope of Services to be provided by the County

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General:

The Owner will provide to the Engineer the following:

1) Provide the authorization to proceed with services through coordination with the project consulting and design Engineer.
2) Payment for work performed by the Engineer and accepted by the Owner in accordance with Article 3 of this Agreement.
3) Assistance to the Engineer, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Engineer cannot easily obtain.
4) Provide any available relevant data the Owner may have on file concerning the projects.
5) Provide timely review and decisions in response to the Engineer's request for information and/or required submittals and deliverables, in order for the Engineer to maintain the agreed upon work schedule prepared in accordance with Exhibit "A" attached to this Agreement.
6) Attend and participate in progress meetings as required and as coordinated and conducted by Engineer.
7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Engineer.

Exhibit "B"

Services to be Provided by Engineer

The work to be furnished by the Engineer shall consist of management and engineering services for improvements along El Pinto Rd. for Sullivan Drainage Improvements. The work shall be developed in accordance with the Owner and applicable design standards and in a format acceptable to the owner, and reviewing agencies.

The Engineer shall render specific management and engineering services for the development of the Project and fulfillment of this Agreement as follows:

I. PRELIMINARY PHASE – GENERAL PROJECT MANGEMENT AND ADMINISTRATION

II. DESIGN PHASE – FINAL DESIGN AND PLANS, SPECIFICATIONS, AND ESTIMATES (PS&E) FOR HIDALGO COUNTY PRECINCT No.4.

I. PRELIMINARY PHASE SERVICES

GENERAL PROJECT MANGEMENT

Services for GENERAL PROJECT MANAGEMENT by the Engineer will include the following:

1. Project/Program Schedule. See Exhibit "C".

2. Coordination/Meetings. The Owner may require the Engineer to attend local public hearings, policy meetings and upon request attend Owner staff meetings. The Engineer shall assist the Owner, as requested, at meetings with the Urban County / Hidalgo County or other necessary entities.

Planning & Assessment

The Engineer will provide the following:

1. Review, verify and gather data necessary to proceed with design of approved Hidalgo County Projects.

2. Perform interviews with Precinct No.3 and City of Sullivan staff to identify "present day" complaints, roadway and drainage histories and preliminary design information for the approved projects.

3. Obtain Hydrologic data for Drainage System Design.

4. Develop drainage system designs, including cost data, pavement repair, and collection of runoff drainage.

5. Identify preliminary alignments; develop Utility and Drainage Profiles.

6. Develop hydraulic design criteria in accordance with Hidalgo County/Local Municipal guidelines.

7. Verify FEMA FIRM zones and requirements.

8. Develop basic schematic layout of improvement to determine right of way requirements.

Right of Way Data

The Engineer shall provide utility and the right of way data for each approved individual project as follows:

1) The Engineer will coordinate utility adjustments with Owner and all affected utility owners as necessary.

Field Survey

The Engineer will provide the following:

1) Vertical and Horizontal Control. Establish and stake the Project control centerline (baselines) and offset for the Project or portions of the Project. Establish vertical control by looping all benchmark (BM) circuits and tie to monument permanent BM elevation. BM's are to be set at 1,000 ft maximum intervals using Global Positioning System (GPS) survey, and in a location that will be undisturbed by future construction.

2) Topography. Obtain topographic information surveyed for the length of the control centerline, as required; provide location (station and offset), size, height, and depth and/or length and description of topographic features; to include, but not limited to the following: driveways, signs, light poles, mail boxes, all fences (including metal beam guard fence and turndowns), utilities (type, owner, location, and depth), riprap, existing right of way lines, private property lines, cou7nty and/or city limits, etc..Drainage elements to include:

II. DESIGN PHASE SERVICES

Final Design and Plans, Specifications & Estimates

The Engineer will develop the final design and prepare Agreement drawings, specifications and estimates for construction of the Project or portions of the Project as authorized by the Owner. These documents will be submitted to the applicable city, county, state, and/or federal agencies for approval.

All final plan sheets will be developed by the Engineer on 11"x17" reproducible, 4 mil, double-matte, white, opaque film.

Recognizing that there will be several team members participating in the development of the overall

Project, and taking into consideration that the Owner has a significant investment in the development of the Project, there is need for consistency in document development for the purpose of review and production to help facilitate and economically efficient product. All computer document files furnished to the Owner by the Engineer shall be furnished on a CD-ROM created utilizing DOS software. Retrieval documentation relating to file storage on the designated delivery media shall be prepared by the Engineer and provide to the Owner. It is the intent of the Engineer and this Agreement to secure computer files from all Project Team members that are composed of elements of the same precision, integrity, singularity, attributes.

The Engineer shall prepare graphic files that can be reviewed and plotted utilizing Microstation/AutoCAD, software. The graphic files submitted must be compatible with Microstation/AutoCAD System without conversion or modification and must plot consistent with reproducible plots submitted.

Plan Sheets. Plan sheets developed by the Engineer will include, but not limited to, title sheet, typical sections, sequence of construction, estimates and quantity, plan-profile, channel details, roadway details, bridge and culvert details, hydraulic details, and standards.

Specifications. The Engineer shall use Standard Specifications for Construction and Maintenance. Other specifications may be developed by the Engineer, but must incorporate, reference to standard requirements of design & testing procedures by Hidalgo County Standards.

Estimates. The Engineer will prepare detailed cost estimates and proposals of authorized construction, which will include summaries of bid items and quantities based on the unit price system of bidding.

All plots and graphic media provided by the Engineer, as a result of this Agreement, shall be delivered to the Owner. Final payment for plan sheet documents and/or associated, applicable engineer files will not be made until the files furnished by the Engineer have been demonstrated to be useable in the formats described above and herein.

Service for FINAL DESIGN AND PLANS, SPECIFICATIONS AND ESTIMATES by the Engineer will include the following:

Drainage Design

The Engineer will prepare the drainage system design for the Project or portions of the Project as authorized by the Owner. The drainage system design will be submitted to the applicable city, county, state, and/or federal agencies for approval.

Drainage design will include:

1) Geometric Design –Vertical alignment, intersection geometrics: to be incorporated onto plan and profile sheets.
2) Geometric and grading design – development of typical drainage sections through vertical alignment determination.
3) Grading design – existing and design cross sections, cut/fill quantities and culvert analysis.

4) Earthwork Quantities – obtained from drainage design.

Drainage

The Engineer will perform final hydrologic/hydraulic analysis and design for the proposed improvements of the Project or portions of the Project as authorized by the Owner.

PS&E Supporting Documents

1. Specifications List and general Notes. The Engineer will prepare an applicable specifications list, as well as any general notes that may be applicable to each PS&E submission.

2. Estimates. The Engineer will prepare detailed cost estimates and proposals of authorized construction, which will include summaries of bid items and quantities based, insofar as practicable, on the unit price system of bidding.

3. Agreement Time Determination Statement. The Engineer will determine the time required for construction for the project, outlining phases of construction and appropriate rates of production and construction for bid items determined to be in the critical path for construction of the PS&E submittal.

STRADA Engineering and Consulting, LLC

EXHIBIT "C"
PROJECT FEE FOR
SULLIVAN DRAINAGE IMPROVEMENTS

		Survey Crew	Project Manager	Sr. Engineer	Project Engineer	Assistant Engineer	Senior Designer	Designer	Tech III	Clerical
	Contracted Rates	$ 167.00	$ 220.00	$ 200.00	$ 172.00	$ 159.00	$ 149.00	$ 139.00	$ 86.00	$ 72.00
TASK 145	PROJECT MANAGEMENT/ADMINISTRATION									
	TASK 145.01 - PROJECT MANAGEMENT AND COORDINATION									
	A) Coordinate, Execute and Administer Work Authorization		2							1
	B) Progress Reports and Invoices		1							2
	C) Meetings (Hidalgo County, Utility Companies)		1							
	TASK 145 SUBTOTAL		4							3
TASK 160										
	Task 160.01 - DESIGN CRITERIA COORDINATION									
	PS&E									
	Tast 160.01 SUBTOTAL									
	TASK 160.02 - HYDROLOGIC ANALYSIS				14			4.0		
	TASK 160.02 SUBTOTAL				14			4		
	TASK 160.03 - HYDRAULIC ANALYSIS									
	TASK 160.03 SUBTOTAL									
	TASK 160.04 - PLAN PREPARATION									
	Create Existing Contours				8				8	
	Create Drainage Area Map				8				8	
	Create Preliminary Design				4			4		
	Create Proposed Crossections									
	Create Existing and Proposed Typical Sections				4			8		
	Prepare Utilities and Drainage Sheets				4			8	8	
	Prepare E&O Tables				4			4		
	Prepare Details and Standard Sheets									
	QA/QC				4			4		4
	Prepare Specification Book									
	TASK 160.04 SUBTOTAL				36			28	24	4
	TOTAL HOURS (DOS Logistics)		4		50			32	24	7
	Contracted Rates	$ 167.00	$ 220.00	$ 200.00	$ 172.00	$ 159.00	$ 149.00	$ 139.00	$ 86.00	$ 72.00
	Total Labor Cost	$ -	$ 880.00	$ -	$ 8,600.00	$ -	$ -	$ 4,448.00	$ 2,064.00	$ 504.00
	Total Engineering (8.5%)	$ 16,496.00								
	TASK 160.05 - TOPOGRAPHIC SURVEY									
	Find Control Points	8.0								
	Basic Topographic Survey	16.0								
	ROW and Easement Recovery	5.3								
	TASK 160.05 SUBTOTAL	29								
	TOTAL HOURS (DOS Logistics)	29.336								
	Contracted Rates	$ 167.00	$ 220.00	$ 200.00	$ 172.00	$ 159.00	$ 149.00	$ 139.00	$ 86.00	$ 72.00
	Total Labor Cost	$4,899								
	Total Surveying (2.5%)	$4,899	$4,899							
	GEO-TECH (PROVIDED BY OTHER)	$ -								
	Total	$ 21,395.00								

WORK AUTHORIZATION NO. 1

HIDALGO COUNTY
Professional Engineer Services

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, acting by and through the **Hidalgo County Urban County Program**, hereinafter called the "**Owner**," and, _____ professional engineers of _____, Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the "engineering services" to provide **professional engineering services**.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is $_____. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "A".**

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

WORK AUTHORIZATION NO.____ shall be funded through funding source:
ACCOUNT NO. _____
PURCHASE ORDER NUMBER: _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of scopes of the work authorization**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and Confirmation by Hidalgo County Urban County Program, Diana Serna (Director) as to content and detail of this **Work Authorization No. ___.**

HIDALGO COUNTY
URBAN COUNTY PROGRAM

BY: _____
DIANA R. SERNA, UCP DIRECTOR

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____ as indicated below and effective as of _____ day of _____, 20___.

THE ENGINEER:

_____
By: Oscar Cancino, P.E.

THE OWNER:
HIDALGO COUNTY

_____
By: Ramon Garcia, County Judge

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

APPROVED AS TO FORM:
Atlas, Hall & Rodriguez, L.L.P.
On: March 3, 2017.

By:_____

Exhibit A: Cost Proposal : (Best & Final Offer Letter & Cost Breakdown)

EXHIBIT E

-Supplemental Agreement Form

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO. ____
TO AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS SUPPLEMENTAL AGREEMENT is made pursuant to the terms and conditions of paragraph 5 of the Agreement made by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and _____Professional Engineers of, _____, Texas, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the _____ day of _____ **20___** concerning Engineering for **Professional Engineering Services** hereinafter referred to as the ("**Project**"); and,

WHEREAS, Paragraph ___ of the **Agreement**, (paragraph title), establishes _____; and,

WHEREAS, it has become necessary to amend the Agreement to _____

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said **Agreement** is amended as follows:

I. Paragraph ___ of the **Agreement**, (paragraph title), is revised to

_____
_____
_____
_____
_____
_____

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 20__.

THE ENGINEER:
HINOJOSA ENGINEERING, INC.

By: Oscar Cancino, P.E., President

THE OWNER:
HIDALGO COUNTY

By: Ramon Garcia, County Judge

ATTEST:

Arturo Guajardo Jr., County Clerk

LIST OF ATTACHMENTS

(as required)

EXHIBIT F

-Certificates of Insurance

BEARCON-01 CFEMIANO

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 03/03/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Smith-Reagan & Associates Inc 148 N Sam Houston San Benito, TX 78586	CONTACT NAME: PHONE (A/C, No, Ext): (956) 399-1353 FAX (A/C, No): (956) 399-2185 E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Colony Insurance Company	39993
INSURED STRADA Engineering and Consulting, LLC 3317 Alberta St. Edinburg, TX 78539	INSURER B : Progressive Co. Mutual Ins Co.	29203
	INSURER C : Texas Mutual Insurance Company	22945
	INSURER D : Landmark American Ins Co	
	INSURER E :	
	INSURER F :	

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PRO-JECT [ ] LOC [ ] OTHER:			103GL0012553-01	01/15/2017	01/15/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [X] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY			05832058-0	01/16/2017	01/16/2018	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N [ ] N / A If yes, describe under DESCRIPTION OF OPERATIONS below			0001300418	01/16/2017	01/16/2018	[ ] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
D	Professional Liabili			LHR761615	01/15/2017	01/15/2018	Aggregate Limit	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Hidalgo County Urban County
427 E Duranta Ave #107
Alamo, TX 78516

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

David B Smith

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CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-174581

Date Filed:
03/03/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
STRADA Engineering and Consulting LLC
McAllen, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Urban County - Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
5016-77-0309-5000-7700-UCP-GVG
Sullivan Drainage Improvements

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

MARISA R. SEPULVEDA
Notary Public
STATE OF TEXAS
Notary ID# 12965349-0
My Comm. Exp. 12-17-2017

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Oscar Canaid, this the 03 day of March, 20 17, to certify which, witness my hand and seal of office.

Signature of officer administering oath	Printed name of officer administering oath	Title of officer administering oath
	Marisa Sepulveda	NOTARY PUBLIC

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-174581

Date Filed:
03/03/2017

Date Acknowledged:
03/06/2017

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

STRADA Engineering and Consulting LLC
McAllen, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Urban County - Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

5016-77-0309-5000-7700-UCP-GVG
Sullivan Drainage Improvements

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

WORK AUTHORIZATION NO. 1

HIDALGO COUNTY
Professional Engineer Services

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, acting by and through the **Hidalgo County Urban County Program**, hereinafter called the "**Owner**," and, **STRADA Engineering and Consulting, LLC.** professional engineers of **Edinburg,** Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK
The purpose of this Work Authorization is for the "engineering services" to provide **professional engineering services**.

PART 2. ESTIMATED COST
The estimated cost for services under this Work Authorization is **$21,395.00**. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "A".**

PART 3. PAYMENT
Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section **4** of the Agreement.

PART 4. FUNDING
WORK AUTHORIZATION NO. **1** shall be funded through funding source:
ACCOUNT NO. **5016-77-0309-5000-7700-UCP-GVG**
PURCHASE ORDER NUMBER: _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE
This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of scopes of the work authorization**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS
This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and Confirmation by Hidalgo County Urban County Program, Diana R. Serna (Director) as to content and detail of this **Work Authorization No. 1 .**

HIDALGO COUNTY
URBAN COUNTY PROGRAM

BY: _____
DIANA R. SERNA, UCP DIRECTOR

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on March 21, 2017 as indicated below and effective as of 21st day of March, 2017 .

THE ENGINEER:

_____
By: Oscar Cancino, P.E.

THE OWNER:
HIDALGO COUNTY

_____
By: Ramon Garcia, County Judge

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

APPROVED AS TO FORM:
Atlas, Hall & Rodriguez, L.L.P.

By: _____

Exhibit A: Cost Proposal : (Best & Final Offer Letter & Cost Breakdown)

STRADA Group
Developing Solutions

STRADA Engineering and Consulting, LLC

March 3, 2017

Guadalupe V. Garcia
UCP Coordinator
Urban County – Hidalgo County

RE: Best and Final Offer – Sullivan Drainage Improvements

Ms. Garcia:

STRADA Engineering and Consulting, LLC (SEC) is pleased to submit our best and final offer in the amount of $21,395.00. SEC is pleased to provide our services for the aforementioned project.

Thank You for your time and attention as it relates to your important project. If you should have any questions or require additional information, please feel free to contact me at 956.648.7245 or via email at ocancino@rgv.rr.com.

Sincerely,

Oscar Cancino, P.E.
President
Enclosures

5111 North 10th St., #366, McAllen TX 78504 ♦ Phone: 956.627.3480 ♦ Fax: 956.800.4813

STRADA Engineering and Consulting, LLC

FEE BREAKDOWN

PROJECT	EST CONST COST	ENGINEERING FEE - 8.5 %	SURVEYING FEE - 2.5 %	GEOTECHNICAL FEE (LS) (NOT INCLUDED)	SUBTOTAL
Sullivan Drainage Improvements	$ 194,500.00	$ 16,532.50	$ 4,862.50	$ -	$ 215,895.00
FEE GRAND TOTAL					**$ 215,895.00**

Engineer fees.

O.C

16,532.50 +
4,862.50 +

002

21,395.00G+

AI-59006 **Urban County** **17. F.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Olga Lerma, URBAN COUNTY

Submitted By: Olga Lerma, URBAN COUNTY

Department: URBAN COUNTY

Information

CAPTION

"Subject to Compliance with HB 1295, when and if Applicable." The Urban County Program is requesting the award of bids and the approval of contracts with Quality Investment and R G Enterprises, LLC dba G & G Contractors for the demolition and reconstruction of the following:
1. (1) Unit in the City of Alamo in the total contract amount of $59,999.99 to Quality Investments; and
2. (2) Unit in the Countywide area and (1) unit in the City of San Juan in the total contract amount of $179,220.00 to R G Enterprises, LLC, dba G & G Contractors.

BACKGROUND

STAFF COMMENTS & RECOMMENDATION:

The applicants were approved to receive assistance under the Owner-Occupied Housing Rehabilitation Program by the County Commissioners' Court on January 24 & February 21, 2017. Bids were received and opened at the Hidalgo County Purchasing Department on Wednesday, March 8, 2017.

FY'15 Rehab Prog.
Funds Available: $463,510.43

APPROVED AS TO FORM
Atlas & Hall, L.L.P.
By: Steve Crain
Date: June 19, 2013

Fiscal Impact

Attachments

Bid Tabulation
G&G Contractors Form 1295 & Insurance
Quality Investment Form 1295 & Insurance
Agreement Ramirez
Agreement Trevino
Agreement Perez
Agreement Medina
ins

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/16/2017 04:15 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Olga Lerma		Started On: 03/16/2017 03:33 PM
Final Approval Date: 03/17/2017		

HIDALGO COUNTY PURCHASING DEPARTMENT BID TABULATION SHEET

DEPT NAME: COUNTY OF HIDALGO URBAN COUNTY PROGRAM

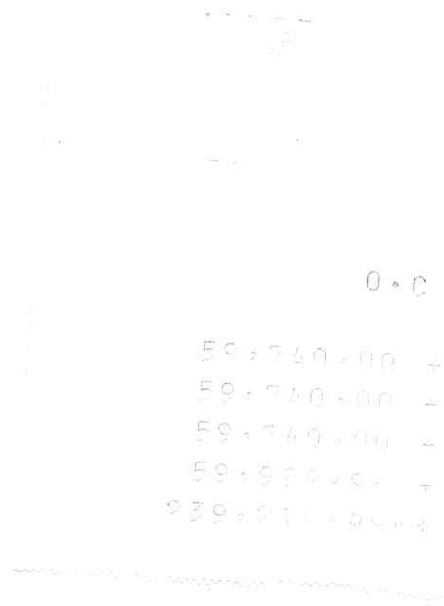
Bid Opening Date: March 08, 2017 Bid Opening Time: 9:30 am

Description of Bid: Demolition and Reconstruction of Two (2) Units in the Countywide Area One (1) Unit in the City of San Juan and one (1) unit in the City of Alamo

Grant #: M-12-UC-48-0501-RC-05

QUALITY INVESTMENTS			
	UNITS	TOTAL BID AMOUNT	BID BOND/CASHIER'S CHECK INCLUDED
1	A. Ramirez	$61,999.99	BB INCLUDED
2	F. Treviño	$61,999.99	BB INCLUDED
3	J. Perez	$59,999.99	BB INCLUDED
4	J. Medina	$59,999.99	BB INCULDED

RG ENTERPRISES dba G & G CONTRACTORS			
	UNITS	TOTAL BID AMOUNT	BID BOND/CASHIER'S CHECK INCLUDED
1	A. Ramirez	$59,740.00	BB INCLUDED
2	F. Treviño	$59,740.00	BB INCLUDED
3	J. Perez	$59,740.00	BB INCLUDED
4	J. Medina	$62,800.00	BB INCULDED



***TYPED AS READ AT BID OPENING, AMOUNTS NOT VERIFIED/CALCULATED**

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-175814

Date Filed:
03/07/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

RG Enterprises, LLC dba G&G Contractors
Edinburg, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County Urban County Program

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

M-12-UC-48-0501-RC-05
DEMOLITION & RECONSTRUCTION OF TWO (2) UNITS IN THE COUNTY WIDE AREA AN ONE (1) IN THE CITY OF SAN JUAN AND ONE (1) IN THE CITY OF ALAMO

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Garza, Rene	Edinburg, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

IRMA H. RODRIGUEZ
Notary Public, State of Texas
My Commission Expires
March 25, 2018

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Rene Garza, this the 08 day of March, 20 17, to certify which, witness my hand and seal of office.

Signature of officer administering oath	Irma H Rodriguez	Notary
	Printed name of officer administering oath	Title of officer administering oath

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 3/7/2016

PRODUCER
EDDIE VILLARREAL INSURANCE AGENCY
2167 S McColl Rd
Edinburg, TX 78539
(956) 381-0951

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
R G ENTERPRISES, LLC
G & G CONTRACTORS
5125 S US HWY 281 STE 1
EDINBURG, TX 78539
956-929-1567

INSURERS AFFORDING COVERAGE	NAIC#
INSURER A: ESSEX INSURANCE COMPANY	39020
INSURER B: TEXAS COUNTY MUTUAL	24392
INSURER C: TEXAS MUTUAL INS CO	22945
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE(MM/DD/YY)	POLICY EXPIRATION DATE(MM/DD/YY)	LIMITS	
A		GENERAL LIABILITY [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [ ] PRO-JECT [ ] LOC	3ED8689	03/16/16	03/16/17	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B		AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] ALL OWNED AUTOS [X] SCHEDULED AUTOS [ ] HIRED AUTOS [ ] NON-OWNED AUTOS	604891354	03/14/16	03/14/17	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
		GARAGE LIABILITY [ ] ANY AUTO				AUTO ONLY - EA ACCIDENT OTHER THAN AUTO ONLY: EA ACC AGG	$ $ $
		EXCESS/UMBRELLA LIABILITY [ ] OCCUR [ ] CLAIMS MADE [ ] DEDUCTIBLE [ ] RETENTION $				EACH OCCURRENCE AGGREGATE	$ $
C		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	SBP-0001221990	03-15-16	03-15-17	WC STATU-TORY LIMITS [X] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
		OTHER					

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

CONSTRUCTION CONTRACTOR

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL _____ DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

© ACORD CORPORATION 1988

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-178737

Date Filed:
03/15/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
QUALITY INVESTMENTS
Mission, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County-Urban County Program

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
M-12-UC-48-0501-RC-05
Demolition and Reconstruction of houses

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Villanueva, Emigdio	MISSION, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

#129984757

OLGA LERMA
Notary Public, State of Texas
My Commission Expires
October 07, 2018

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Emigdio Villanueva, this the 15th day of March, 20 17, to certify which, witness my hand and seal of office.

Olga Lerma — Signature of officer administering oath
Olga Lerma — Printed name of officer administering oath
Office Clerk — Title of officer administering oath

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/24/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Sue Coyle
Southern American Insurance Agency	PHONE (A/C, No, Ext): (281) 890-9294 FAX (A/C, No): (281) 890-2229
13823 Schmidt Road	E-MAIL ADDRESS: suec@southernamericanins.com
Cypress TX 77429	INSURER(S) AFFORDING COVERAGE / NAIC #
INSURED	INSURER A: Texas Mutual Insurance Co. 22945
Quality Investments, DBA: Emigdio Villanueva Jr.	INSURER B:
P. O. Box 943	INSURER C:
	INSURER D:
Mission TX 78573	INSURER E:
	INSURER F:

COVERAGES **CERTIFICATE NUMBER:17-18 WC** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ CLAIMS-MADE ☐ OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$
	OTHER:							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
A	UMBRELLA LIAB ☐ OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$
	DED ☐ RETENTION $			0001112441	1/1/2017	1/1/2018		$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N						PER STATUTE ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ N/A (Mandatory in NH)						E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Emilio Villanueva, owner, is excluded from coverage.

CERTIFICATE HOLDER

(956) 318-2988

Hildago County
Attn: Monica Guerra
427 E. Duranta Ave.
Alamo, TX 78516

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

S American Ins. Agcy. C. A. MacCleave

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CONSTRUCTION LOAN AGREEMENT

OWNER-OCCUPIED REHABILITATION LOAN PROGRAM

This Construction Loan Agreement (this "Agreement"), is entered into effective as **March 21, 2017**, among Borrower, Lender and Contractor who are identified and whose addresses are stated below. This Agreement relates to the manner of disbursement of the loan proceeds on the Note for the benefit of Borrower for the rehabilitation and/or renovation of the Improvements on the Property under the Lender's Owner-Occupied Housing Rehabilitation Program. The Note is secured by liens on the Property and Improvements granted the Mechanic's Lien Contract and the Deed of Trust.

BORROWER: **Arturo & Oralia C. Ramirez**

BORROWER'S ADDRESS:

13521 Collin Dr.,
Edinburg, Texas 78542

LENDER: County of Hidalgo, a political subdivision of the State of Texas

LENDER'S ADDRESS:

County of Hidalgo, Urban County Program
Owner-Occupied Rehabilitation Loan Program
427 E. Duranta Ave., Suite 107
Alamo, Texas 78516

CONTRACTOR: **R G Enterprises, LLC, G & G Contractors**

CONTRACTOR'S ADDRESS:

711 E. Wisconsin Rd
Edinburg, Texas 78539

NOTE:

Mechanic's Lien Note ("Mechanic's Lien Note") of even date herewith, in the original principal amount of **$59,740.00,** executed by Borrower, and payable to the order of Contractor, which note has been renewed and extended into a Promissory Note of even date herewith, in the original principal amount of **$59,740.00**, executed by Borrower, and payable to Lender.

CONTRACT:

Mechanic's Lien Contract and Transfer of Lien of even date herewith, executed by Borrower and Contractor providing for the rehabilitation and/or renovation to the Improvements and (i) granting Contractor liens against the Property to secure payment of the Mechanic's Lien Note; and (ii) transferring such liens to Lender.

SECURITY FOR PAYMENT:

Mechanic's and materialman's lien on the Property granted by Borrower to Contractor in the Mechanic's Lien Contract and Transfer of Lien (the "Mechanic's Lien Contract"), which liens were transferred thereunder to Lender, which Mechanic's Lien Contract and Transfer of Lien is recorded in the Real Property Records of Hidalgo County, Texas, and a deed of trust lien on the Property granted by Borrower for the benefit of Lender in a Deed of Trust ("Deed of Trust") of even date herewith, which Deed of Trust is recorded in the Real Property Records of Hidalgo County, Texas

PROPERTY: See Exhibit "A" attached hereto and made a part hereof for all purposes

IMPROVEMENTS:

Renovation and/or rehabilitation to Borrower's residence located on the Property according to: (i) Plans and Specifications, Timetable and Budget attached hereto as Exhibit "B"; (ii) an Owner-Occupied Rehabilitation Loan Program Contract (the "Rehabilitation Contract") of even date herewith entered into by and between Borrower and Lender; and (iii) the accepted bid submitted to Lender by Contractor.

AMOUNT AVAILABLE FOR CONSTRUCTION: **$59,740.00**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, Lender and Contractor agree as follows:

1. Purpose and Limitation of Advances.

(a) Subject to the provisions of this Agreement, and in compliance with Subchapter K, Chapter 53, Texas Property Code, Lender will advance funds to Contractor for the benefit of Borrower in the aggregate amount of the Note. Provided Contractor has obtained the performance bond required in Paragraph 1 (b) of this Agreement, Lender will advance the Amount Available for Construction during the course of the construction of the Improvements, in accordance with this Agreement. The Amount Available for Construction will be advanced solely to pay Contractor for costs of labor performed and materials furnished by Contractor pursuant to the Contract.

(b) Contractor may furnish a performance bond ("Bond"), at Contractor's sole cost and expense, to be kept in force throughout the period of this Agreement, in an amount equal to the Amount Available for Construction. The Bond shall: (i) cover Contractor's faithful performance of the Contract, free of liens upon the Property; (ii) name as obligees both Borrower and Lender, jointly and severally; (iii) be written by surety companies qualified to do business in the State of Texas; and (iv) be in such form and with such sureties as the Lender may approve.

(c) Construction advances are to be made by Lender to Borrower for work done.

(d) If Contractor has provided Lender and Borrower the Bond permitted by this Agreement, Contractor may submit a request for 40% of the Amount Available for Construction ("Initial Advance") when 50% of the work related to the Improvements have been completed and Contractor and Borrower have complied with the provisions of Paragraph 3 of this Agreement. A second request for construction advance for 50% of the Amount Available for Construction ("Final Advance") may be submitted when the Improvements have been completed and accepted by Borrower and Lender and Contractor and Borrower have complied with the provisions of Paragraph 4 of this Agreement.

(e) If Contractor has not provided Lender and Borrower the Bond permitted by this Agreement, Contractor may submit a request for 90% of the Amount Available for Construction when the Improvements have been completed and accepted by Borrower and Lender, and Contractor and Borrower have complied with the provisions of Paragraph 4 (except as to the Bond) of this Agreement.

(f) All requests for construction advances shall comply with Subchapter K, Chapter 53, Texas Property Code, and be made on forms approved by Lender. Each construction advance shall be in an amount equal to the Amount Available for Construction times the applicable percentage as determined by Lender and/or its inspectors. Lender may prepare a chart for determining the percentage of completion and the schedule of advances to be made by Lender, and Lender may limit advances according to the schedule based on the percentage of the Improvements that are complete at the time of any request for construction advance.

(g) Whenever in the sole opinion of Lender the cost of completing the Improvements pursuant to the plans and specifications approved by Lender exceeds the total amount of unadvanced loan proceeds, Borrower, at Lender's request, shall pay such excess to the satisfaction of Lender prior to any further advances under the Note.

2. Lender's Payments on Behalf of Borrower. Lender shall make payments for the cost of construction of the Improvements by check payable to the Owner and Contractor, or to Contractor, and in Lender's discretion, following Contractor's default under this Agreement or the Contract, jointly to Contractor and Contractor's subcontractors or suppliers.

3. Conditions to Initial Advance. Lender shall have no obligation to make the Initial Advance of funds to Borrower unless and until Contractor has furnished Borrower and Lender the Bond permitted by this Contract, and the following conditions have been satisfied:

(a) Borrower has executed and delivered to Lender this Agreement, the Contract, the Note, the Deed of Trust, the Owner-Occupied Rehabilitation Loan Program Contract of even date herewith by and between Borrower and Lender, and Affidavit of Commencement and other documents securing the loan evidenced by the Note; and Contractor has executed and delivered to Lender this Agreement, the Contract, an Affidavit of Commencement and other documents securing the loan evidenced by the Note;

(b) Borrower and Contractor have furnished Lender all documents required by Lender to evidence compliance with Subchapter K, Chapter 53, Texas Property Code;

(c) To the extent applicable, Contractor has furnished Lender evidence that Contractor has established a construction account in compliance with Chapter 162, Texas Property Code;

(d) Contractor has provided Lender a copy of the final plans and specifications for the construction of the Improvements acceptable to Lender, along with a timetable and budget for completion of the Improvements as required by this Agreement and the Contractor's accepted bid;

(e) Contractor has provided Lender a copy of the building permit for the Improvements;

(f) Contractor has provided Borrower and Lender a list of all subcontractors used or to be used for completion of the Improvements, and executed partial releases and lien waivers from Contractor and any subcontractors and suppliers who performed work and/or materials at any time in connection with the Improvements, in a form acceptable to Lender, for all amounts to be disbursed to Contractor against the Amount Available for Construction;

(g) Contractor has provided Lender a copy of all insurance policies, which Contractor is required to maintain under the Contract, or in lieu thereof, a certificate of insurance which confirms Contractor has obtained all insurance required under the Contract;

(h) Contractor has provided Lender evidence that Contractor is in compliance with Chapter 416, Texas Property Code; and

(i) Borrower and Contractor have provided Lender such other items as Lender shall reasonably require.

4. Final Advance. The Final Advance (except for retainage, which will be disbursed in accordance with paragraph 5) shall be disbursed at the completion of the Improvements when Contractor has delivered to Lender all documents required under Paragraph 3 and the following:

(a) an affidavit of completion executed by Borrower and Contractor (the "Affidavit of Completion"), a final bills- paid affidavit executed by Contractor (the "Final Bills-Paid Affidavit"), and final waivers of lien and releases executed by Contractor and any subcontractors and suppliers who performed work and/or materials at any time in connection

with the Improvements (collectively, the "Releases"), which documents comply with Subchapter K, Chapter 53, Texas Property Code and are acceptable to Lender, together with supporting evidence that: (i) the construction work for the Improvements has been fully completed; and (ii) all bills for labor and material have been paid in full;

(b) Evidence that Borrower and Contractor have complied with all applicable laws pertaining to the location, development, and construction of the Improvements and that all governmental authorities having jurisdiction have approved: (i) the location, development, and construction of the Improvements to the Property; and (ii) all other matters requiring approval by governmental authorities; and

(c) Borrower and Contractor have provided such other items as Lender shall reasonably require.

5. Disbursement of Retainage. The retainage will not be disbursed until: (i) (a) the Releases have been filed in the Real Property Records of Hidalgo County, Texas, (b) the deadline to file an affidavit claiming a lien against the Property in connection with the Improvements (that is, the fifteenth (15^{th}) day of the third calendar month after the day the indebtedness accrues) has expired and no such affidavits have been filed, or (c) if any affidavits claiming a lien against the Property in connection with the Improvements have been filed, the claims set forth in such affidavits have been resolved and the affidavits have been released of record; (iii) the Affidavit of Completion and the Final Bills-Paid Affidavit have been filed in the Real Property Records of Hidalgo County, Texas; and (iv) Borrower and Contractor have complied with Paragraph 4 of this Agreement.

6. Inspections. Lender shall be entitled to: (i) use its own personnel; or (ii) to designate an architect, engineer or other third party; to make any inspections or certifications required by Lender, and Lender shall not be required to make any loan advance until Lender has received inspections and certifications satisfactory to it. Prior to each loan advance, and at such other times as Lender may require, either Borrower or Contractor will be required to call for a physical inspection by Lender or other party designated by Lender.

7. Borrower's and Contractor's Additional Obligations. Borrower and Contractor further agree that:

(a) The Improvements will be constructed and fully equipped in a good and workmanlike manner with materials of high quality, using all new materials, strictly in accordance with the plans and specifications approved by Lender, and that the Improvements will comply with: (i) all applicable Housing Quality Standards contained in 24 Code of Federal Regulations, as amended, if the Property is located outside the jurisdiction of a municipality; or (ii) all applicable local building codes and ordinances of the municipality if the Property is located within the jurisdiction of a municipality, unless the municipality has no local building codes and ordinances, in which event Owner shall comply with all applicable Housing Quality Standards contained in 24 Code of Federal Regulations, as amended;

(b) No changes will be made in the plans and specifications submitted to Lender except on the written approval of the same by Lender;

(c) No extras shall be allowed to any contractor or subcontractor or any change made in any contract or subcontract without the Lender's prior written approval and consent;

(d) Contractor will promptly furnish Lender, at Lender's request, after execution thereof, executed copies of all contracts between Contractor and subcontractors, and of all contracts between Contractor and its suppliers, as well as contracts between subcontractors and their suppliers;

(e) Borrower and Contractor will cooperate with Lender in arranging for inspections by representatives of Lender of the progress of construction from time to time and will promptly comply with Lender's requirements or satisfy any objections regarding construction of the Improvements or the progress thereof;

(f) Borrower and Contractor will not suffer or permit any mechanics' or materialmen's lien claims to be filed or otherwise asserted against the Property and will promptly discharge the same in case of the filing of any claims for lien or proceedings for the enforcement thereof; provided, however, that Borrower shall have the right to contest in good faith and with reasonable diligence the validity of any such lien or claim on furnishing to Lender such security or indemnity as it may require;

(g) Borrower will pay all real estate taxes and assessments of every kind on the Property before the same become delinquent, and Lender may at any time require Borrower to provide evidence that taxes have been paid current;

(h) In the event that Lender shall expend any amount in performance of any of Borrower's covenants or agreements under the Note or any document securing the Note, such amounts shall constitute additional indebtedness secured under the Contract;

(i) All of the personal property, fixtures, attachments, and equipment delivered on, attached to, or used in connection with the construction of the Improvements or the operation thereof will be kept free and clear of all liens, encumbrances, and security interests whatsoever, and Borrower will be the absolute owner of such personal property, fixtures, attachments, and equipment and Contractor and Borrower will, from time to time, furnish Lender with satisfactory evidence of such ownership, including searches of applicable public records;

(j) Borrower and Contractor will comply with their respective obligations under this Agreement and the Contract and with all applicable laws, rules, ordinances and regulations;

(k) Borrower and Contractor will comply with the Special Conditions, if any, set forth in Exhibit "C" attached hereto;

(l) Contractor will pay all premiums on all insurance policies required from time to time during the progress of construction, and furnish to Lender additional and renewal insurance policies with companies, coverage, and amounts satisfactory to Lender; and

(m) Contractor will keep accurate and proper books and records of the construction of the Improvements, and will at all reasonable hours allow Lender or its representative to examine such books and records and all contracts and bills relating to the construction of the Improvements.

(l) Contractor shall not discriminate against any employee or applicant for employment because of sex, race, creed, color, national origin or handicap and shall take affirmative action to ensure that during the application process and during employment applicants and employees are treated without regard to their race, creed, color, national origin or handicap. Such action shall include, but not be limited to hiring and employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor shall continuously post in conspicuous places, readily available to employees and applicants for employment, notices to be provided or approved by the County of Hidalgo, setting forth the provisions of this non-discrimination provision and such other notices as may be required by law.

8. Actions For Lender's Benefit Only. **THE AUTHORITY HEREIN CONFERRED ON LENDER AND ANY ACTION TAKEN BY LENDER IN MAKING INSPECTIONS OF THE PROPERTY, PROCURING SWORN STATEMENTS AND WAIVERS OF LIENS, APPROVING CONTRACTS AND SUBCONTRACTS AND APPROVING PLANS AND SPECIFICATIONS WILL BE TAKEN BY LENDER FOR ITS OWN PROTECTION ONLY, AND LENDER SHALL NOT BE DEEMED TO HAVE ASSUMED ANY RESPONSIBILITY TO BORROWER OR ANY OTHER PERSON WITH RESPECT TO ANY SUCH ACTION HEREIN AUTHORIZED OR TAKEN BY LENDER OR WITH RESPECT TO THE PROPER CONSTRUCTION OF THE IMPROVEMENTS, PERFORMANCE OF CONTRACTS OR SUBCONTRACTS BY ANY CONTRACTORS OR SUBCONTRACTORS, OR PREVENTION OF CLAIMS FOR MECHANIC'S LIEN.**

9. Non-Waiver By Lender. No waiver of any breach or default hereunder shall constitute or be construed as a waiver by Lender of any subsequent breach or default or of any breach or default of any other provision. No waiver of any term or provision of this Agreement shall be binding unless executed in writing by the party entitled to the benefit thereof. Pursuit by Lender of any remedies set forth in this Agreement does not preclude pursuit by Lender of other remedies in this Agreement or provided by law.

10. Conflict of Interest. **BORROWER AND CONTRACTOR REPRESENT AND WARRANT TO LENDER THAT, TO THE BEST OF THEIR KNOWLEDGE, NO EMPLOYEE, AGENT, CONSULTANT, OFFICER, OR ELECTED OR APPOINTED OFFICIAL OF LENDER WHO EXERCISES OR HAS EXERCISED ANY FUNCTIONS OR RESPONSIBILITIES WITH RESPECT TO THE ACTIVITIES ASSISTED WITH THE LENDER'S OWNER-OCCUPIED REHABILITATION LOAN PROGRAM OR WHO ARE IN A POSITION TO PARTICIPATE IN A DECISION MAKING PROCESS OR GAIN INSIDE INFORMATION WITH REGARD TO THESE ACTIVITIES, DURING THEIR TENURE OR WITHIN ONE YEAR THEREAFTER, HAS A FINANCIAL INTEREST OR BENEFIT IN THE LOAN RELATED TO THIS AGREEMENT, OR THE PROCEEDS THEREUNDER, EITHER FOR THEMSELVES OR THOSE WITH WHOM THEY HAVE FAMILY OR BUSINESS TIES.**

11. Dispute Resolution. All disputes between Contractor and Borrower regarding the construction project which is the subject of this Agreement, including, but not limited to, all disputes with regard to the Contract and this Agreement, shall, in the first instance, be submitted, in writing, with supporting documentation, within ten (10) days of the incident giving rise to the dispute, to Lender's program director having responsibility for the Lender's owner-occupied rehabilitation loan program for resolution. Except for good cause shown, any dispute not submitted within such ten (10) day period shall be deemed waived. While a dispute is pending, Contractor and Borrower shall otherwise proceed to perform all obligations under the Contract and this Agreement not otherwise in dispute.

12. Sole and Only Agreement. This Agreement and its exhibits and the instruments executed in connection therewith constitute the sole and only agreement of the parties hereto and supersedes any prior understandings or written or oral agreements between the parties respecting the within subject matter.

13. Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provisions shall be excluded from this Agreement and the balance of this Agreement shall be interpreted as if such provisions were so excluded and shall be enforceable in accordance with its terms.

14. Interpretation. No provision of this Agreement will be interpreted in favor of, or against, any of the parties hereto by reason of the extent to which any such party or its counsel participated in the drafting thereof or by reason of the extent to which any such provision in inconsistent with any prior draft hereof or thereof. In the event of a conflict between this Agreement, the Mechanic's Lien Contract and/or the Rehabilitation Contract, the provisions in the document containing the most stringent requirement for the matter in dispute shall control

15. Jurisdiction and Venue. The parties agree that any suit, action or proceeding brought by a party against the other in connection with or arising from this Agreement ("Judicial Action") shall be brought only in any United States Federal or Texas state court located in Hidalgo County,

Texas and the parties hereby consent to the exclusive jurisdiction of such courts (and the appropriate appellate courts) in any such Judicial Action and waives any objection to venue laid therein. If either party is a prevailing party in a Judicial Action, such party is entitled to recover from the non-prevailing party all costs of such proceeding and reasonable attorney's fees.

16. General Provisions. This Agreement:

a. may not be assigned by Owner or Contractor without the prior written consent of County;

b. may not be amended or modified, in whole or in part, unless such amendment or modification is executed in writing by both parties;

c. binds and inures to the benefit of the parties and their respective heirs, successors and permitted assigns; and

d. is for the sole benefit of the parties hereto and their respective heirs, successors and permitted assigns. Nothing herein shall give, or be construed to give, any legal or equitable rights hereunder to any other person or entity other than the parties hereto and their respective heirs, successors and permitted assigns.

NOTICE

ANY HOLDER OF THIS CONSUMER CREDIT CONTRACT IS SUBJECT TO ALL CLAIMS AND DEFENSES WHICH THE DEBTOR COULD ASSERT AGAINST THE SELLER OF GOODS OR SERVICES OBTAINED PURSUANT HERETO OR WITH THE PROCEEDS HEREOF. RECOVERY HEREUNDER BY THE DEBTOR SHALL NOT EXCEED AMOUNTS PAID BY THE DEBTOR HEREUNDER.

IMPORTANT NOTICE: YOU AND YOUR CONTRACTOR ARE RESPONSIBLE FOR MEETING THE TERMS AND CONDITIONS OF THIS CONTRACT. IF YOU SIGN THIS CONTRACT AND YOU FAIL TO MEET THE TERMS AND CONDITIONS OF THIS CONTRACT, YOU MAY LOSE YOUR LEGAL OWNERSHIP RIGHTS IN YOUR HOME. KNOW YOUR RIGHTS AND DUTIES UNDER THE LAW.

RESIDENTIAL CONSTRUCTION LIABILITY ACT (RCLA) NOTICE

This contract is subject to Chapter 27 of the Texas Property Code. The provisions of that chapter may affect your right to recover damages arising from the performance of this contract. If you have a complaint concerning a construction defect arising from the performance of this contract and that defect has not been corrected through normal warranty service, you must provide the notice required by Chapter 27 of the Texas Property Code to the contractor by certified mail, return receipt requested, not later than the 60th day before the date you file suit to recover damages in a court of law or initiate arbitration. The notice must refer to Chapter 27 of the Texas Property Code and must describe the construction defect. If requested by the contractor, you must provide the contractor an opportunity to inspect and cure the defect as

provided by Section 27.004 of the Texas Property Code.

BORROWER(S):

_____

Arturo Ramirez

_____

Oralia C. Ramirez

YOU, THE OWNER, MAY CANCEL THIS TRANSACTION AT ANY TIME BEFORE MIDNIGHT OF THE THIRD BUSINESS DAY AFTER THE DATE OF THIS TRANSACTION. SEE THE ATTACHED NOTICE OF CANCELLATION FORM FOR AN EXPLANATION OF THIS RIGHT.

LENDER:

COUNTY OF HIDALGO, a political subdivision of the State of Texas

_____

By: **Diana R. Serna**
Its: **Director of Urban County Program**

CONTRACTOR:

_____

By: **Rene Garza**
Its: **R G Enterprises, LLC, dba G & G Contractors**

APPROVED AS TO FORM
Atlas & Hall, L.L.P.
By: Steve Crain
Date: June 19, 2013

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** day of **March, 2017** by **Diana R. Serna, Director of Urban County Program of the County of Hidalgo**, a political subdivision of the State of Texas, on behalf of said political subdivision.

_____
NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** of **March 2017**, by **Arturo Ramirez.**

_____
NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** of **March 2017**, by **Oralia C. Ramirez.**

_____
NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** day of **March 2017**, by **Rene Garza** with **R G Enterprises, LLC, dba G & G Contractors.**

_____
NOTARY PUBLIC, STATE OF TEXAS

YOU MAY CANCEL THIS TRANSACTION, WITHOUT ANY PENALTY OR OBLIGATION, WITHIN THREE BUSINESS DAYS FROM THE ABOVE DATE.

IF YOU CANCEL, ANY PROPERTY TRADED IN, ANY PAYMENTS MADE BY YOU UNDER THE CONTRACT OR SALE, AND ANY NEGOTIABLE INSTRUMENT EXECUTED BY YOU WILL BE RETURNED WITHIN TEN BUSINESS DAYS FOLLOWING RECEIPT BY THE MERCHANT OF YOUR CANCELLATION NOTICE, AND ANY SECURITY INTEREST ARISING OUT OF THE TRANSACTION WILL BE CANCELED.

IF YOU CANCEL YOU MUST MAKE AVAILABLE TO THE MERCHANT AT YOUR RESIDENCE, IN SUBSTANTIALLY AS GOOD CONDITION AS WHEN RECEIVED, ANY GOODS DELIVERED TO YOU UNDER THIS CONTRACT OR SALE; OR YOU MAY IF YOU WISH, COMPLY WITH THE INSTRUCTIONS OF THE MERCHANT REGARDING THE RETURN SHIPMENT OF THE GOODS AT THE MERCHANT'S EXPENSE AND RISK.

IF YOU DO NOT AGREE TO RETURN THE GOODS TO THE MERCHANT OR IF THE MERCHANT DOES NOT PICK THEM UP WITHIN TWENTY DAYS OF THE DATE OF YOUR NOTICE OF CANCELLATION, YOU MAY RETAIN OR DISPOSE OF THE GOODS WITHOUT ANY FURTHER OBLIGATION.

TO CANCEL THIS TRANSACTION, MAIL OR DELIVER A SIGNED AND DATED COPY OF THIS CANCELLATION NOTICE OR ANY OTHER WRITTEN NOTICE, OR SEND A TELEGRAM, TO RENE GARZA, R G ENTERPRISES, LLC, DBA G & G CONTRACTORS , AT 711 E. WISCONSIN RD, EDINBURG, TEXAS 78539 NOT LATER THAN MIDNIGHT OF MARCH 24, 2017.

I HEREBY CANCEL THIS TRANSACTION.

Dated: _____.

OWNER(S):

_____

Arturo Ramirez

_____

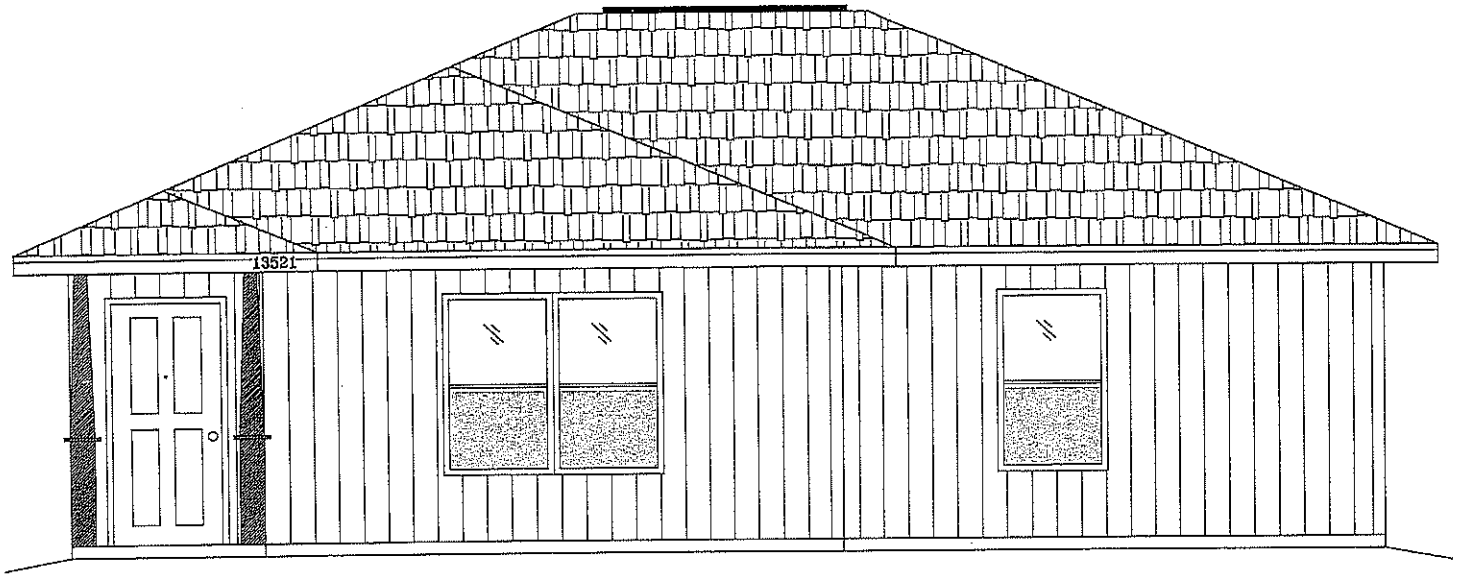
Oralia C. Ramirez

EXHIBIT "A"
LEGAL DESCRIPTION OF THE PROPERTY

Lot 10 Collin Subdivision, a Re-subdivision of the South 10 acres of the North 20 acres of Lot 14, Block 95, MO-TEX, Hidalgo County Texas.

EXHIBIT "B"
PLANS AND SPECIFICATIONS,
TIMETABLE
AND
BUDGET

RAMIREZ RESIDENCE



ARTURO & ORALIA RAMIREZ
13521 COLLIN DRIVE
EDINBURG, TX. 78542
(956) 272-8584
(956) 414-1351

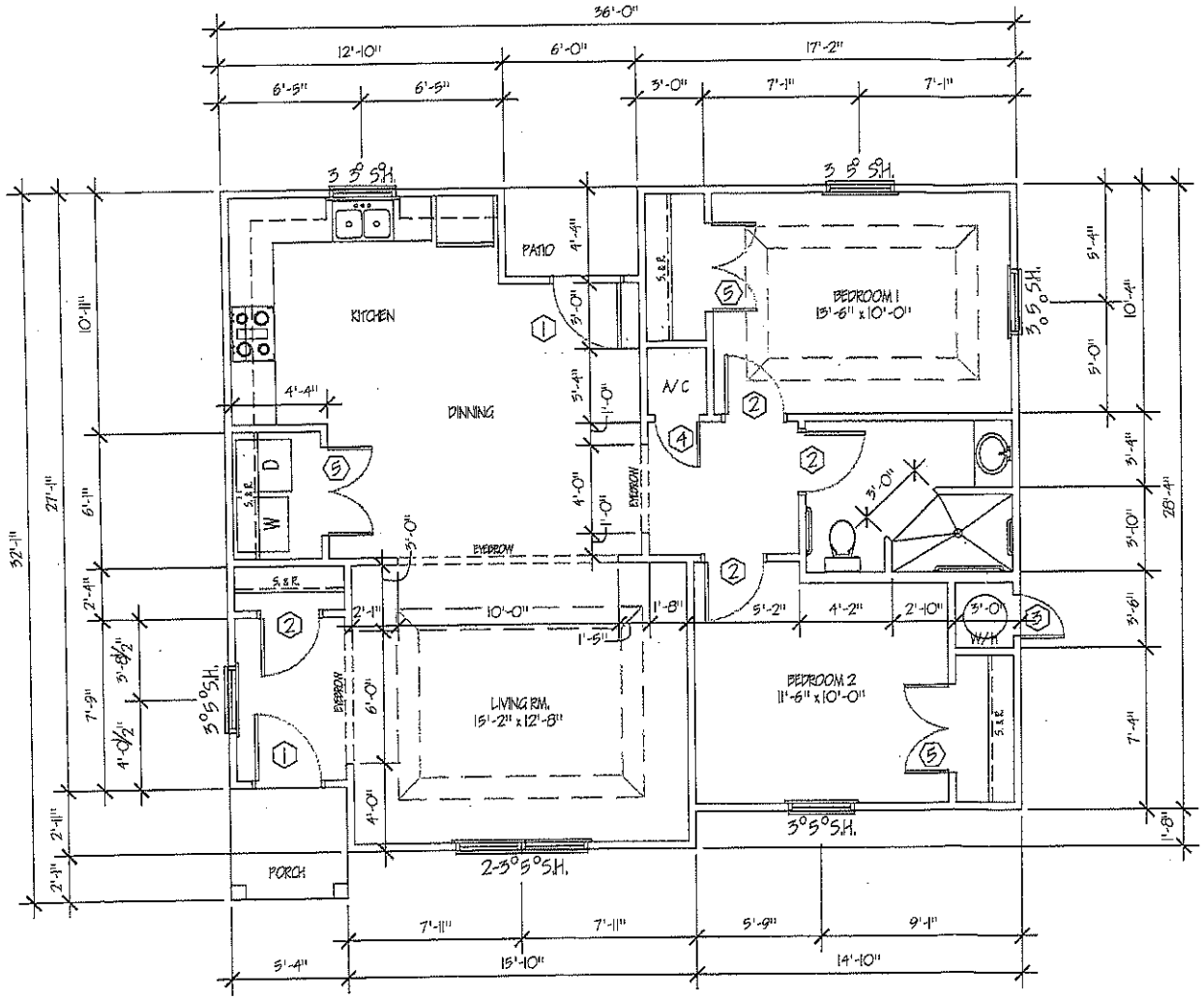
URBAN COUNTY PROGRAM
427 E. DURANTA STE 107-ALAMO
(956) 787-8127

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

TOTAL AREA
1064 SQ. FT.

ARTURO & ORALIA RAMIREZ
13521 COLLIN DRIVE., EDINBURG, TX.

C1.0



1 FLOOR PLAN

3/16" = 1'-0"

SQUARE FOOTAGE

LIVING AREA	1045
PORCH/ PATIO	19
TOTAL SQ. FT.	1064

DOOR SCEDULE

DR#	TASK	SIZ X 6 8	TYPE	LOCKS
1	INSTALL NEW UNIT W/ DUAL PEEP HOLES	3°	METAL W/ LOW PROFILE THRESH'D.	LEVER TYPE ENTRY LOCK W/ DEADBOLT.
2	INSTALL NEW UNIT	2⁸	HOLLOW CORE	LEVER TYPE PRIVACY
3	INSTALL NEW UNIT	2°	HOLLOW METAL	LOCK W/ DEADBOLT
4	INSTALL NEW UNIT	2°	HOLLOW CORE	N/C CLOSET PASSAGE
5	INSTALL NEW UNIT	(2) 2°	HOLLOW CORE	PASSAGE

GENERAL NOTES

-5/12 SLOPE WITH 16" OVERHANG
-SUPPLY RIDGE/ SOFFIT VENTS WHERE NEEDED
-INSTALL PORCH RAILING WHERE FINISH GRADE IS LOWER THAN 1" FROM PORCH FLOOR.
-INSTALL PORCH STEPS WHERE FINISH GRADE IS LOWER THAN 6" FROM PORCH FLOOR.
-CLIENT IS REQUESTING CONNECTIOS FOR A GAS / (ELECTRIC STOVE.)
-INSTALL A MIN. OF TWO PHONE JACKS & CABLE CONNECTIONS AS PER OWNERS REQUEST.

EXTERIOR COLOR CHOICES TO BE OR MATCH:

SW6668 Sunrise — SW6666 enjoyable yellow

INTERIOR COLOR CHOICES TO BE OR MATCH:

SW6612 Ravishing coral — SW6615 peppy

I HAVE READ AND FULLY AGREE WITH THE WRITE-UP AND PLANS AS PRESENTED TO ME THIS 3rd DAY OF Feb 2017

Arturo R Cantu

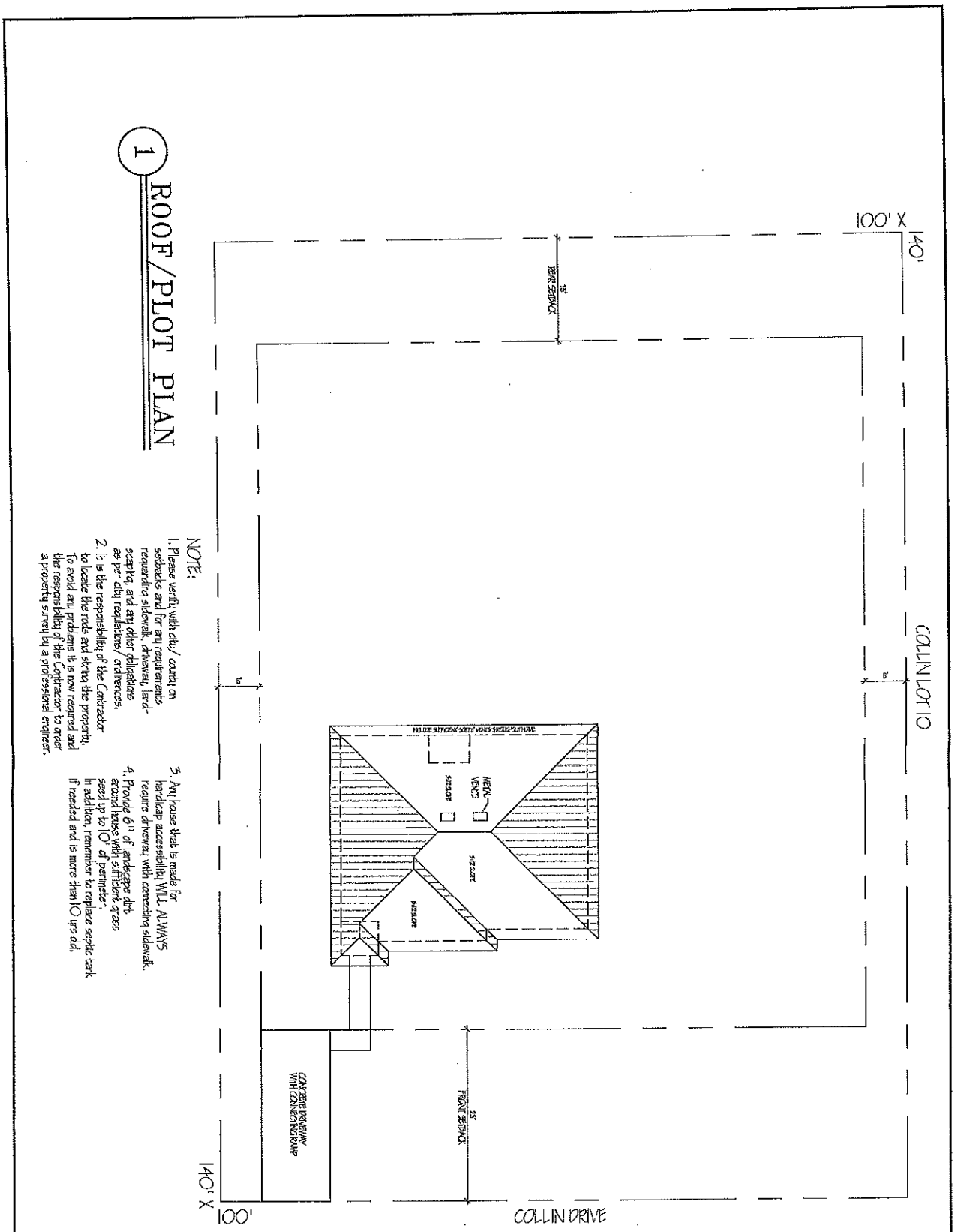
Rosalia C. Ramirez

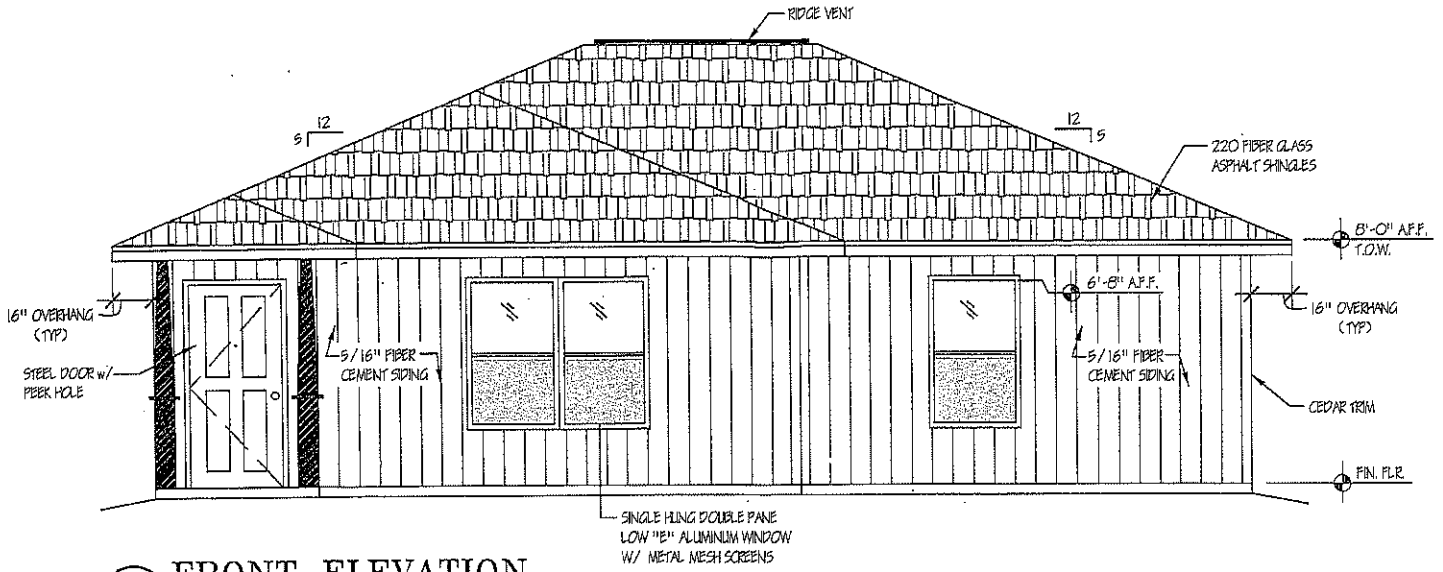
TOTAL AREA 1064 SQ. FT.

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

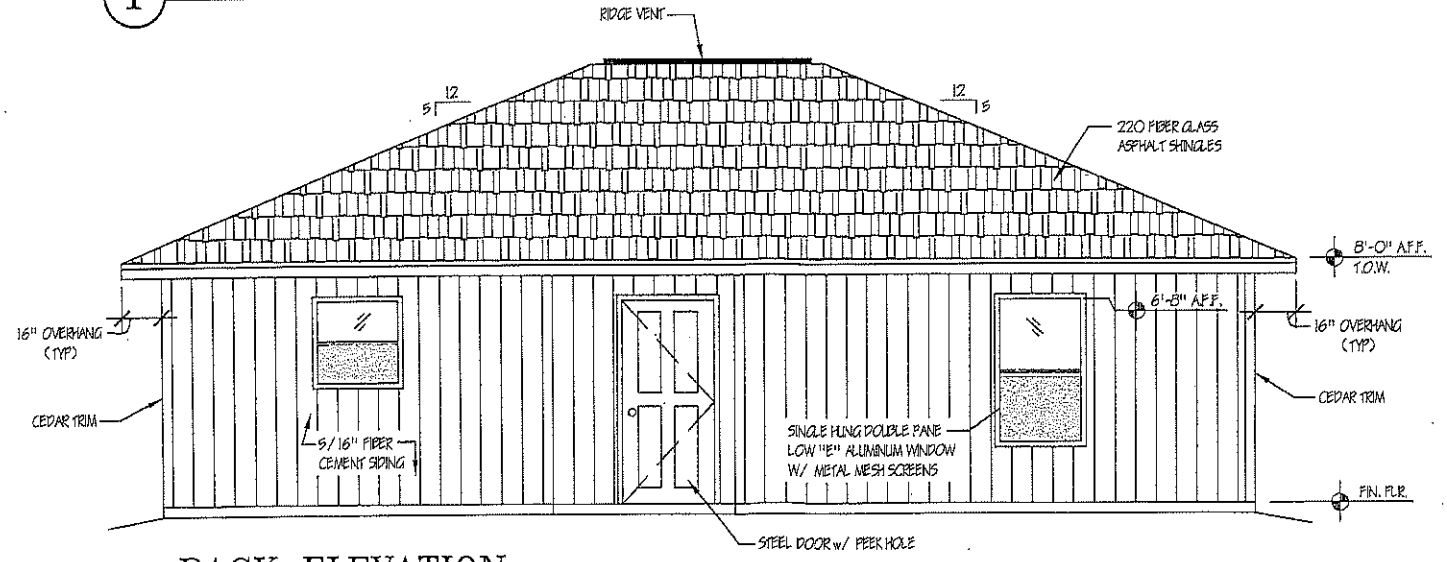
ARTURO & ORALIA RAMIREZ
13521 COLLIN DRIVE., EDINBURG, TX.

A1.1


1
ROOF/PLOT PLAN
100' X 140'
15' REAR SETBACK
COLLIN LOT 10
5'
5'
MEDIUM SHADE
MEDIUM SHADE
MEDIUM SHADE



1 FRONT ELEVATION



2 BACK ELEVATION

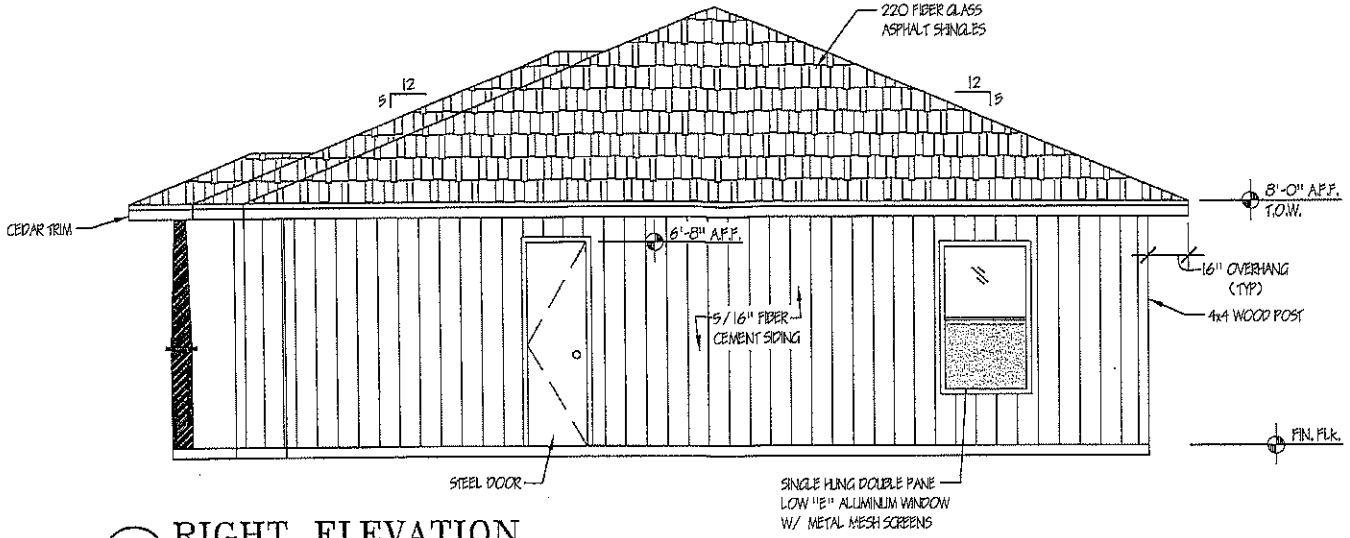
URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

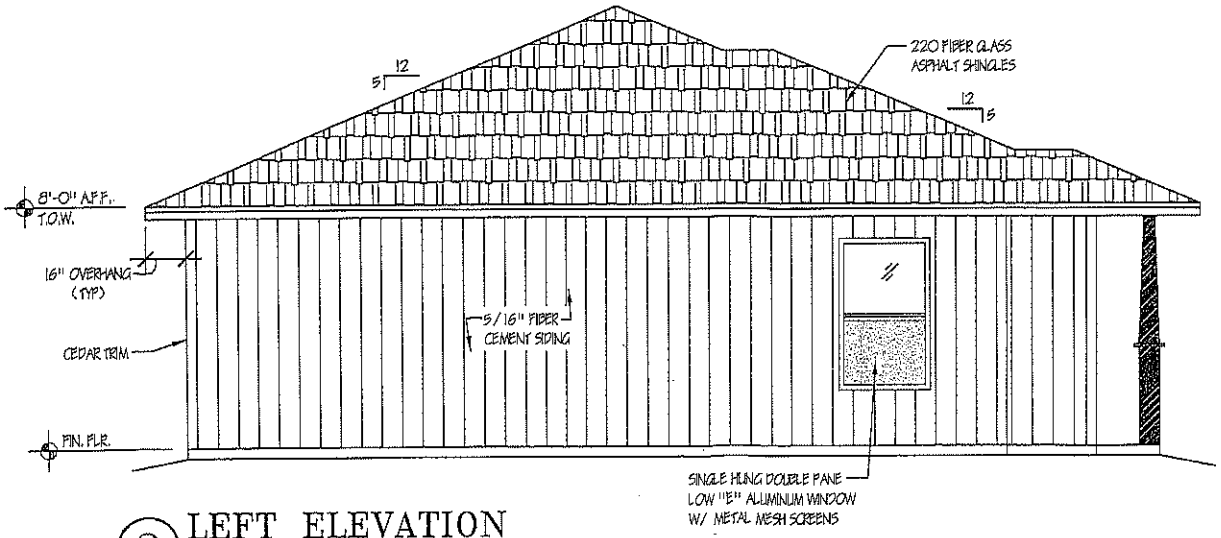
TOTAL AREA
1064 SQ. FT.

ARTURO & ORALIA RAMIREZ
13521 COLLIN DRIVE., EDINBURG, TX.

A1.2



1 RIGHT ELEVATION



2 LEFT ELEVATION

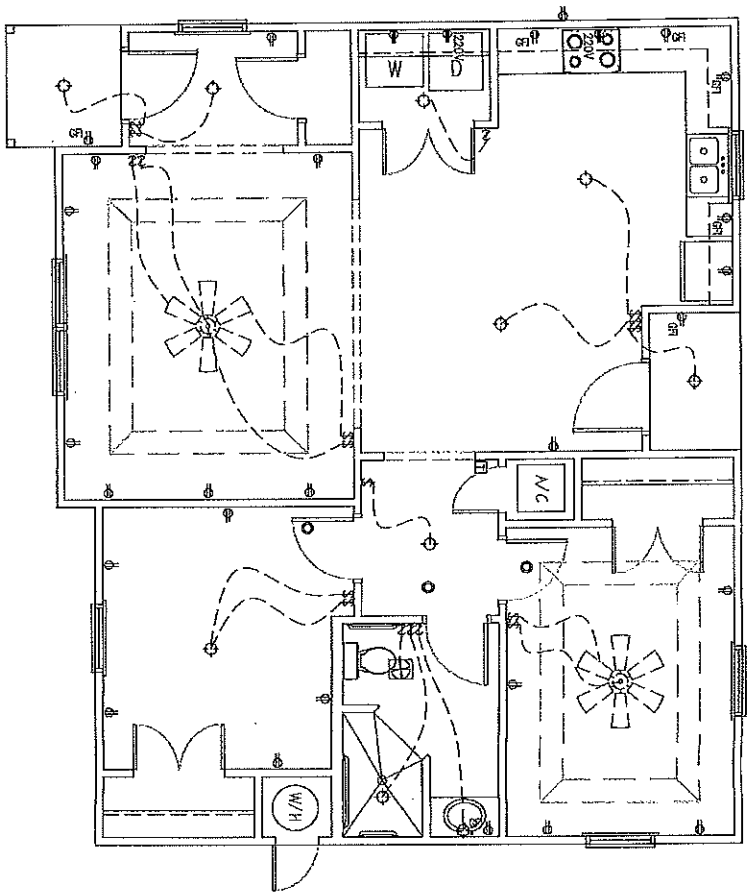
URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

ARTURO & ORALIA RAMIREZ
13521 COLLIN DRIVE., EDINBURG, TX.

TOTAL AREA
1064 SQ. FT.

A1.3



1 ELECTRICAL PLAN
3/16" = 1'-0"

ELECTRICAL LEGEND

WH WATER HEATER	LIGHT FIXTURE
PLEX ELECTRICAL RECEPT.	$ LIGHT SWITCH
220V DUPLEX ELECTRICAL RECEPTACLE	THERMOSTAT
GFI GROUND FAULT CIRCUIT INTERRUPTER	SMOKE DETECTOR
BATHROOM EXHAUST FAN	

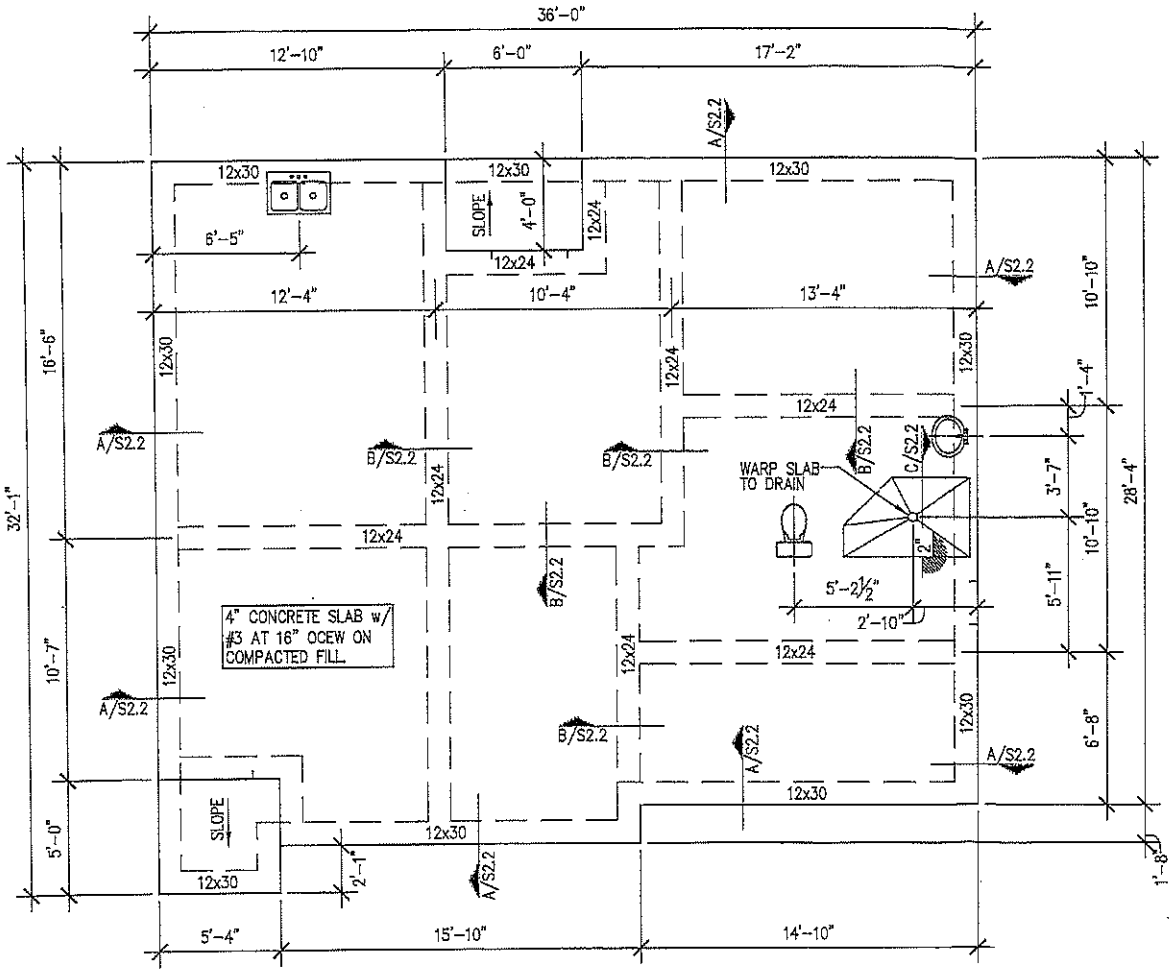
URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

E1.1

ARTURO & ORALIA RAMIREZ
13521 COLLIN DRIVE., EDINBURG, TX.

TOTAL AREA
1064 SQ. FT.



1 FOUNDATION PLAN

3/16" = 1'-0"

NOTES:

1. 4" THICK SLAB ON GRADE w/ #3 BARS AT 16" O.C.E.W. AT MID-DEPTH OF SLAB OVER 6 MIL. VISQUEEN OVER APPROVED COMPACTED FILL.
2. EXTERIOR GRADE BEAMS TO BE 12"x30" w/ 4-#5 BARS CONT. TOP AND BOTTOM w/ #3 STIRRUPS AT 24" o/c. A MINIMUM OF 6" IN DEPTH TO UNDISTURBED SOIL.
3. INTERIOR GRADE BEAMS TO BE 12"x24" w/ 4-#5 BARS CONT. TOP AND BOTTOM w/ #3 STIRRUPS AT 24" o/c. A MINIMUM OF 6" IN DEPTH TO UNDISTURBED SOIL.
4. CORNER BARS AT ALL CORNERS AND INTERSECTIONS SHALL BE #5 x 2'-0"x2'-0". APPLY 6x6 WIRE MESH AT SIDEWALKS AND DRIVEWAYS.
5. INSTALL ANCHOR BOLTS AT PERIMETER AT 48" o/c.
6. USE ONLY COMPACTED SELECT FILL DIRT. FINISH FLOOR TO BE 18" FROM TOP OF CURB, UNLESS OTHERWISE NOTED.

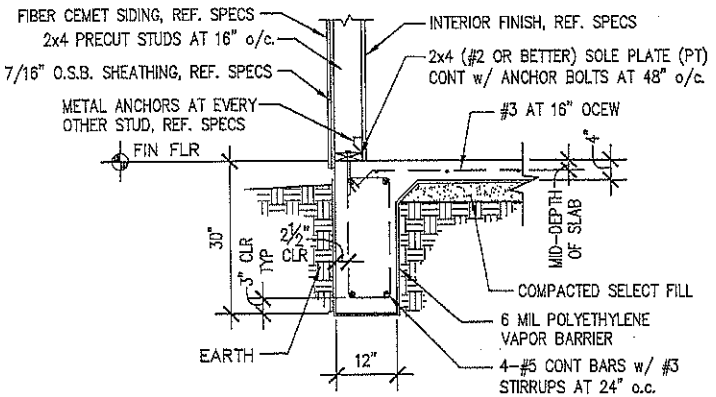
URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

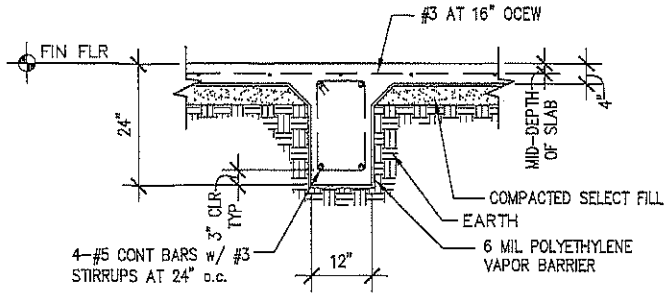
ARTURO & ORALIA RAMIREZ
13521 COLLIN DRIVE., EDINBURG, TX.

TOTAL AREA
1064 SQ. FT.

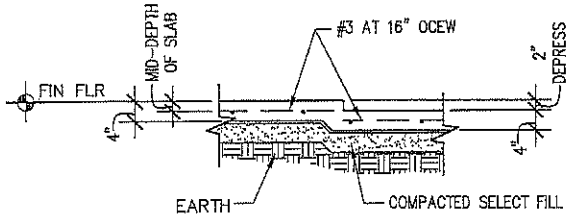
S2.1



A-EXTERIOR BEAM



B-INTERIOR BEAM



C-SHOWER DEPRESS

URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

ARTURO & ORALIA RAMIREZ
13521 COLLIN DRIVE., EDINBURG, TX.

TOTAL AREA
1064 SQ. FT.

S2.2

SPECIFICATIONS

ALL *SPECIFICATIONS* SHALL ASSUME THE USE OF *CONTRACTOR'S MINIMUM GENERAL SPECIFICATIONS MANUAL*

OWNER (S) ARTURO & ORALIA RAMIREZ CASE NO.: # 3190 DATE: 2/3/17 ADDRESS: 13521 COLLIN DRIVE. EDINBURG, TX PHONE: 956-272-8584 BY: ROBERT CAVAZOS

1. FOUNDATION WORK:

BUILD A NEW SLAB ON GRADE FOUNDATION TO COMPLY WITH PLANS, SPECS, CITY AND / COUNTY REQUIREMENTS. PROJECTS TO BE 18" ABOVE CENTER LINE OF STREET OR CURB OR 12" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. PROVIDE CONCRETE SLAB FOR A/C UNIT. PROVIDE A MIN. OF 12 X 25 DRIVEWAY (depending on city).

2. PLUMBING GENERAL: (SEE SPECS)

ALL PLUMBING ROUGH SHALL BE AS FOLLOWS:

- WATER SUPPLY TO HOUSE SHALL HAVE A ¾" CUTOFF VALVE BEFORE ENTRY TO HOUSE.
- INTERIOR WATER SUPPLY LINES FOR HOUSE SHALL BE ALL NEW PEX OF APPROPRIATE DIAMETER
- NEW PEX PIPES AND FITTINGS:
  - OF 1" MINIMUM DIAMETER FOR ALL EXTERIOR WATER SUPPLY LINES BELOW GROUND.
  - OF APROPRIATE DIAMETER FOR DWV (DRAIN, WASTE, AND VENTS).
- SEWER CONNECTION SHALL HAVE (1) PLASTIC PVC SEWER CLEAN OUT.

ALL PLUMBING FINISH SHALL BE AS FOLLOWS:

- RELATED PLUMBING ITEMS:
  - (2) EXTERIOR HOSE BRASS BIB FAUCETS:
  - ½" CUTOFF VALVES WITH ESCUTCHEONS FOR ALL FIXTURES.

FIXTURES:

- PLUMBING SEALANT FOR ALL DRAINS, AND SINK PERIMETERS
- ALL OTHER RELATED PLUMBING (SEE SPECS)

FIXTURES: (SEE SPECS)

- KITCHEN SINK W/ RELATED PLUMBING & FAUCETS
- PEDESTAL SINK W/ RELATED PLUMBING & FAUCETS
- TOILET OF MATCHING COLOR
- SHOWER WITH RELATED PLUMBING AND HANDICAP ACCESSIBLE.
- SHOWER FAUCETS & REMOVABLE SHOWER HEAD
- MEDICINE CABINETS/TOWEL RACKS/ T.P. DISPENCER/ TOOTHBRUSH & SOAP HOLDER, & SHOWER ROD (SEE SPECS)
- WATER HEATER INSTALLED AS-PER SPECS. (GAS OR ELECTRIC AS PER OWNER REQUEST)

OTHER RELATED ITEMS

- RANGE CONNECTIONS AS PER OWNERS REQUST.(SEE SECTION 23.)
- 4" DRYER EXAUST VENT.
- IN WALL WASHING MACHINE BOX, WITH BRASS FAUCETS & RELATED PLUMBING.

HOOK UP ALL DRAINAGE LINES TO CITY SEWER SYSTEM IF AVAILABLE. SEE CITY FOR INFORMATION.TEST SEPTIC SYSTEM IF EXISTING FOR INTEGRITY AND REPLACE IF NECESSARY AND MORE THAN 10 YEARS OF AGE

3. INTERIOR/EXTERIOR WALLS & CEILINGS:

ALL INTERIOR AND EXTERIOR WALL FRAMING:

- 2"x4" (#2 OR BETTER) FOR USE IN: SOLE PLATES (TREATED LUMBER)
  - DOUBLE TOP PLATES
  - 92 5/8" PRE-CUT STUDS @ 16" O.C.
  - WINDOW SILLS
  - CEILING JOIST CHAIN BLOCKING @ 48" O.C.
- 2"x6" (#2 OR BETTER) FOR USE IN:
  - WINDOW & DOOR HEADERS WITH 1"/2" PLYWOOD SPACER.
  - CEILING JOIST @ 24" O.C., FOR CLEARANCES LARGER THAN 12' CEILING JOIST SHALL BE @ 16" O.C.
  - INSTALL BOOT TIES IN EVERY CORNER OF THE HOUSE ALONG WITH METAL ANCHORS ON BOTH BOTTOM AND TOP PLATES OF HOME

ALL EXTERIOR CEILING COVERINGS:

- 3/8" CD EXTERIOR PLYWOOD FOR PORCH CEILINGS.

ALL INTERIOR WALL & CEILING COVERINGS.

- ½" SHEETROCK FINISHED AS PER SPECS.
- ½ "DAMP RESISTANT SHEETROCK FOR BATH AREAS.

ALL INTERIOR CEILINGS SHALL HAVE ORANGE PEEL TEXTURE.
ALL INTERIOR WALL SURFACESS SHALL HAVE ORANGE PEEL TEXTURE.
ALL EXTERTIOR TRIMMINGS SHOULD CONSIST OF CEDAR WOOD.

4. ROOF: (SLOPE=5/12)

ROOF SHALL HAVE:

- A HIP/GABLE STYLE ROOF WITH 16" OVERHANGS.
- A HIP/GABLE STYLE FRONT PORCH AS PER PLANS.
- PORCH COLUMNS MUST BE FASTENED TO CONCRETE.
- AN ADEQUATE COMBINATION OF RIDGE & SOFFIT VENTS WITH AIR CHUTES.
- ADEQUATE RAIN GUTTERS WITH DOWN SPOUTS FOR THE ROOF AREA THAT MAY AFFECT OWNERS.
- SHINGLES TO BE OF LIGHT COLOR (no black shingles)

5. PORCH & CANOPY FLOORS:

THE HOUSE SHALL HAVE PORCH FLOORS AS FOLLOWS:

- A FRONT PORCH FLOOR.
- A SIDE/BACK PORCH FLOOR.

PROVIDE RAMP & (2)-HANDRAILS TO EACH FRONT AND/OR SIDE PORCH STEPS

6. INSULATION:

INSULATE:

- ALL LIVING AREA CEILINGS WITH BLOWN IN INSULATION TO AN R-49 FACTOR. (need a combined R-30 & R-19 to meet requirement)
- HAVE RULER INSTALLED FOR EVER 300 SQUARE FEET BEFORE FRAMING AND ROUGH-IN INSPECTION IS SCHEDULED.
- INFILTRATION FOAM SHALL BE USED AROUND ALL WINDOWS, WIRES, PLUMBING, ELECTRICAL, 2X4 BOTTOM PLATES, AND ALL PENETRATED AREAS.
- ALL PERIMETER WALLS WITH R-15 F.G. BATT.
- ALL EXTERIOR PIPES EXPOSED TO WEATHER SHALL BE INSULATED.

7. INTERIOR FINISH:

ALL TRIM SHALL BE INSTALLED AS PER SPECS.
ALL PAINT SHALL BE APPLIED AS PER SPECS (2-COATS) WITH PAINT COMPARABLE IN QUALITY TO SHERWIN WILLIAMS. ALLOW A VARIETY OF DIFFERENT COLORS FOR CLIENT TO CHOOSE FROM. (2 COLOR CHOICE MIN).

8. EXTERIOR FINISH:

PAINT ENTIRE HOUSE AS PER SPECS WITH PAINT COMPARABLE IN QUALITY TO SHERWIN WILLIAMS. PRIMER TO BE OIL BASED & PAINT MUST BE EQUIVALENT TO A-100. (2 COLOR CHOICE MIN).

9. SIDING:

THE SIDING SHALL BE 5/16" FIBER CEMENT WITH ALL CEDAR TRIM TO ENTIRE HOUSE.
INSTALL 7/16" O.S.B. TO THE ENTIRE PERIMETER OF THE HOUSE AS PER MANUFACTURER'S SPECIFICATIONS. REFERENCE DETAIL.

10. WINDOWS:

SHALL BE NEW LOW "E" DOUBLE PANE INSULATED ALUMINUM WINDOWS, SIZE AS PER PLAN. KEEP LABELS ON WINDOWS UNTIL FINAL INSPECTION HAS BEEN CLEARED.

11. CABINETS GENERAL:

BUILD AND/OR INSTALL NEW KITCHEN CABINETS TO INCLUDE:

- A RANGE CABINET.
- A KITCHEN/ BATHROOM FORMICA COUNTER TOP OF MATCHING COLOR.

BUILD AND / OR INSTALL A NEW VANITY CABINET (IF APPLICABLE) FOR BATHROOM WITH FORMICA TO MATCH LAVATORY, SINK, AND WALLS. ALL CABINETRY PIECES SHOULD BE NEW AND COMPLETE AND-BUILT TO PROFESSIONAL STANDARDS.

12. FLOOR, SUBFLOOR, & FINISH FLOORING:

APPLY VCT FLOOR TILE TO ALL LIVING AREA HOUSE FLOORS.

13. ELECTRICAL GENERAL

ALL ELECTRICAL INSTALLATIONS & WORK AS PER ELECTRICAL CODE WITH THE FOLLOWING CONDITIONS:

- PROVIDE RANGE OUTLET AS PER OWNER'S REQUEST.
- PROVIDE APPROPRIATE WASHER & DRYER CONNECTION.
- (2) 52" CEILING FANS (CEILING HUGGER STYLE) COMPARABLE IN QUALITY TO THE "HUNTER" BRAND, THE CONTACTOR SHALL ALLOW $120.00 FOR MATERIAL & LABOR, LOCATON AS PER OWNER REQUEST.
- INSTALL GFCI OUTLETS IN BATHROOMS, KITCHEN, AND EXTERIOR WALLS.
- EACH ELECTRICAL PANEL OR BREAKERBOX, LIGHT SWITCH, & THERMOSTAT NO HIGHER THAN 48" ABOVE FLOOR
- EACH ELECTRICAL PLUG TO BE 15" ABOVE THE FLOOR
- ANY OUTLETS WITHIN 6' FROM KITCHEN OR BATHROOM SINKS MUST BE GFCI

14. RANGE HOOD:

INSTALL A RANGE HOOD TO FIT OWNER'S RANGE SIZE (30" OR 36") AND VENT TO EXTERIOR.

15. BATHROOM ACCESSORIES:

ALL ACCESSORIES & MEDICINE CABINETS AS PER SPECS, INCLUDE CURTAIN ROD & PLASTIC RETAINING DAM TO HELP PREVENT WATER FROM ESCAPING SHOWER. INSTALL PEDESTAL SINK AND CABINET ABOVE TOILET. (ALSO INCLUDE TOILET PAPER, TOOTHBRUSH, AND SOAP HOLDER.)

16. ACCESS FOR PHYSICAL DISABILITIES:

INSTALL ONE CONC. RAMP AS PER OWNERS REQUEST THAT CONNECTS WITH 12 X 25 DRIVEWAY AND STEPS WITH HANDRAILS
BATHROOM SHOULD ACCOMMODATE GRAB BARS WHERE INDICATED IN PLANS

17. HEATING & A/C:

PROVIDE & INSTALL A 16 SEER CENTRAL AIR CONDITIONING COMPARABLE IN QUALITY TO A CARRIER BRAND UNIT FOR THE ENTIRE HOUSE. INCLUDE DIGITAL THERMOSTAT.

18. SMOKE DETECTORS:

INSTALL A SMOKE DETECTOR INSIDE EACH SLEEPING ROOM, OUTSIDE SLEEPING ROOMS, ALL WIRED IN SERIES.

19. GENERAL NOTES.

CONTRACTOR IS RESPONSIBLE FOR:

- YOU'RE BID TO INCLUDE ANY COST RELATED TO REQUIREMENTS FROM CITY. CHANGE ORDERS FOR THIS PARTICULAR PURPOSE WILL NOT BE ACCEPTED OR PROCESSED TO CORRECT THE ABOVE MENTIONED.
- YOUR BID TO INCLUDE ANY COST RELATED TO RES-CHECK & ENERGY COMPLIANCE REQUIREMENTS.
- THE DEMOLISH AND DISPOSAL EXISTING STRUCTURE.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING SIDEWALKS, DRIVEWAYS, AND UTILITY LINES DURING DEMOLITION.
- THE COMPLIANCE OF ALL THE REQUIRED BUILDING ELEVATIONS.
- PROVIDE 6" OF LANDSCAPE DIRT AROUND THE HOUSE ALONG WITH SUFFICIENT GRASS SEEDS UP TO 10' OF PERIMETER.
- PROVIDING THE APPROPRIATE ELECTRICAL AND /OR GAS CONNECTIONS FOR RANGE AS PER APPICANT'S REQUEST AND ACCORDING TO APPLICABLE PLUMBING/ELECTRICAL CODE.
- PROVIDE PHONE JACKS & CABLE CONNECTIONS IN EVERY BDRM & LIVING SPACE. KITCHEN PHONE IF REQUESTED.
- PROVIDE TERMITE PRE-TREATMENT TO ENTIRE FOUNDATION PAD.
- OBTAINING, DISPLAYING, AND SUBMITTING ALL PROPER PERMITS & INSPECTIONS.
- ALL CONTRACTORS WILL BE RESPONSIBLE FOR ANY ADDITIONAL PLANS, SPECIFICATIONS AND/OR DETAILS THAT ARE REQUIRED BY CITIES OR COUNTY AT THE TIME OF ATTAINING PERMITS.
- MINIMUM 12x-25 CONC. DRIVEWAY WITH CONNECTING SIDEWALK TO RAMP FOR HANDICAP APPLICANTS.
- ALL THE GENERAL INFORMATION CONTAINED WITHIN SECTION 23. GENERAL NOTES OF THE CONTRACTOR'S GENERAL SPECIFICATIONS MANUAL.
- PROVIDE AND INSTALL PROJECTS SIGNS AT EACH CONSTRUCTION SITE PRIOR TO THE START OF CONSTRUCTION. FINES WILL BE ENFORCED.
- CONTRACTOR IS RESPONSIBLE FOR SUPPLYING PORT A POTTY THROUGHOUT CONSTRUCTION PROCESS (demo to final Inspection) FINES WILL BE ENFORCED.
- SHOWER ENTRANCES TO BE 36" WIDE.
- ALL UCP HOMES MUST COMPLY WITH TEXAS GOVERNMENT CODE §2306.514

THE HOMEOWNER SHALL BE RESPONSIBLE FOR

- REMOVE AND DISPOSE OF ALL DEBRIS ON SITE BEFORE THE BEGINNING OFCONSTRUCTION, INCLUDING BUT NOT LIMITED TO TIRES, ABANDONEDVEHICLES, OLD LUMBER, ETC.
- MAKING NECESSARY DEPOSITS FOR ANY UTILITIES TO BE CONNECTED TO THE NEW DWELLING.

SPECIFICATIONS

ALL *SPECIFICATIONS* SHALL ASSUME THE USE OF *CONTRACTOR'S MINIMUM GENERAL SPECIFICATIONS MANUAL*

OWNER (S) ARTURO & ORALIA RAMIREZ CASE NO.: # 3190 DATE: 2/3/17 ADDRESS: 13521 COLLIN DRIVE, EDINBURG, TX PHONE: 956-272-8584 BY: ROBERT CAVAZOS

I HAVE READ AND FULLY AGREE WITH THE WRITE-UP AND PLANS AS PRESENTED TO ME.

Arturo Ramirez

NAME OF APPLICANT

Oralia L. Ramirez

NAME OF CO-APPLICANT

TIME TABLE

ACTIVITY	DATE(S)
Contract Signing	March 7, 2017
Demolition	March 16, 2017
Construction Start	March 17, 2017
Anticipated Draws	After 50% construction completion After 100% construction completion 30 days after construction completion
Fnd Construction	June 5, 2017

BUDGET

	Total Cost
Pre-Development	$ 0.00
Acquisition	$ 0.00
Demolition/Construction	$59,740.00
Other Costs:	$ 0.00
TOTAL PROJECT COSTS	$59,740.00

EXHIBIT "C"
SPECIAL CONDITIONS

None.

CONSTRUCTION LOAN AGREEMENT

OWNER-OCCUPIED REHABILITATION LOAN PROGRAM

This Construction Loan Agreement (this "Agreement"), is entered into effective as **March 21, 2017**, among Borrower, Lender and Contractor who are identified and whose addresses are stated below. This Agreement relates to the manner of disbursement of the loan proceeds on the Note for the benefit of Borrower for the rehabilitation and/or renovation of the Improvements on the Property under the Lender's Owner-Occupied Housing Rehabilitation Program. The Note is secured by liens on the Property and Improvements granted the Mechanic's Lien Contract and the Deed of Trust.

BORROWER: **Felipe & Estela Trevino**

BORROWER'S ADDRESS:

13413 La Paloma St.,
Edinburg, Texas 78542

LENDER: County of Hidalgo, a political subdivision of the State of Texas

LENDER'S ADDRESS:

County of Hidalgo, Urban County Program
Owner-Occupied Rehabilitation Loan Program
427 E. Duranta Ave., Suite 107
Alamo, Texas 78516

CONTRACTOR: **R G Enterprises, LLC, dba G & G Contractors**

CONTRACTOR'S ADDRESS:

711 E. Wisconsin Rd
Edinburg, Texas 78539

NOTE:

Mechanic's Lien Note ("Mechanic's Lien Note") of even date herewith, in the original principal amount of **$59,740.00,** executed by Borrower, and payable to the order of Contractor, which note has been renewed and extended into a Promissory Note of even date herewith, in the original principal amount of **$59,740.00**, executed by Borrower, and payable to Lender.

CONTRACT:

Mechanic's Lien Contract and Transfer of Lien of even date herewith, executed by Borrower and Contractor providing for the rehabilitation and/or renovation to the Improvements and (i) granting Contractor liens against the Property to secure payment of the Mechanic's Lien Note; and (ii) transferring such liens to Lender.

SECURITY FOR PAYMENT:

Mechanic's and materialman's lien on the Property granted by Borrower to Contractor in the Mechanic's Lien Contract and Transfer of Lien (the "Mechanic's Lien Contract"), which liens were transferred thereunder to Lender, which Mechanic's Lien Contract and Transfer of Lien is recorded in the Real Property Records of Hidalgo County, Texas, and a deed of trust lien on the Property granted by Borrower for the benefit of Lender in a Deed of Trust ("Deed of Trust") of even date herewith, which Deed of Trust is recorded in the Real Property Records of Hidalgo County, Texas

PROPERTY: See Exhibit "A" attached hereto and made a part hereof for all purposes

IMPROVEMENTS:

Renovation and/or rehabilitation to Borrower's residence located on the Property according to: (i) Plans and Specifications, Timetable and Budget attached hereto as Exhibit "B"; (ii) an Owner-Occupied Rehabilitation Loan Program Contract (the "Rehabilitation Contract") of even date herewith entered into by and between Borrower and Lender; and (iii) the accepted bid submitted to Lender by Contractor.

AMOUNT AVAILABLE FOR CONSTRUCTION: **$59,740.00**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, Lender and Contractor agree as follows:

1. Purpose and Limitation of Advances.

(a) Subject to the provisions of this Agreement, and in compliance with Subchapter K, Chapter 53, Texas Property Code, Lender will advance funds to Contractor for the benefit of Borrower in the aggregate amount of the Note. Provided Contractor has obtained the performance bond required in Paragraph 1 (b) of this Agreement, Lender will advance the Amount Available for Construction during the course of the construction of the Improvements, in accordance with this Agreement. The Amount Available for Construction will be advanced solely to pay Contractor for costs of labor performed and materials furnished by Contractor pursuant to the Contract.

(b) Contractor may furnish a performance bond ("Bond"), at Contractor's sole cost and expense, to be kept in force throughout the period of this Agreement, in an amount equal to the Amount Available for Construction. The Bond shall: (i) cover Contractor's faithful performance of the Contract, free of liens upon the Property; (ii) name as obligees both Borrower and Lender, jointly and severally; (iii) be written by surety companies qualified to do business in the State of Texas; and (iv) be in such form and with such sureties as the Lender may approve.

(c) Construction advances are to be made by Lender to Borrower for work done.

(d) If Contractor has provided Lender and Borrower the Bond permitted by this Agreement, Contractor may submit a request for 40% of the Amount Available for Construction ("Initial Advance") when 50% of the work related to the Improvements have been completed and Contractor and Borrower have complied with the provisions of Paragraph 3 of this Agreement. A second request for construction advance for 50% of the Amount Available for Construction ("Final Advance") may be submitted when the Improvements have been completed and accepted by Borrower and Lender and Contractor and Borrower have complied with the provisions of Paragraph 4 of this Agreement.

(e) If Contractor has not provided Lender and Borrower the Bond permitted by this Agreement, Contractor may submit a request for 90% of the Amount Available for Construction when the Improvements have been completed and accepted by Borrower and Lender, and Contractor and Borrower have complied with the provisions of Paragraph 4 (except as to the Bond) of this Agreement.

(f) All requests for construction advances shall comply with Subchapter K, Chapter 53, Texas Property Code, and be made on forms approved by Lender. Each construction advance shall be in an amount equal to the Amount Available for Construction times the applicable percentage as determined by Lender and/or its inspectors. Lender may prepare a chart for determining the percentage of completion and the schedule of advances to be made by Lender, and Lender may limit advances according to the schedule based on the percentage of the Improvements that are complete at the time of any request for construction advance.

(g) Whenever in the sole opinion of Lender the cost of completing the Improvements pursuant to the plans and specifications approved by Lender exceeds the total amount of unadvanced loan proceeds, Borrower, at Lender's request, shall pay such excess to the satisfaction of Lender prior to any further advances under the Note.

2. Lender's Payments on Behalf of Borrower. Lender shall make payments for the cost of construction of the Improvements by check payable to the Owner and Contractor, or to Contractor, and in Lender's discretion, following Contractor's default under this Agreement or the Contract, jointly to Contractor and Contractor's subcontractors or suppliers.

3. Conditions to Initial Advance. Lender shall have no obligation to make the Initial Advance of funds to Borrower unless and until Contractor has furnished Borrower and Lender the Bond permitted by this Contract, and the following conditions have been satisfied:

(a) Borrower has executed and delivered to Lender this Agreement, the Contract, the Note, the Deed of Trust, the Owner-Occupied Rehabilitation Loan Program Contract of even date herewith by and between Borrower and Lender, and Affidavit of Commencement and other documents securing the loan evidenced by the Note; and Contractor has executed and delivered to Lender this Agreement, the Contract, an Affidavit of Commencement and other documents securing the loan evidenced by the Note;

(b) Borrower and Contractor have furnished Lender all documents required by Lender to evidence compliance with Subchapter K, Chapter 53, Texas Property Code;

(c) To the extent applicable, Contractor has furnished Lender evidence that Contractor has established a construction account in compliance with Chapter 162, Texas Property Code;

(d) Contractor has provided Lender a copy of the final plans and specifications for the construction of the Improvements acceptable to Lender, along with a timetable and budget for completion of the Improvements as required by this Agreement and the Contractor's accepted bid;

(e) Contractor has provided Lender a copy of the building permit for the Improvements;

(f) Contractor has provided Borrower and Lender a list of all subcontractors used or to be used for completion of the Improvements, and executed partial releases and lien waivers from Contractor and any subcontractors and suppliers who performed work and/or materials at any time in connection with the Improvements, in a form acceptable to Lender, for all amounts to be disbursed to Contractor against the Amount Available for Construction;

(g) Contractor has provided Lender a copy of all insurance policies, which Contractor is required to maintain under the Contract, or in lieu thereof, a certificate of insurance which confirms Contractor has obtained all insurance required under the Contract;

(h) Contractor has provided Lender evidence that Contractor is in compliance with Chapter 416, Texas Property Code; and

(i) Borrower and Contractor have provided Lender such other items as Lender shall reasonably require.

4. Final Advance. The Final Advance (except for retainage, which will be disbursed in accordance with paragraph 5) shall be disbursed at the completion of the Improvements when Contractor has delivered to Lender all documents required under Paragraph 3 and the following:

(a) an affidavit of completion executed by Borrower and Contractor (the "Affidavit of Completion"), a final bills- paid affidavit executed by Contractor (the "Final Bills-Paid Affidavit"), and final waivers of lien and releases executed by Contractor and any subcontractors and suppliers who performed work and/or materials at any time in connection

with the Improvements (collectively, the "Releases"), which documents comply with Subchapter K, Chapter 53, Texas Property Code and are acceptable to Lender, together with supporting evidence that: (i) the construction work for the Improvements has been fully completed; and (ii) all bills for labor and material have been paid in full;

(b) Evidence that Borrower and Contractor have complied with all applicable laws pertaining to the location, development, and construction of the Improvements and that all governmental authorities having jurisdiction have approved: (i) the location, development, and construction of the Improvements to the Property; and (ii) all other matters requiring approval by governmental authorities; and

(c) Borrower and Contractor have provided such other items as Lender shall reasonably require.

5. Disbursement of Retainage. The retainage will not be disbursed until: (i) (a) the Releases have been filed in the Real Property Records of Hidalgo County, Texas, (b) the deadline to file an affidavit claiming a lien against the Property in connection with the Improvements (that is, the fifteenth (15^{th}) day of the third calendar month after the day the indebtedness accrues) has expired and no such affidavits have been filed, or (c) if any affidavits claiming a lien against the Property in connection with the Improvements have been filed, the claims set forth in such affidavits have been resolved and the affidavits have been released of record; (iii) the Affidavit of Completion and the Final Bills-Paid Affidavit have been filed in the Real Property Records of Hidalgo County, Texas; and (iv) Borrower and Contractor have complied with Paragraph 4 of this Agreement.

6. Inspections. Lender shall be entitled to: (i) use its own personnel; or (ii) to designate an architect, engineer or other third party; to make any inspections or certifications required by Lender, and Lender shall not be required to make any loan advance until Lender has received inspections and certifications satisfactory to it. Prior to each loan advance, and at such other times as Lender may require, either Borrower or Contractor will be required to call for a physical inspection by Lender or other party designated by Lender.

7. Borrower's and Contractor's Additional Obligations. Borrower and Contractor further agree that:

(a) The Improvements will be constructed and fully equipped in a good and workmanlike manner with materials of high quality, using all new materials, strictly in accordance with the plans and specifications approved by Lender, and that the Improvements will comply with: (i) all applicable Housing Quality Standards contained in 24 Code of Federal Regulations, as amended, if the Property is located outside the jurisdiction of a municipality; or (ii) all applicable local building codes and ordinances of the municipality if the Property is located within the jurisdiction of a municipality, unless the municipality has no local building codes and ordinances, in which event Owner shall comply with all applicable Housing Quality Standards contained in 24 Code of Federal Regulations, as amended;

(b) No changes will be made in the plans and specifications submitted to Lender except on the written approval of the same by Lender;

(c) No extras shall be allowed to any contractor or subcontractor or any change made in any contract or subcontract without the Lender's prior written approval and consent;

(d) Contractor will promptly furnish Lender, at Lender's request, after execution thereof, executed copies of all contracts between Contractor and subcontractors, and of all contracts between Contractor and its suppliers, as well as contracts between subcontractors and their suppliers;

(e) Borrower and Contractor will cooperate with Lender in arranging for inspections by representatives of Lender of the progress of construction from time to time and will promptly comply with Lender's requirements or satisfy any objections regarding construction of the Improvements or the progress thereof;

(f) Borrower and Contractor will not suffer or permit any mechanics' or materialmen's lien claims to be filed or otherwise asserted against the Property and will promptly discharge the same in case of the filing of any claims for lien or proceedings for the enforcement thereof; provided, however, that Borrower shall have the right to contest in good faith and with reasonable diligence the validity of any such lien or claim on furnishing to Lender such security or indemnity as it may require;

(g) Borrower will pay all real estate taxes and assessments of every kind on the Property before the same become delinquent, and Lender may at any time require Borrower to provide evidence that taxes have been paid current;

(h) In the event that Lender shall expend any amount in performance of any of Borrower's covenants or agreements under the Note or any document securing the Note, such amounts shall constitute additional indebtedness secured under the Contract;

(i) All of the personal property, fixtures, attachments, and equipment delivered on, attached to, or used in connection with the construction of the Improvements or the operation thereof will be kept free and clear of all liens, encumbrances, and security interests whatsoever, and Borrower will be the absolute owner of such personal property, fixtures, attachments, and equipment and Contractor and Borrower will, from time to time, furnish Lender with satisfactory evidence of such ownership, including searches of applicable public records;

(j) Borrower and Contractor will comply with their respective obligations under this Agreement and the Contract and with all applicable laws, rules, ordinances and regulations;

(k) Borrower and Contractor will comply with the Special Conditions, if any, set forth in Exhibit "C" attached hereto;

(l) Contractor will pay all premiums on all insurance policies required from time to time during the progress of construction, and furnish to Lender additional and renewal insurance policies with companies, coverage, and amounts satisfactory to Lender; and

(m) Contractor will keep accurate and proper books and records of the construction of the Improvements, and will at all reasonable hours allow Lender or its representative to examine such books and records and all contracts and bills relating to the construction of the Improvements.

(l) Contractor shall not discriminate against any employee or applicant for employment because of sex, race, creed, color, national origin or handicap and shall take affirmative action to ensure that during the application process and during employment applicants and employees are treated without regard to their race, creed, color, national origin or handicap. Such action shall include, but not be limited to hiring and employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor shall continuously post in conspicuous places, readily available to employees and applicants for employment, notices to be provided or approved by the County of Hidalgo, setting forth the provisions of this non-discrimination provision and such other notices as may be required by law.

8. Actions For Lender's Benefit Only. **THE AUTHORITY HEREIN CONFERRED ON LENDER AND ANY ACTION TAKEN BY LENDER IN MAKING INSPECTIONS OF THE PROPERTY, PROCURING SWORN STATEMENTS AND WAIVERS OF LIENS, APPROVING CONTRACTS AND SUBCONTRACTS AND APPROVING PLANS AND SPECIFICATIONS WILL BE TAKEN BY LENDER FOR ITS OWN PROTECTION ONLY, AND LENDER SHALL NOT BE DEEMED TO HAVE ASSUMED ANY RESPONSIBILITY TO BORROWER OR ANY OTHER PERSON WITH RESPECT TO ANY SUCH ACTION HEREIN AUTHORIZED OR TAKEN BY LENDER OR WITH RESPECT TO THE PROPER CONSTRUCTION OF THE IMPROVEMENTS, PERFORMANCE OF CONTRACTS OR SUBCONTRACTS BY ANY CONTRACTORS OR SUBCONTRACTORS, OR PREVENTION OF CLAIMS FOR MECHANIC'S LIEN.**

9. Non-Waiver By Lender. No waiver of any breach or default hereunder shall constitute or be construed as a waiver by Lender of any subsequent breach or default or of any breach or default of any other provision. No waiver of any term or provision of this Agreement shall be binding unless executed in writing by the party entitled to the benefit thereof. Pursuit by Lender of any remedies set forth in this Agreement does not preclude pursuit by Lender of other remedies in this Agreement or provided by law.

10. Conflict of Interest. **BORROWER AND CONTRACTOR REPRESENT AND WARRANT TO LENDER THAT, TO THE BEST OF THEIR KNOWLEDGE, NO EMPLOYEE, AGENT, CONSULTANT, OFFICER, OR ELECTED OR APPOINTED OFFICIAL OF LENDER WHO EXERCISES OR HAS EXERCISED ANY FUNCTIONS OR RESPONSIBILITIES WITH RESPECT TO THE ACTIVITIES ASSISTED WITH THE LENDER'S OWNER-OCCUPIED REHABILITATION LOAN PROGRAM OR WHO ARE IN A POSITION TO PARTICIPATE IN A DECISION MAKING PROCESS OR GAIN INSIDE INFORMATION WITH REGARD TO THESE ACTIVITIES, DURING THEIR TENURE OR WITHIN ONE YEAR THEREAFTER, HAS A FINANCIAL INTEREST OR BENEFIT IN THE LOAN RELATED TO THIS AGREEMENT, OR THE PROCEEDS THEREUNDER, EITHER FOR THEMSELVES OR THOSE WITH WHOM THEY HAVE FAMILY OR BUSINESS TIES.**

11. Dispute Resolution. All disputes between Contractor and Borrower regarding the construction project which is the subject of this Agreement, including, but not limited to, all disputes with regard to the Contract and this Agreement, shall, in the first instance, be submitted, in writing, with supporting documentation, within ten (10) days of the incident giving rise to the dispute, to Lender's program director having responsibility for the Lender's owner-occupied rehabilitation loan program for resolution. Except for good cause shown, any dispute not submitted within such ten (10) day period shall be deemed waived. While a dispute is pending, Contractor and Borrower shall otherwise proceed to perform all obligations under the Contract and this Agreement not otherwise in dispute.

12. Sole and Only Agreement. This Agreement and its exhibits and the instruments executed in connection therewith constitute the sole and only agreement of the parties hereto and supersedes any prior understandings or written or oral agreements between the parties respecting the within subject matter.

13. Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provisions shall be excluded from this Agreement and the balance of this Agreement shall be interpreted as if such provisions were so excluded and shall be enforceable in accordance with its terms.

14. Interpretation. No provision of this Agreement will be interpreted in favor of, or against, any of the parties hereto by reason of the extent to which any such party or its counsel participated in the drafting thereof or by reason of the extent to which any such provision in inconsistent with any prior draft hereof or thereof. In the event of a conflict between this Agreement, the Mechanic's Lien Contract and/or the Rehabilitation Contract, the provisions in the document containing the most stringent requirement for the matter in dispute shall control

15. Jurisdiction and Venue. The parties agree that any suit, action or proceeding brought by a party against the other in connection with or arising from this Agreement ("Judicial Action") shall be brought only in any United States Federal or Texas state court located in Hidalgo County,

Texas and the parties hereby consent to the exclusive jurisdiction of such courts (and the appropriate appellate courts) in any such Judicial Action and waives any objection to venue laid therein. If either party is a prevailing party in a Judicial Action, such party is entitled to recover from the non-prevailing party all costs of such proceeding and reasonable attorney's fees.

16. General Provisions. This Agreement:

a. may not be assigned by Owner or Contractor without the prior written consent of County;

b. may not be amended or modified, in whole or in part, unless such amendment or modification is executed in writing by both parties;

c. binds and inures to the benefit of the parties and their respective heirs, successors and permitted assigns; and

d. is for the sole benefit of the parties hereto and their respective heirs, successors and permitted assigns. Nothing herein shall give, or be construed to give, any legal or equitable rights hereunder to any other person or entity other than the parties hereto and their respective heirs, successors and permitted assigns.

NOTICE

ANY HOLDER OF THIS CONSUMER CREDIT CONTRACT IS SUBJECT TO ALL CLAIMS AND DEFENSES WHICH THE DEBTOR COULD ASSERT AGAINST THE SELLER OF GOODS OR SERVICES OBTAINED PURSUANT HERETO OR WITH THE PROCEEDS HEREOF. RECOVERY HEREUNDER BY THE DEBTOR SHALL NOT EXCEED AMOUNTS PAID BY THE DEBTOR HEREUNDER.

IMPORTANT NOTICE: YOU AND YOUR CONTRACTOR ARE RESPONSIBLE FOR MEETING THE TERMS AND CONDITIONS OF THIS CONTRACT. IF YOU SIGN THIS CONTRACT AND YOU FAIL TO MEET THE TERMS AND CONDITIONS OF THIS CONTRACT, YOU MAY LOSE YOUR LEGAL OWNERSHIP RIGHTS IN YOUR HOME. KNOW YOUR RIGHTS AND DUTIES UNDER THE LAW.

RESIDENTIAL CONSTRUCTION LIABILITY ACT (RCLA) NOTICE

This contract is subject to Chapter 27 of the Texas Property Code. The provisions of that chapter may affect your right to recover damages arising from the performance of this contract. If you have a complaint concerning a construction defect arising from the performance of this contract and that defect has not been corrected through normal warranty service, you must provide the notice required by Chapter 27 of the Texas Property Code to the contractor by certified mail, return receipt requested, not later than the 60th day before the date you file suit to recover damages in a court of law or initiate arbitration. The notice must refer to Chapter 27 of the Texas Property Code and must describe the construction defect. If requested by the contractor, you must provide the contractor an opportunity to inspect and cure the defect as

provided by Section 27.004 of the Texas Property Code.

BORROWER(S):

_____

Felipe Trevino

_____

Estela Trevino

YOU, THE OWNER, MAY CANCEL THIS TRANSACTION AT ANY TIME BEFORE MIDNIGHT OF THE THIRD BUSINESS DAY AFTER THE DATE OF THIS TRANSACTION. SEE THE ATTACHED NOTICE OF CANCELLATION FORM FOR AN EXPLANATION OF THIS RIGHT.

LENDER:

COUNTY OF HIDALGO, a political subdivision of the State of Texas

_____

By: **Diana R. Serna**
Its: **Director of Urban County Program**

CONTRACTOR:

_____

By: **Rene Garza**
Its: **R G Enterprises, LLC, dba**
G & G Contractors

APPROVED AS TO FORM
Atlas & Hall, L.L.P.
By: Steve Crain
Date: June 19, 2013

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** day of **March, 2017** by **Diana R. Serna, Director of Urban County Program of the County of Hidalgo**, a political subdivision of the State of Texas, on behalf of said political subdivision.

_____
NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** of **March 2017**, by **Felipe Trevino.**

_____
NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** of **March 2017**, by **Estela Trevino.**

_____
NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** day of **March 2017**, by **Rene Garza** with **R G Enterprises, LLC, dba G & G Contractors .**

_____
NOTARY PUBLIC, STATE OF TEXAS

YOU MAY CANCEL THIS TRANSACTION, WITHOUT ANY PENALTY OR OBLIGATION, WITHIN THREE BUSINESS DAYS FROM THE ABOVE DATE.

IF YOU CANCEL, ANY PROPERTY TRADED IN, ANY PAYMENTS MADE BY YOU UNDER THE CONTRACT OR SALE, AND ANY NEGOTIABLE INSTRUMENT EXECUTED BY YOU WILL BE RETURNED WITHIN TEN BUSINESS DAYS FOLLOWING RECEIPT BY THE MERCHANT OF YOUR CANCELLATION NOTICE, AND ANY SECURITY INTEREST ARISING OUT OF THE TRANSACTION WILL BE CANCELED.

IF YOU CANCEL YOU MUST MAKE AVAILABLE TO THE MERCHANT AT YOUR RESIDENCE, IN SUBSTANTIALLY AS GOOD CONDITION AS WHEN RECEIVED, ANY GOODS DELIVERED TO YOU UNDER THIS CONTRACT OR SALE; OR YOU MAY IF YOU WISH, COMPLY WITH THE INSTRUCTIONS OF THE MERCHANT REGARDING THE RETURN SHIPMENT OF THE GOODS AT THE MERCHANT'S EXPENSE AND RISK.

IF YOU DO NOT AGREE TO RETURN THE GOODS TO THE MERCHANT OR IF THE MERCHANT DOES NOT PICK THEM UP WITHIN TWENTY DAYS OF THE DATE OF YOUR NOTICE OF CANCELLATION, YOU MAY RETAIN OR DISPOSE OF THE GOODS WITHOUT ANY FURTHER OBLIGATION.

TO CANCEL THIS TRANSACTION, MAIL OR DELIVER A SIGNED AND DATED COPY OF THIS CANCELLATION NOTICE OR ANY OTHER WRITTEN NOTICE, OR SEND A TELEGRAM, TO RENE GARZA, R G ENTERPRISES, LLC, DBA G & G CONTRACTORS , AT 711 E. WISCONSIN RD, EDINBURG, TEXAS 78539 NOT LATER THAN MIDNIGHT OF MARCH 24, 2017.

I HEREBY CANCEL THIS TRANSACTION.

Dated: _____.

OWNER(S):

_____

Felipe Trevino

_____

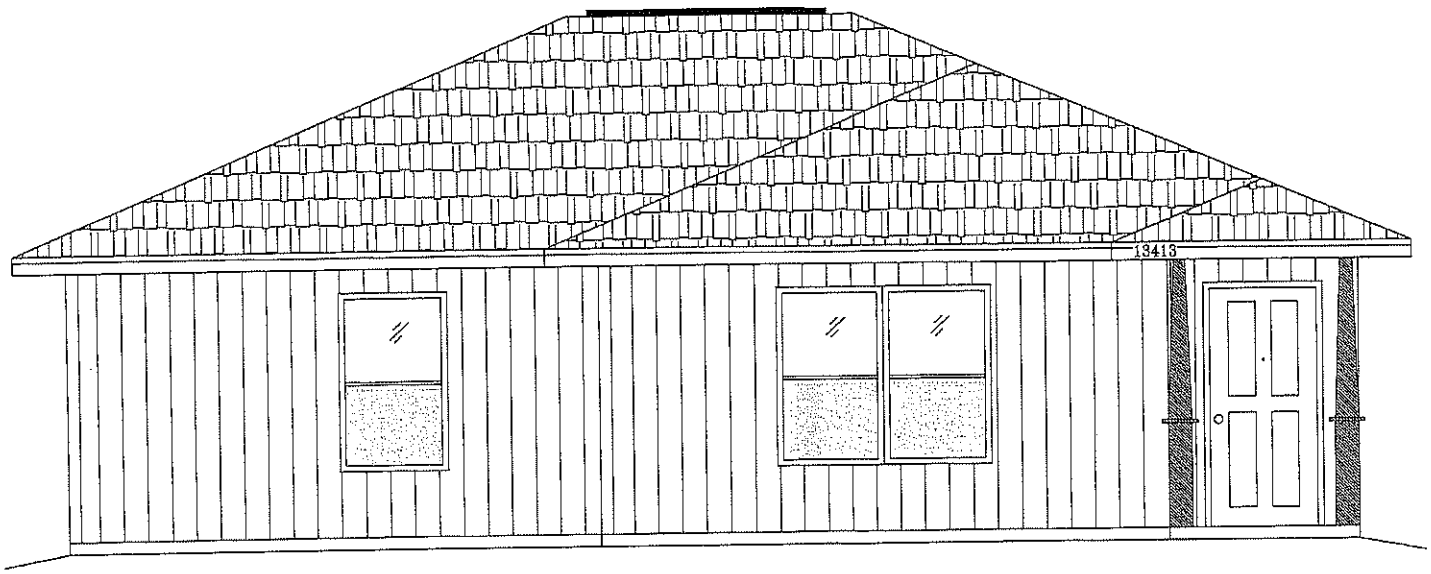
Estela Trevino

EXHIBIT "A"
LEGAL DESCRIPTION OF THE PROPERTY

Lot 9 of the Cinco Hermanas Subdivision, of the lands in Hidalgo County Texas.

EXHIBIT "B"
PLANS AND SPECIFICATIONS,
TIMETABLE
AND
BUDGET

TREVINO RESIDENCE



FELIPE & ESTELA TREVINO
13413 LA PALOMA STREET
EDINBURG, TX. 78542
(956) 789-0040

URBAN COUNTY PROGRAM
427 E. DURANTA STE 107-ALAMO
(956) 787-8127

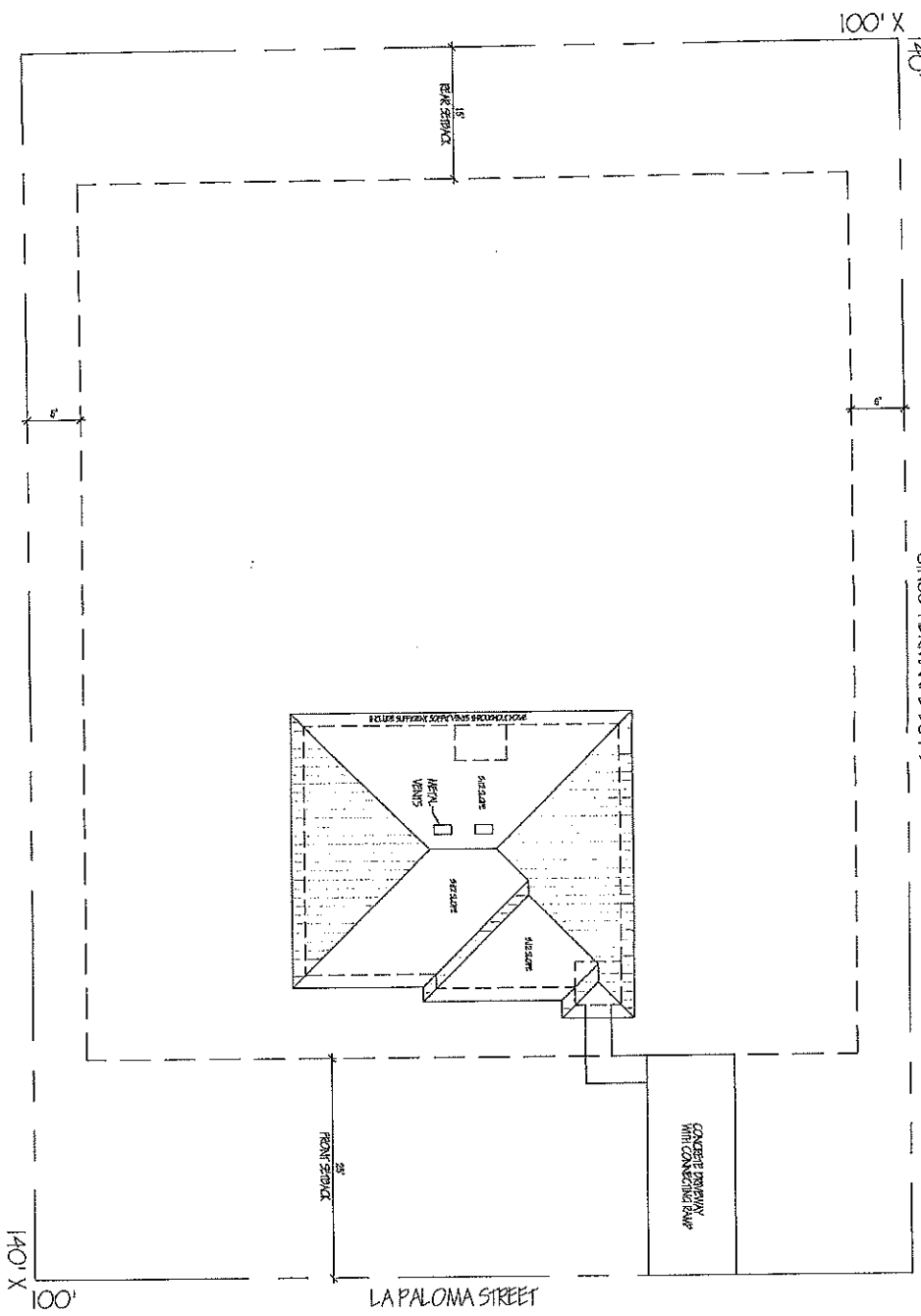
TOTAL AREA
1064 SQ. FT.

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

FELIPE AND ESTELA TREVINO
13413 LA PALOMA STREET EDINBURG, TX.

C1.0

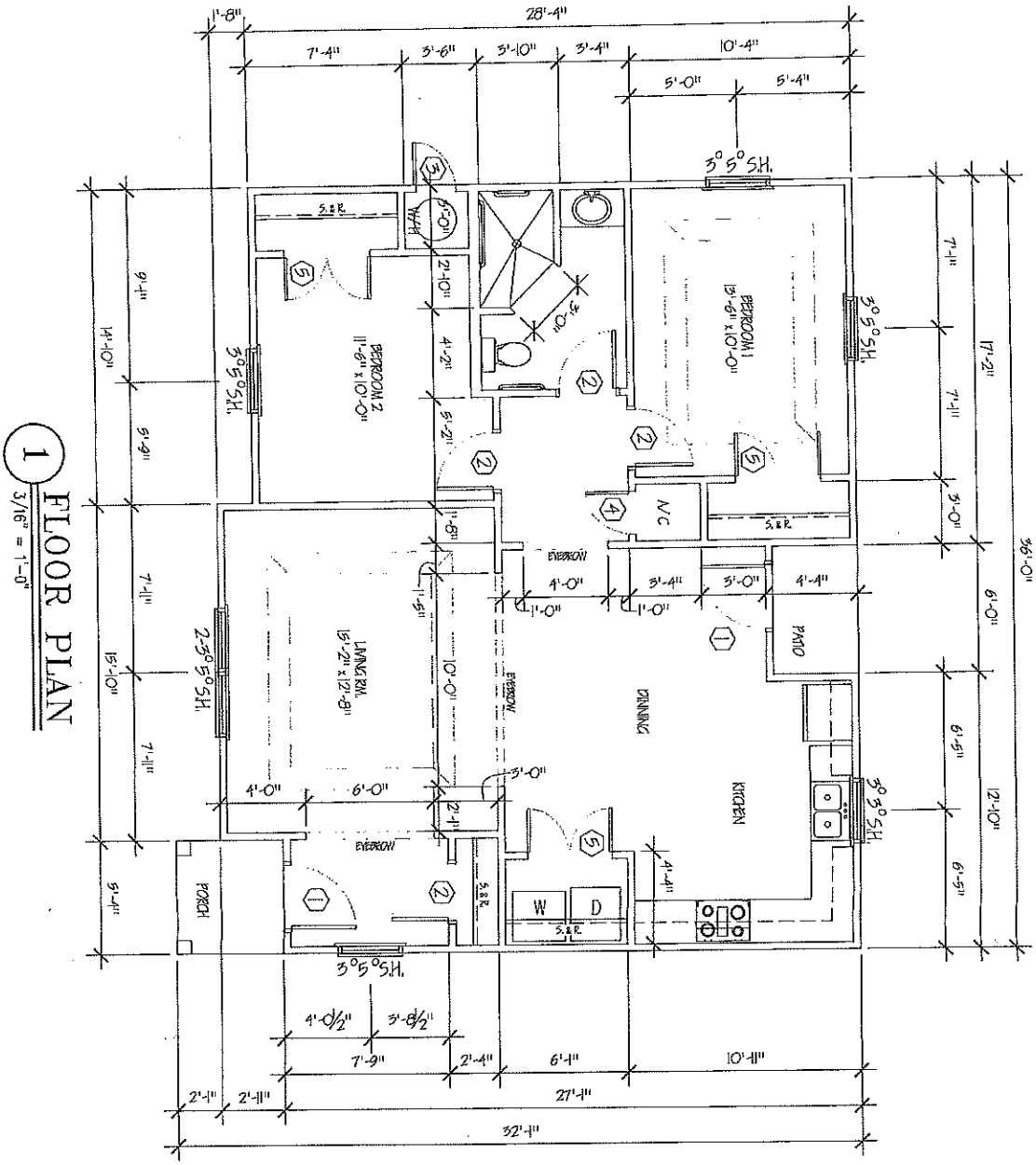
1 ROOF/PLOT PLAN



NOTE:

1. Please verify with city/ county on setbacks and for any requirements regarding sidewalk, driveway, landscaping, and any other obligations as per city regulations/ ordinances.
2. It is the responsibility of the Contractor to locate the rods and stake the property, to avoid any problems it is now required and the responsibility of the Contractor to order a property survey by a professional engineer.
3. Any house that is made for handicap accessibility WILL ALWAYS require driveway with connecting sidewalk.
4. Provide 6" of landscape dirt around house with sufficient grass seed up to 10' of perimeter. In addition, remember to replace septic tank if needed and is more than 10 yrs old.

	URBAN COUNTY PROGRAM OWNER OCCUPIED HOUSING REHABILITATION PROGRAM	
AS1.1	FELIPE AND ESTELA TREVINO 13413 LA PALOMA STREET EDINBURG, TX.	TOTAL AREA 1064 SQ. FT.



1 FLOOR PLAN

3/16" = 1'-0"

SQUARE FOOTAGE

LIVING AREA	1015
PORCH/ PATIO	49
TOTAL SQ. FT.	1064

DOOR SCEDULE

DR#	TASK	SIZ X 8	TYPE	LOCKS
1	INSTALL NEW ENT. W/ DUAL PEEP HOLES	3'0	METAL W/ LOW PROFILE THRESH.	LEVER TYPE ENTRY LOCK W/ DEADBOLT
2	INSTALL NEW UNIT	2'8	HOLLOW CORE	LEVER TYPE PRIVACY
3	INSTALL NEW UNIT	2'0	HOLLOW METAL	LOCK W/ DEADBOLT
4	INSTALL NEW UNIT	2'0	HOLLOW CORE	N/C CLOSET PASSAGE
5	INSTALL NEW UNIT	(2) 2'0	HOLLOW CORE	PASSAGE

GENERAL NOTES

-5/12 SLOPE WITH 16" OVERHANG
-SUPPLY VENTS / SOFFIT VENTS WHERE NEEDED
-INSTALL PORCH RAILING WHERE FINISH GRADE IS LOWER THAN 11" FROM PORCH FLOOR.
-INSTALL PORCH STEPS WHERE FINISH GRADE IS LOWER THAN 6" FROM PORCH FLOOR.
-CLIENT IS RESPONSIBLE FOR CONNECTIONS FOR A GAS / ELECTRIC STOVE.
-INSTALL A MIN. OF TWO PHONE JACKS & CABLE CONNECTIONS AS PER OWNERS REQUEST.

EXTERIOR COLOR CHOICES TO BE OR MATCH: Sw Cyprus
INTERIOR COLOR CHOICES TO BE OR MATCH: Sw 6402 Supreme green Polish

I HAVE READ AND FULLY AGREE WITH THE WRITE-UP AND PLANS AS PRESENTED TO ME THIS 16th DAY OF February 2018

Estela Trevino

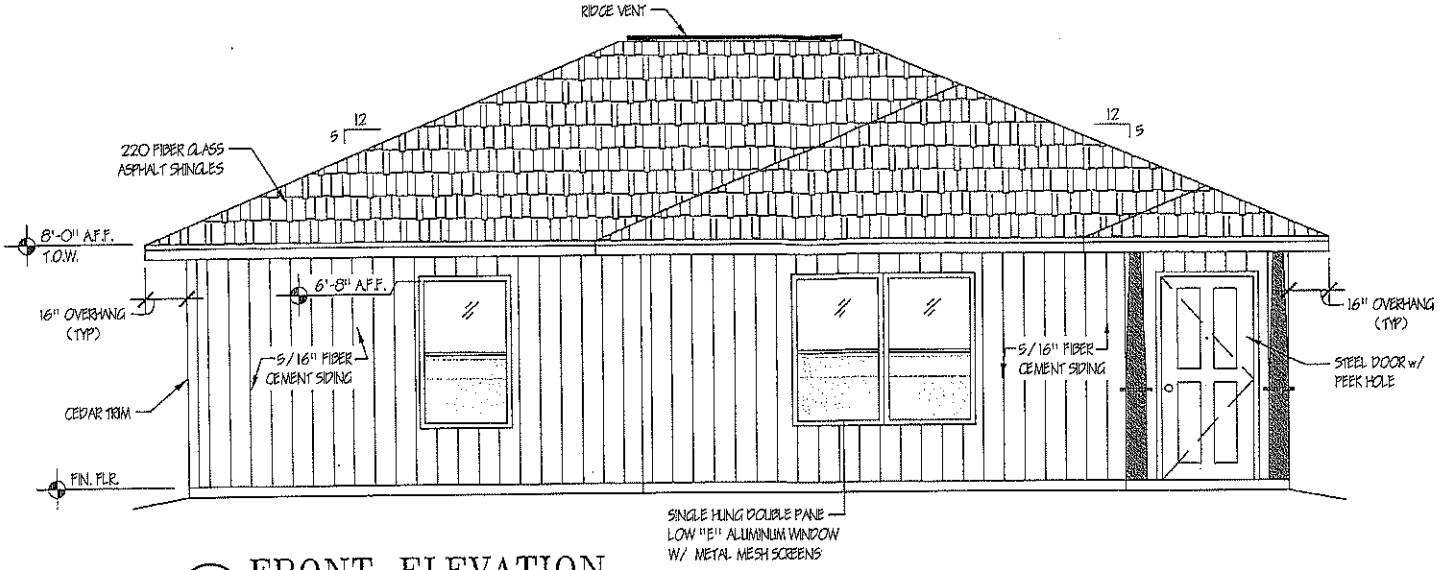
URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

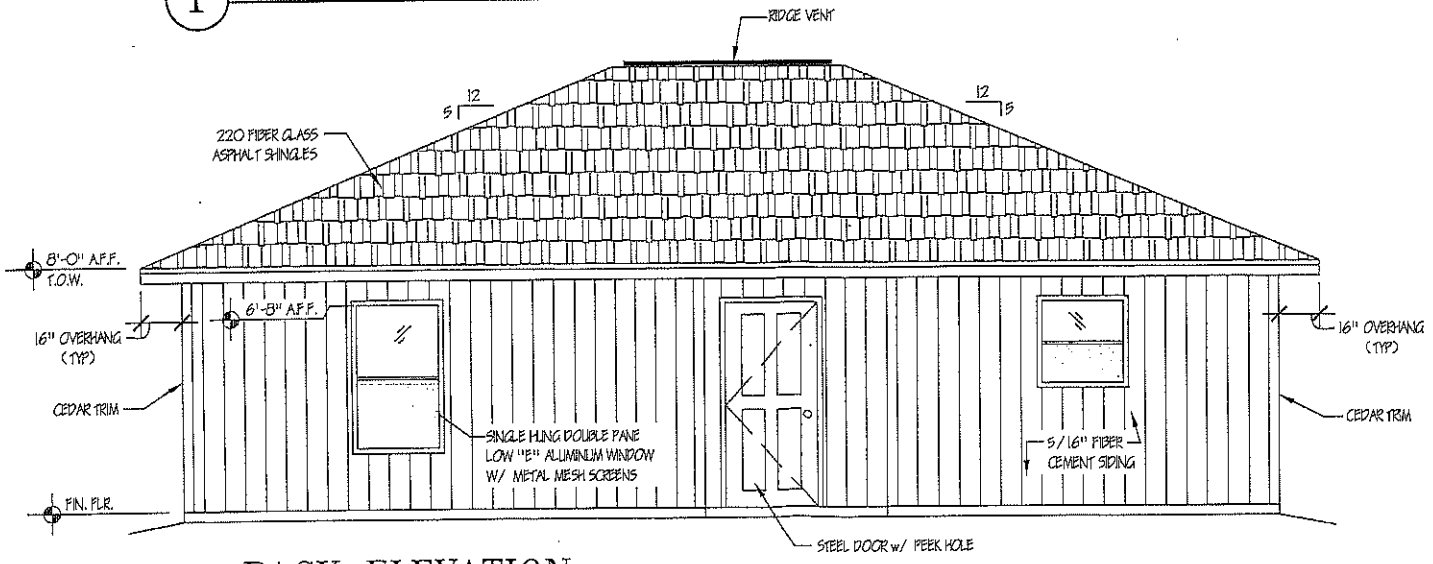
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FELIPE AND ESTELA TREVINO
13413 LA PALOMA STREET EDINBURG, TX.

TOTAL AREA
1064 SQ. FT.



1 FRONT ELEVATION



2 BACK ELEVATION

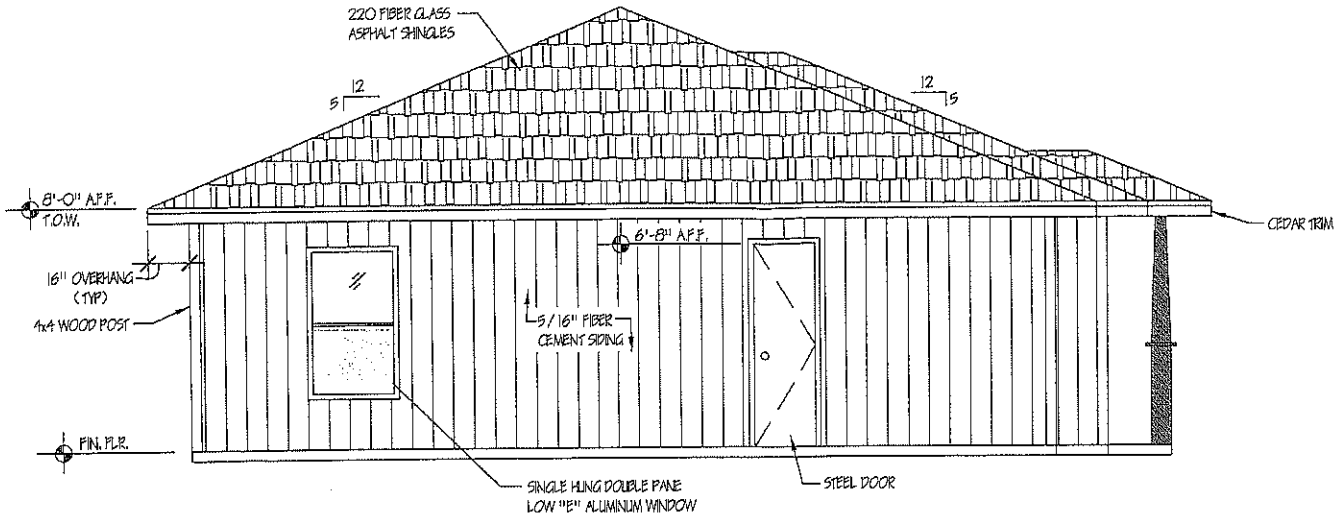
URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

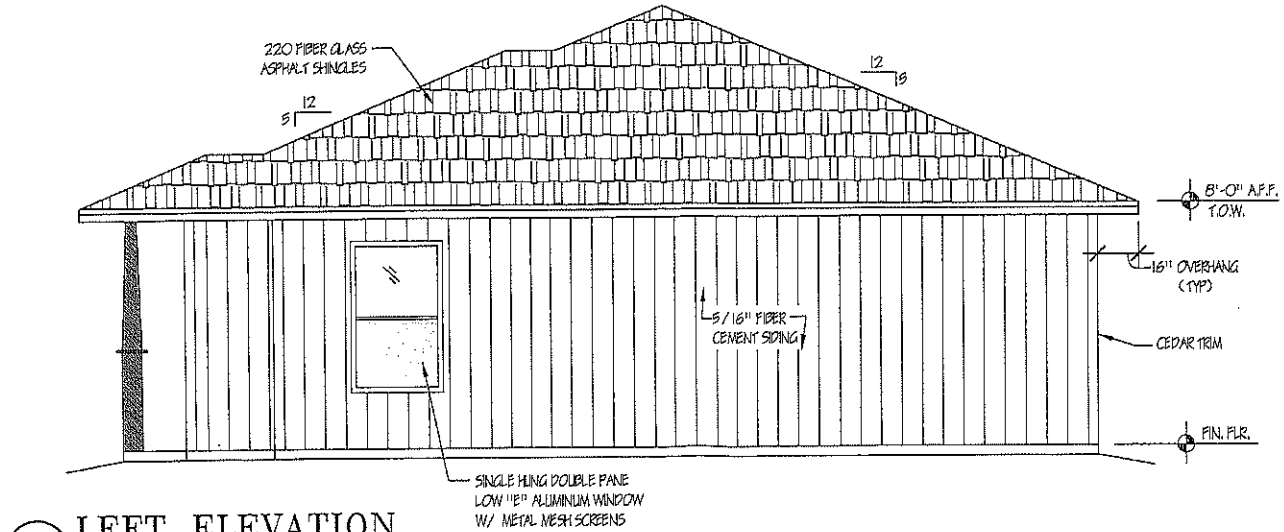
FELIPE AND ESTELA TREVINO
13413 LA PALOMA STREET EDINBURG, TX.

TOTAL AREA
1064 SQ. FT.

A1.2



1 RIGHT ELEVATION



2 LEFT ELEVATION

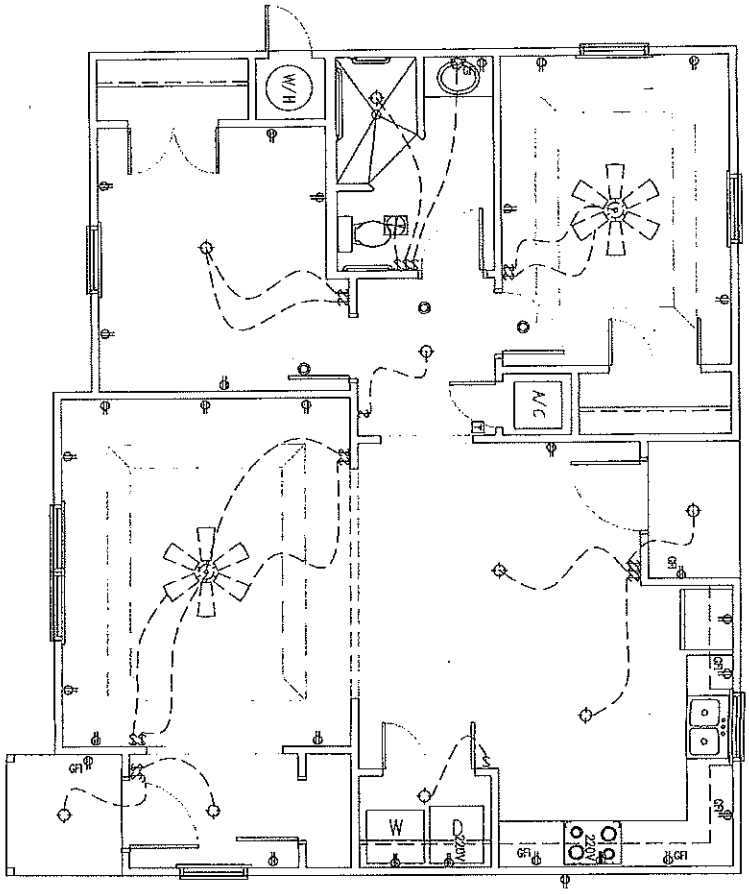
TOTAL AREA
1064 SQ. FT.

URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

FELIPE AND ESTELA TREVINO
13413 LA PALOMA STREET EDINBURG, TX.

A1.3



1 ELECTRICAL PLAN
3/16" = 1'-0"

ELECTRICAL LEGEND

W	WATER HEATER
	DUPLEX ELECTRICAL RECEPT.
S	LIGHT SWITCH
220V	220 VOLT RECEPTACLE
T	THERMOSTAT
GFI	GROUND FAULT CIRCUIT INTERRUPTER
	SMOKE DETECTOR
	BATHROOM EXHAUST FAN

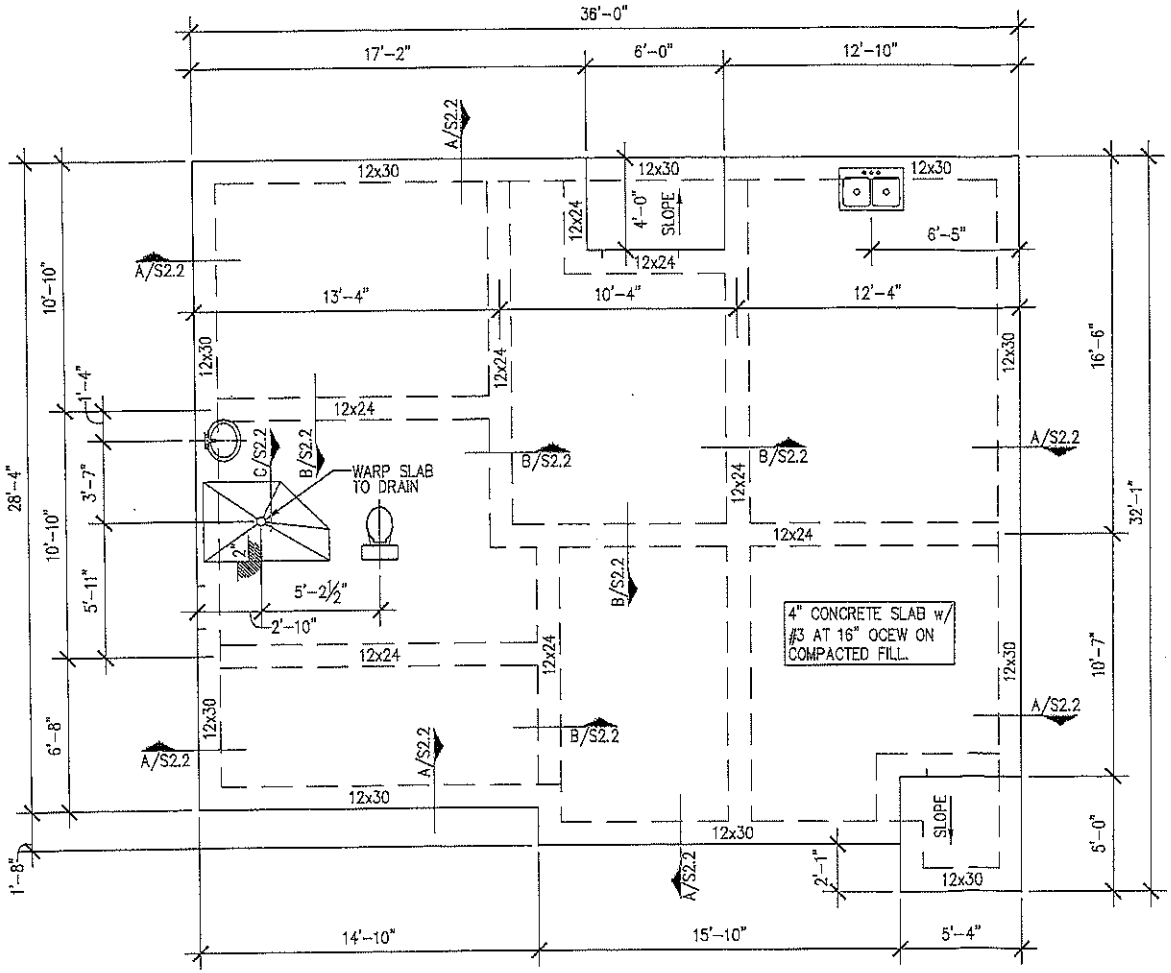
URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

E1.1

FELIPE AND ESTELA TREVINO
13413 LA PALOMA STREET EDINBURG, TX.

TOTAL AREA
1064 SQ. FT.



1 FOUNDATION PLAN

3/16" = 1'-0"

NOTES:

1. 4" THICK SLAB ON GRADE w/ #3 BARS AT 16" O.C.E.W. AT MID-DEPTH OF SLAB OVER 6 MIL. VISQUEEN OVER APPROVED COMPACTED FILL.
2. EXTERIOR GRADE BEAMS TO BE 12"x30" w/ 4-#5 BARS CONT. TOP AND BOTTOM w/ #3 STIRRUPS AT 24" o/c. A MINIMUM OF 6" IN DEPTH TO UNDISTURBED SOIL.
3. INTERIOR GRADE BEAMS TO BE 12"x24" w/ 4-#5 BARS CONT. TOP AND BOTTOM w/ #3 STIRRUPS AT 24" o/c. A MINIMUM OF 6" IN DEPTH TO UNDISTURBED SOIL.
4. CORNER BARS AT ALL CORNERS AND INTERSECTIONS SHALL BE #5 x 2'-0"x2'-0". APPLY 6x6 WIRE MESH AT SIDEWALKS AND DRIVEWAYS.
5. INSTALL ANCHOR BOLTS AT PERIMETER AT 48" o/c.
6. USE ONLY COMPACTED SELECT FILL DIRT. FINISH FLOOR TO BE 18" FROM TOP OF CURB, UNLESS OTHERWISE NOTED.

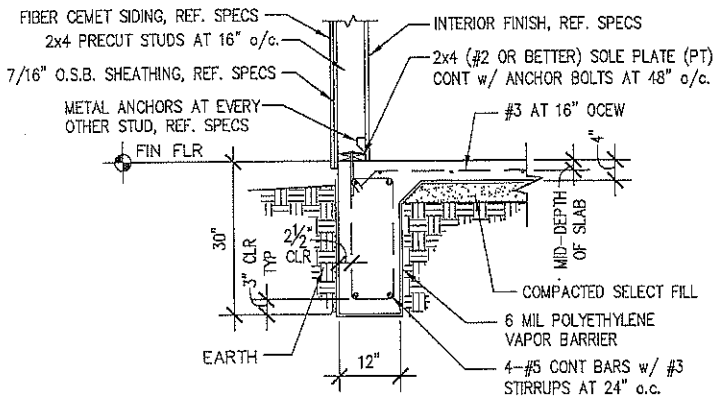
URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

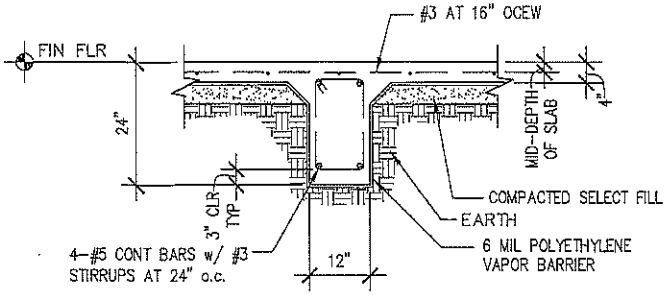
TOTAL AREA 1064 SQ. FT.

FELIPE AND ESTELA TREVINO
13413 LA PALOMA STREET EDINBURG, TX.

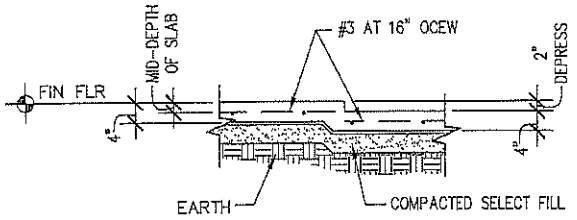
S2.1



A-EXTERIOR BEAM



B-INTERIOR BEAM



C-SHOWER DEPRESS

URBAN COUNTY PROGRAM

OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

TOTAL AREA
1064 SQ. FT.

FELIPE AND ESTELA TREVINO
13413 LA PALOMA STREET EDINBURG, TX.

S2.2

SPECIFICATIONS

ALL *SPECIFICATIONS* SHALL ASSUME THE USE OF *CONTRACTOR'S MINIMUM GENERAL SPECIFICATIONS MANUAL*

OWNER (S) FELIPE & ESTELA TREVINO CASE NO.: # 3189 DATE: 2/3/17 ADDRESS: 13413 LA PALOMA ST. EDINBURG, TX PHONE: 956-789-0040 BY: ROBERT CAVAZOS

1. FOUNDATION WORK:

BUILD A NEW SLAB ON GRADE FOUNDATION TO COMPLY WITH PLANS, SPECS, CITY AND / COUNTY REQUIREMENTS. PROJECTS TO BE 18" ABOVE CENTER LINE OF STREET OR CURB OR 12" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. PROVIDE CONCRETE SLAB FOR A/C UNIT. PROVIDE A MIN. OF 12 X 25 DRIVEWAY (depending on city).

2. PLUMBING GENERAL: (SEE SPECS)

ALL PLUMBING ROUGH SHALL BE AS FOLLOWS:

- WATER SUPPLY TO HOUSE SHALL HAVE A ¾" CUTOFF VALVE BEFORE ENTRY TO HOUSE.
- INTERIOR WATER SUPPLY LINES FOR HOUSE SHALL BE ALL NEW PEX OF APPROPRIATE DIAMETER
- NEW PEX PIPES AND FITTINGS:
  - OF 1" MINIMUM DIAMETER FOR ALL EXTERIOR WATER SUPPLY LINES BELOW GROUND.
  - OF APROPRIATE DIAMETER FOR DWV (DRAIN, WASTE, AND VENTS).
- SEWER CONNECTION SHALL HAVE (1) PLASTIC PVC SEWER CLEAN OUT.

ALL PLUMBING FINISH SHALL BE AS FOLLOWS:

- RELATED PLUMBING ITEMS:
  - (2) EXTERIOR HOSE BRASS BIB FAUCETS:
  - ½" CUTOFF VALVES WITH ESCUTCHEONS FOR ALL FIXTURES.

FIXTURES:

- PLUMBING SEALANT FOR ALL DRAINS, AND SINK PERIMETERS
- ALL OTHER RELATED PLUMBING (SEE SPECS)

FIXTURES: (SEE SPECS)

- KITCHEN SINK W/ RELATED PLUMBING & FAUCETS
- PEDESTAL SINK W/ RELATED PLUMBING & FAUCETS
- TOILET OF MATCHING COLOR
- SHOWER WITH RELATED PLUMBING AND HANDICAP ACCESSIBLE.
- SHOWER FAUCETS & REMOVABLE SHOWER HEAD
- MEDICINE CABINETS/TOWEL RACKS/ T.P. DISPENCER/ TOOTHBRUSH & SOAP HOLDER, & SHOWER ROD (SEE SPECS)
- WATER HEATER INSTALLED AS-PER SPECS. (GAS OR ELECTRIC AS PER OWNER REQUEST)

OTHER RELATED ITEMS

- RANGE CONNECTIONS AS PER OWNERS REQUST.(SEE SECTION 23.)
- 4" DRYER EXAUST VENT.
- IN WALL WASHING MACHINE BOX, WITH BRASS FAUCETS & RELATED PLUMBING.

HOOK UP ALL DRAINAGE LINES TO CITY SEWER SYSTEM IF AVAILABLE. SEE CITY FOR INFORMATION.TEST SEPTIC SYSTEM IF EXISTING FOR INTEGRITY AND REPLACE IF NECESSARY AND MORE THAN 10 YEARS OF AGE

3. INTERIOR/EXTERIOR WALLS & CEILINGS:

ALL INTERIOR AND EXTERIOR WALL FRAMING:

- 2"x4" (#2 OR BETTER) FOR USE IN: SOLE PLATES (TREATED LUMBER)
  - DOUBLE TOP PLATES
  - 92 5/8" PRE-CUT STUDS @ 16" O.C.
  - WINDOW SILLS
  - CEILING JOIST CHAIN BLOCKING @ 48" O.C.
- 2"x6" (#2 OR BETTER) FOR USE IN:
  - WINDOW & DOOR HEADERS WITH 1"/2" PLYWOOD SPACER.
  - CEILING JOIST @ 24" O.C., FOR CLEARANCES LARGER THAN 12' CEILING JOIST SHALL BE @ 16" O.C.
  - INSTALL BOOT TIES IN EVERY CORNER OF THE HOUSE ALONG WITH METAL ANCHORS ON BOTH BOTTOM AND TOP PLATES OF HOME

ALL EXTERIOR CEILING COVERINGS:

- 3/8" CD EXTERIOR PLYWOOD FOR PORCH CEILINGS.

ALL INTERIOR WALL & CEILING COVERINGS.

- ½" SHEETROCK FINISHED AS PER SPECS.
- ½ "DAMP RESISTANT SHEETROCK FOR BATH AREAS.

ALL INTERIOR CEILINGS SHALL HAVE ORANGE PEEL TEXTURE.
ALL INTERIOR WALL SURFACESS SHALL HAVE ORANGE PEEL TEXTURE.
ALL EXTERTIOR TRIMMINGS SHOULD CONSIST OF CEDAR WOOD.

4. ROOF: (SLOPE=5/12)

ROOF SHALL HAVE:

- A HIP/GABLE STYLE ROOF WITH 16" OVERHANGS.
- A HIP/GABLE STYLE FRONT PORCH AS PER PLANS.
- PORCH COLUMNS MUST BE FASTENED TO CONCRETE.
- AN ADEQUATE COMBINATION OF RIDGE & SOFFIT VENTS WITH AIR CHUTES.
- ADEQUATE RAIN GUTTERS WITH DOWN SPOUTS FOR THE ROOF AREA THAT MAY AFFECT OWNERS.
- SHINGLES TO BE OF LIGHT COLOR (**no black shingles**)

5. PORCH & CANOPY FLOORS:

THE HOUSE SHALL HAVE PORCH FLOORS AS FOLLOWS:

- A FRONT PORCH FLOOR.
- A SIDE/BACK PORCH FLOOR.

PROVIDE RAMP & (2)-HANDRAILS TO EACH FRONT AND/OR SIDE PORCH STEPS

6. INSULATION:

INSULATE:

- ALL LIVING AREA CEILINGS WITH BLOWN IN INSULATION TO AN **R-49 FACTOR.** (need a combined R-30 & R-19 to meet requirement)
- HAVE RULER INSTALLED FOR EVER 300 SQUARE FEET BEFORE FRAMING AND ROUGH-IN INSPECTION IS SCHEDULED.
- **INFILTRATION FOAM** SHALL BE USED AROUND ALL WINDOWS, WIRES, PLUMBING, ELECTRICAL, 2X4 BOTTOM PLATES, AND ALL PENETRATED AREAS.
- ALL PERIMETER WALLS WITH **R-15 F.G. BATT.**
- ALL EXTERIOR PIPES EXPOSED TO WEATHER SHALL BE INSULATED.

7. INTERIOR FINISH:

ALL TRIM SHALL BE INSTALLED AS PER SPECS.
*ALL PAINT SHALL BE APPLIED AS PER SPECS (2-COATS) WITH PAINT **COMPARABLE IN QUALITY TO SHERWIN WILLIAMS.** ALLOW A VARIETY OF DIFFERENT COLORS FOR CLIENT TO CHOOSE FROM. (2 COLOR CHOICE MIN).*

8. EXTERIOR FINISH:

*PAINT ENTIRE HOUSE AS PER SPECS WITH PAINT **COMPARABLE IN QUALITY TO SHERWIN WILLIAMS. PRIMER TO BE OIL BASED & PAINT MUST BE EQUIVALENT TO A-100.** (2 COLOR CHOICE MIN).*

9. SIDING:

THE SIDING SHALL BE 5/16" FIBER CEMENT WITH ALL CEDAR TRIM TO ENTIRE HOUSE.
INSTALL 7/16" O.S.B. TO THE ENTIRE PERIMETER OF THE HOUSE AS PER MANUFACTURER'S SPECIFICATIONS. REFERENCE DETAIL.

10. WINDOWS:

SHALL BE NEW LOW "E" DOUBLE PANE INSULATED ALUMINUM WINDOWS, SIZE AS PER PLAN. KEEP LABELS ON WINDOWS UNTIL FINAL INSPECTION HAS BEEN CLEARED.

11. CABINETS GENERAL:

BUILD AND/OR INSTALL NEW KITCHEN CABINETS TO INCLUDE:

- A RANGE CABINET.
- A KITCHEN/ BATHROOM FORMICA COUNTER TOP OF MATCHING COLOR.

BUILD AND / OR INSTALL A NEW VANITY CABINET (IF APPLICABLE) FOR BATHROOM WITH FORMICA TO MATCH LAVATORY, SINK. AND WALLS. ALL CABINETRY PIECES SHOULD BE NEW AND COMPLETE AND BUILT TO PROFESSIONAL STANDARDS.

12. FLOOR, SUBFLOOR, & FINISH FLOORING:

APPLY VCT FLOOR TILE TO ALL LIVING AREA HOUSE FLOORS.

13. ELECTRICAL GENERAL

ALL ELECTRICAL INSTALLATIONS & WORK AS PER ELECTRICAL CODE WITH THE FOLLOWING CONDITIONS:

- PROVIDE RANGE OUTLET AS PER OWNER'S REQUEST.
- PROVIDE APPROPRIATE WASHER & DRYER CONNECTION.
- (2) 52" CEILING FANS (CEILING HUGGER STYLE) **COMPARABLE IN QUALITY** TO THE "HUNTER" BRAND, THE CONTACTOR SHALL ALLOW $120.00 FOR MATERIAL & LABOR, LOCATON AS PER OWNER REQUEST.
- INSTALL GFCI OUTLETS IN BATHROOMS, KITCHEN, AND EXTERIOR WALLS.
- EACH ELECTRICAL PANEL OR BREAKERBOX, LIGHT SWITCH, & THERMOSTAT NO HIGHER THAN 48" ABOVE FLOOR
- EACH ELECTRICAL PLUG TO BE 15" ABOVE THE FLOOR
- ANY OUTLETS WITHIN 6' FROM KITCHEN OR BATHROOM SINKS MUST BE GFCI

14. RANGE HOOD:

INSTALL A RANGE HOOD TO FIT OWNER'S RANGE SIZE (30" OR 36") AND VENT TO EXTERIOR.

15. BATHROOM ACCESSORIES:

ALL ACCESSORIES & MEDICINE CABINETS AS PER SPECS, INCLUDE CURTAIN ROD & PLASTIC RETAINING DAM TO HELP PREVENT WATER FROM ESCAPING SHOWER. INSTALL PEDESTAL SINK AND CABINET ABOVE TOILET. (ALSO INCLUDE TOILET PAPER, TOOTHBRUSH, AND SOAP HOLDER.)

16. ACCESS FOR PHYSICAL DISABILITIES:

INSTALL ONE CONC. RAMP AS PER OWNERS REQUEST THAT CONNECTS WITH 12 X 25 DRIVEWAY AND STEPS WITH HANDRAILS
BATHROOM SHOULD ACCOMMODATE GRAB BARS WHERE INDICATED IN PLANS

17. HEATING & A/C:

*PROVIDE & INSTALL A 16 SEER CENTRAL AIR CONDITIONING **COMPARABLE IN QUALITY** TO A CARRIER BRAND UNIT FOR THE ENTIRE HOUSE. INCLUDE DIGITAL THERMOSTAT.*

18. SMOKE DETECTORS:

INSTALL A SMOKE DETECTOR INSIDE EACH SLEEPING ROOM, OUTSIDE SLEEPING ROOMS, ALL WIRED IN SERIES.

19. GENERAL NOTES.

CONTRACTOR IS RESPONSIBLE FOR:

- YOU'RE BID TO INCLUDE ANY COST RELATED TO REQUIREMENTS FROM CITY. CHANGE ORDERS FOR THIS PARTICULAR PURPOSE WILL NOT BE ACCEPTED OR PROCESSED TO CORRECT THE ABOVE MENTIONED.
- YOUR BID TO INCLUDE ANY COST RELATED TO RES-CHECK & ENERGY COMPLIANCE REQUIREMENTS.
- THE DEMOLISH AND DISPOSAL EXISTING STRUCTURE.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING SIDEWALKS, DRIVEWAYS, AND UTILITY LINES DURING DEMOLITION.
- THE COMPLIANCE OF ALL THE REQUIRED BUILDING ELEVATIONS.
- PROVIDE 6" OF LANDSCAPE DIRT AROUND THE HOUSE ALONG WITH SUFFICIENT GRASS SEEDS UP TO 10' OF PERIMETER.
- PROVIDING THE APPROPRIATE ELECTRICAL AND /OR GAS CONNECTIONS FOR RANGE AS PER APPICANT'S REQUEST AND ACCORDING TO APPLICABLE PLUMBING/ELECTRICAL CODE.
- PROVIDE PHONE JACKS & CABLE CONNECTIONS IN EVERY BDRM & LIVING SPACE. KITCHEN PHONE IF REQUESTED.
- PROVIDE TERMITE PRE-TREATMENT TO ENTIRE FOUNDATION PAD.
- OBTAINING, DISPLAYING, AND SUBMITTING ALL PROPER PERMTIS & INSPECTIONS.
- ALL CONTRACTORS WILL BE RESPONSIBLE FOR ANY ADDITIONAL PLANS, SPECIFICATIONS AND/OR DETAILS THAT ARE REQUIRED BY CITIES OR COUNTY AT THE TIME OF ATTAINING PERMITS.
- MINIMUM 12x-25 CONC. DRIVEWAY WITH CONNECTING SIDEWALK TO RAMP FOR HANDICAP APPLICANTS.
- ALL THE GENERAL INFORMATION CONTAINED WITHIN **SECTION 23. GENERAL NOTES** OF THE CONTRACTOR'S GENERAL SPECIFICATIONS MANUAL.
- PROVIDE AND INSTALL PROJECTS SIGNS AT EACH CONSTRUCTION SITE PRIOR TO THE START OF CONSTRUCTION. FINES WILL BE ENFORCED.
- CONTRACTOR IS RESPONSIBLE FOR SUPPLYING PORT A POTTY TRHOUGHOUT CONSTRUCTION PROCESS (demo to final inspection) FINES WILL BE ENFORCED.
- SHOWER ENTRANCES TO BE 36" WIDE.
- ALL UCP HOMES MUST COMPLY WITH TEXAS GOVERNMENT CODE §2306.514

THE HOMEOWNER SHALL BE RESPONSIBLE FOR

- REMOVE AND DISPOSE OF ALL DEBRIS ON SITE BEFORE THE BEGINNING OFCONSTRUCTION, INCLUDING BUT NOT LIMITED TO TIRES, ABANDONEDVEHICLES, OLD LUMBER, ETC.
- MAKING NECESSARY DEPOSITS FOR ANY UTILITIES TO BE CONNECTED TO THE NEW DWELLING.

SPECIFICATIONS

ALL *SPECIFICATIONS* SHALL ASSUME THE USE OF *CONTRACTOR'S MINIMUM GENERAL SPECIFICATIONS MANUAL*

OWNER (S) FELIPE & ESTELA TREVINO CASE NO.: # 3189 DATE: 2/3/17 ADDRESS: 13413 LA PALOMA ST. EDINBURG, TX PHONE: 956-789-0040 BY: ROBERT CAVAZOS

I HAVE READ AND FULLY AGREE WITH THE WRITE-UP AND PLANS AS PRESENTED TO ME.

Estela Trevino

NAME OF APPLICANT

Felipe Trevino

NAME OF CO-APPLICANT

TIME TABLE

ACTIVITY	DATE(S)
Contract Signing	March 7, 2017
Demolition	March 16, 2017
Construction Start	March 17, 2017
Anticipated Draws	After 50% construction completion After 100% construction completion 30 days after construction completion
End Construction	June 5, 2017

BUDGET

	Total Cost
Pre-Development	$ 0.00
Acquisition	$ 0.00
Demolition/Construction	$59,740.00
Other Costs:	$ 0.00
TOTAL PROJECT COSTS	$59,740.00

EXHIBIT "C"
SPECIAL CONDITIONS

None.

CONSTRUCTION LOAN AGREEMENT

OWNER-OCCUPIED REHABILITATION LOAN PROGRAM

This Construction Loan Agreement (this "Agreement"), is entered into effective as **March 21, 2017**, among Borrower, Lender and Contractor who are identified and whose addresses are stated below. This Agreement relates to the manner of disbursement of the loan proceeds on the Note for the benefit of Borrower for the rehabilitation and/or renovation of the Improvements on the Property under the Lender's Owner-Occupied Housing Rehabilitation Program. The Note is secured by liens on the Property and Improvements granted the Mechanic's Lien Contract and the Deed of Trust.

BORROWER: **Juanita Perez**

BORROWER'S ADDRESS:

504 W. Ebony St.,
San Juan, Texas 78589

LENDER: County of Hidalgo, a political subdivision of the State of Texas

LENDER'S ADDRESS:

County of Hidalgo, Urban County Program
Owner-Occupied Rehabilitation Loan Program
427 E. Duranta Ave., Suite 107
Alamo, Texas 78516

CONTRACTOR: **R G Enterprises, LLC, dba G & G Contractors**

CONTRACTOR'S ADDRESS:

711 E. Wisconsin Rd
Edinburg, Texas 78539

NOTE:

Mechanic's Lien Note ("Mechanic's Lien Note") of even date herewith, in the original principal amount of **$59,740.00,** executed by Borrower, and payable to the order of Contractor, which note has been renewed and extended into a Promissory Note of even date herewith, in the original principal amount of **$59,740.00**, executed by Borrower, and payable to Lender.

CONTRACT:

Mechanic's Lien Contract and Transfer of Lien of even date herewith, executed by Borrower and Contractor providing for the rehabilitation and/or renovation to the Improvements and (i) granting Contractor liens against the Property to secure payment of the Mechanic's Lien Note; and (ii) transferring such liens to Lender.

SECURITY FOR PAYMENT:

Mechanic's and materialman's lien on the Property granted by Borrower to Contractor in the Mechanic's Lien Contract and Transfer of Lien (the "Mechanic's Lien Contract"), which liens were transferred thereunder to Lender, which Mechanic's Lien Contract and Transfer of Lien is recorded in the Real Property Records of Hidalgo County, Texas, and a deed of trust lien on the Property granted by Borrower for the benefit of Lender in a Deed of Trust ("Deed of Trust") of even date herewith, which Deed of Trust is recorded in the Real Property Records of Hidalgo County, Texas

PROPERTY: See Exhibit "A" attached hereto and made a part hereof for all purposes

IMPROVEMENTS:

Renovation and/or rehabilitation to Borrower's residence located on the Property according to: (i) Plans and Specifications, Timetable and Budget attached hereto as Exhibit "B"; (ii) an Owner-Occupied Rehabilitation Loan Program Contract (the "Rehabilitation Contract") of even date herewith entered into by and between Borrower and Lender; and (iii) the accepted bid submitted to Lender by Contractor.

AMOUNT AVAILABLE FOR CONSTRUCTION: **$59,740.00**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, Lender and Contractor agree as follows:

1. Purpose and Limitation of Advances.

(a) Subject to the provisions of this Agreement, and in compliance with Subchapter K, Chapter 53, Texas Property Code, Lender will advance funds to Contractor for the benefit of Borrower in the aggregate amount of the Note. Provided Contractor has obtained the performance bond required in Paragraph 1 (b) of this Agreement, Lender will advance the Amount Available for Construction during the course of the construction of the Improvements, in accordance with this Agreement. The Amount Available for Construction will be advanced solely to pay Contractor for costs of labor performed and materials furnished by Contractor pursuant to the Contract.

(b) Contractor may furnish a performance bond ("Bond"), at Contractor's sole cost and expense, to be kept in force throughout the period of this Agreement, in an amount equal to the Amount Available for Construction. The Bond shall: (i) cover Contractor's faithful performance of the Contract, free of liens upon the Property; (ii) name as obligees both Borrower and Lender, jointly and severally; (iii) be written by surety companies qualified to do business in the State of Texas; and (iv) be in such form and with such sureties as the Lender may approve.

(c) Construction advances are to be made by Lender to Borrower for work done.

(d) If Contractor has provided Lender and Borrower the Bond permitted by this Agreement, Contractor may submit a request for 40% of the Amount Available for Construction ("Initial Advance") when 50% of the work related to the Improvements have been completed and Contractor and Borrower have complied with the provisions of Paragraph 3 of this Agreement. A second request for construction advance for 50% of the Amount Available for Construction ("Final Advance") may be submitted when the Improvements have been completed and accepted by Borrower and Lender and Contractor and Borrower have complied with the provisions of Paragraph 4 of this Agreement.

(e) If Contractor has not provided Lender and Borrower the Bond permitted by this Agreement, Contractor may submit a request for 90% of the Amount Available for Construction when the Improvements have been completed and accepted by Borrower and Lender, and Contractor and Borrower have complied with the provisions of Paragraph 4 (except as to the Bond) of this Agreement.

(f) All requests for construction advances shall comply with Subchapter K, Chapter 53, Texas Property Code, and be made on forms approved by Lender. Each construction advance shall be in an amount equal to the Amount Available for Construction times the applicable percentage as determined by Lender and/or its inspectors. Lender may prepare a chart for determining the percentage of completion and the schedule of advances to be made by Lender, and Lender may limit advances according to the schedule based on the percentage of the Improvements that are complete at the time of any request for construction advance.

(g) Whenever in the sole opinion of Lender the cost of completing the Improvements pursuant to the plans and specifications approved by Lender exceeds the total amount of unadvanced loan proceeds, Borrower, at Lender's request, shall pay such excess to the satisfaction of Lender prior to any further advances under the Note.

2. Lender's Payments on Behalf of Borrower. Lender shall make payments for the cost of construction of the Improvements by check payable to the Owner and Contractor, or to Contractor, and in Lender's discretion, following Contractor's default under this Agreement or the Contract, jointly to Contractor and Contractor's subcontractors or suppliers.

3. Conditions to Initial Advance. Lender shall have no obligation to make the Initial Advance of funds to Borrower unless and until Contractor has furnished Borrower and Lender the Bond permitted by this Contract, and the following conditions have been satisfied:

(a) Borrower has executed and delivered to Lender this Agreement, the Contract, the Note, the Deed of Trust, the Owner-Occupied Rehabilitation Loan Program Contract of even date herewith by and between Borrower and Lender, and Affidavit of Commencement and other documents securing the loan evidenced by the Note; and Contractor has executed and delivered to Lender this Agreement, the Contract, an Affidavit of Commencement and other documents securing the loan evidenced by the Note;

(b) Borrower and Contractor have furnished Lender all documents required by Lender to evidence compliance with Subchapter K, Chapter 53, Texas Property Code;

(c) To the extent applicable, Contractor has furnished Lender evidence that Contractor has established a construction account in compliance with Chapter 162, Texas Property Code;

(d) Contractor has provided Lender a copy of the final plans and specifications for the construction of the Improvements acceptable to Lender, along with a timetable and budget for completion of the Improvements as required by this Agreement and the Contractor's accepted bid;

(e) Contractor has provided Lender a copy of the building permit for the Improvements;

(f) Contractor has provided Borrower and Lender a list of all subcontractors used or to be used for completion of the Improvements, and executed partial releases and lien waivers from Contractor and any subcontractors and suppliers who performed work and/or materials at any time in connection with the Improvements, in a form acceptable to Lender, for all amounts to be disbursed to Contractor against the Amount Available for Construction;

(g) Contractor has provided Lender a copy of all insurance policies, which Contractor is required to maintain under the Contract, or in lieu thereof, a certificate of insurance which confirms Contractor has obtained all insurance required under the Contract;

(h) Contractor has provided Lender evidence that Contractor is in compliance with Chapter 416, Texas Property Code; and

(i) Borrower and Contractor have provided Lender such other items as Lender shall reasonably require.

4. Final Advance. The Final Advance (except for retainage, which will be disbursed in accordance with paragraph 5) shall be disbursed at the completion of the Improvements when Contractor has delivered to Lender all documents required under Paragraph 3 and the following:

(a) an affidavit of completion executed by Borrower and Contractor (the "Affidavit of Completion"), a final bills- paid affidavit executed by Contractor (the "Final Bills-Paid Affidavit"), and final waivers of lien and releases executed by Contractor and any subcontractors and suppliers who performed work and/or materials at any time in connection

with the Improvements (collectively, the "Releases"), which documents comply with Subchapter K, Chapter 53, Texas Property Code and are acceptable to Lender, together with supporting evidence that: (i) the construction work for the Improvements has been fully completed; and (ii) all bills for labor and material have been paid in full;

(b) Evidence that Borrower and Contractor have complied with all applicable laws pertaining to the location, development, and construction of the Improvements and that all governmental authorities having jurisdiction have approved: (i) the location, development, and construction of the Improvements to the Property; and (ii) all other matters requiring approval by governmental authorities; and

(c) Borrower and Contractor have provided such other items as Lender shall reasonably require.

5. Disbursement of Retainage. The retainage will not be disbursed until: (i) (a) the Releases have been filed in the Real Property Records of Hidalgo County, Texas, (b) the deadline to file an affidavit claiming a lien against the Property in connection with the Improvements (that is, the fifteenth (15^{th}) day of the third calendar month after the day the indebtedness accrues) has expired and no such affidavits have been filed, or (c) if any affidavits claiming a lien against the Property in connection with the Improvements have been filed, the claims set forth in such affidavits have been resolved and the affidavits have been released of record; (iii) the Affidavit of Completion and the Final Bills-Paid Affidavit have been filed in the Real Property Records of Hidalgo County, Texas; and (iv) Borrower and Contractor have complied with Paragraph 4 of this Agreement.

6. Inspections. Lender shall be entitled to: (i) use its own personnel; or (ii) to designate an architect, engineer or other third party; to make any inspections or certifications required by Lender, and Lender shall not be required to make any loan advance until Lender has received inspections and certifications satisfactory to it. Prior to each loan advance, and at such other times as Lender may require, either Borrower or Contractor will be required to call for a physical inspection by Lender or other party designated by Lender.

7. Borrower's and Contractor's Additional Obligations. Borrower and Contractor further agree that:

(a) The Improvements will be constructed and fully equipped in a good and workmanlike manner with materials of high quality, using all new materials, strictly in accordance with the plans and specifications approved by Lender, and that the Improvements will comply with: (i) all applicable Housing Quality Standards contained in 24 Code of Federal Regulations, as amended, if the Property is located outside the jurisdiction of a municipality; or (ii) all applicable local building codes and ordinances of the municipality if the Property is located within the jurisdiction of a municipality, unless the municipality has no local building codes and ordinances, in which event Owner shall comply with all applicable Housing Quality Standards contained in 24 Code of Federal Regulations, as amended;

(b) No changes will be made in the plans and specifications submitted to Lender except on the written approval of the same by Lender;

(c) No extras shall be allowed to any contractor or subcontractor or any change made in any contract or subcontract without the Lender's prior written approval and consent;

(d) Contractor will promptly furnish Lender, at Lender's request, after execution thereof, executed copies of all contracts between Contractor and subcontractors, and of all contracts between Contractor and its suppliers, as well as contracts between subcontractors and their suppliers;

(e) Borrower and Contractor will cooperate with Lender in arranging for inspections by representatives of Lender of the progress of construction from time to time and will promptly comply with Lender's requirements or satisfy any objections regarding construction of the Improvements or the progress thereof;

(f) Borrower and Contractor will not suffer or permit any mechanics' or materialmen's lien claims to be filed or otherwise asserted against the Property and will promptly discharge the same in case of the filing of any claims for lien or proceedings for the enforcement thereof; provided, however, that Borrower shall have the right to contest in good faith and with reasonable diligence the validity of any such lien or claim on furnishing to Lender such security or indemnity as it may require;

(g) Borrower will pay all real estate taxes and assessments of every kind on the Property before the same become delinquent, and Lender may at any time require Borrower to provide evidence that taxes have been paid current;

(h) In the event that Lender shall expend any amount in performance of any of Borrower's covenants or agreements under the Note or any document securing the Note, such amounts shall constitute additional indebtedness secured under the Contract;

(i) All of the personal property, fixtures, attachments, and equipment delivered on, attached to, or used in connection with the construction of the Improvements or the operation thereof will be kept free and clear of all liens, encumbrances, and security interests whatsoever, and Borrower will be the absolute owner of such personal property, fixtures, attachments, and equipment and Contractor and Borrower will, from time to time, furnish Lender with satisfactory evidence of such ownership, including searches of applicable public records;

(j) Borrower and Contractor will comply with their respective obligations under this Agreement and the Contract and with all applicable laws, rules, ordinances and regulations;

(k) Borrower and Contractor will comply with the Special Conditions, if any, set forth in Exhibit "C" attached hereto;

(l) Contractor will pay all premiums on all insurance policies required from time to time during the progress of construction, and furnish to Lender additional and renewal insurance policies with companies, coverage, and amounts satisfactory to Lender; and

(m) Contractor will keep accurate and proper books and records of the construction of the Improvements, and will at all reasonable hours allow Lender or its representative to examine such books and records and all contracts and bills relating to the construction of the Improvements.

(l) Contractor shall not discriminate against any employee or applicant for employment because of sex, race, creed, color, national origin or handicap and shall take affirmative action to ensure that during the application process and during employment applicants and employees are treated without regard to their race, creed, color, national origin or handicap. Such action shall include, but not be limited to hiring and employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor shall continuously post in conspicuous places, readily available to employees and applicants for employment, notices to be provided or approved by the County of Hidalgo, setting forth the provisions of this non-discrimination provision and such other notices as may be required by law.

8. Actions For Lender's Benefit Only. **THE AUTHORITY HEREIN CONFERRED ON LENDER AND ANY ACTION TAKEN BY LENDER IN MAKING INSPECTIONS OF THE PROPERTY, PROCURING SWORN STATEMENTS AND WAIVERS OF LIENS, APPROVING CONTRACTS AND SUBCONTRACTS AND APPROVING PLANS AND SPECIFICATIONS WILL BE TAKEN BY LENDER FOR ITS OWN PROTECTION ONLY, AND LENDER SHALL NOT BE DEEMED TO HAVE ASSUMED ANY RESPONSIBILITY TO BORROWER OR ANY OTHER PERSON WITH RESPECT TO ANY SUCH ACTION HEREIN AUTHORIZED OR TAKEN BY LENDER OR WITH RESPECT TO THE PROPER CONSTRUCTION OF THE IMPROVEMENTS, PERFORMANCE OF CONTRACTS OR SUBCONTRACTS BY ANY CONTRACTORS OR SUBCONTRACTORS, OR PREVENTION OF CLAIMS FOR MECHANIC'S LIEN.**

9. Non-Waiver By Lender. No waiver of any breach or default hereunder shall constitute or be construed as a waiver by Lender of any subsequent breach or default or of any breach or default of any other provision. No waiver of any term or provision of this Agreement shall be binding unless executed in writing by the party entitled to the benefit thereof. Pursuit by Lender of any remedies set forth in this Agreement does not preclude pursuit by Lender of other remedies in this Agreement or provided by law.

10. Conflict of Interest. **BORROWER AND CONTRACTOR REPRESENT AND WARRANT TO LENDER THAT, TO THE BEST OF THEIR KNOWLEDGE, NO EMPLOYEE, AGENT, CONSULTANT, OFFICER, OR ELECTED OR APPOINTED OFFICIAL OF LENDER WHO EXERCISES OR HAS EXERCISED ANY FUNCTIONS OR RESPONSIBILITIES WITH RESPECT TO THE ACTIVITIES ASSISTED WITH THE LENDER'S OWNER-OCCUPIED REHABILITATION LOAN PROGRAM OR WHO ARE IN A POSITION TO PARTICIPATE IN A DECISION MAKING PROCESS OR GAIN INSIDE INFORMATION WITH REGARD TO THESE ACTIVITIES, DURING THEIR TENURE OR WITHIN ONE YEAR THEREAFTER, HAS A FINANCIAL INTEREST OR BENEFIT IN THE LOAN RELATED TO THIS AGREEMENT, OR THE PROCEEDS THEREUNDER, EITHER FOR THEMSELVES OR THOSE WITH WHOM THEY HAVE FAMILY OR BUSINESS TIES.**

11. Dispute Resolution. All disputes between Contractor and Borrower regarding the construction project which is the subject of this Agreement, including, but not limited to, all disputes with regard to the Contract and this Agreement, shall, in the first instance, be submitted, in writing, with supporting documentation, within ten (10) days of the incident giving rise to the dispute, to Lender's program director having responsibility for the Lender's owner-occupied rehabilitation loan program for resolution. Except for good cause shown, any dispute not submitted within such ten (10) day period shall be deemed waived. While a dispute is pending, Contractor and Borrower shall otherwise proceed to perform all obligations under the Contract and this Agreement not otherwise in dispute.

12. Sole and Only Agreement. This Agreement and its exhibits and the instruments executed in connection therewith constitute the sole and only agreement of the parties hereto and supersedes any prior understandings or written or oral agreements between the parties respecting the within subject matter.

13. Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provisions shall be excluded from this Agreement and the balance of this Agreement shall be interpreted as if such provisions were so excluded and shall be enforceable in accordance with its terms.

14. Interpretation. No provision of this Agreement will be interpreted in favor of, or against, any of the parties hereto by reason of the extent to which any such party or its counsel participated in the drafting thereof or by reason of the extent to which any such provision in inconsistent with any prior draft hereof or thereof. In the event of a conflict between this Agreement, the Mechanic's Lien Contract and/or the Rehabilitation Contract, the provisions in the document containing the most stringent requirement for the matter in dispute shall control

15. Jurisdiction and Venue. The parties agree that any suit, action or proceeding brought by a party against the other in connection with or arising from this Agreement ("Judicial Action") shall be brought only in any United States Federal or Texas state court located in Hidalgo County,

Texas and the parties hereby consent to the exclusive jurisdiction of such courts (and the appropriate appellate courts) in any such Judicial Action and waives any objection to venue laid therein. If either party is a prevailing party in a Judicial Action, such party is entitled to recover from the non-prevailing party all costs of such proceeding and reasonable attorney's fees.

16. General Provisions. This Agreement:

a. may not be assigned by Owner or Contractor without the prior written consent of County;

b. may not be amended or modified, in whole or in part, unless such amendment or modification is executed in writing by both parties;

c. binds and inures to the benefit of the parties and their respective heirs, successors and permitted assigns; and

d. is for the sole benefit of the parties hereto and their respective heirs, successors and permitted assigns. Nothing herein shall give, or be construed to give, any legal or equitable rights hereunder to any other person or entity other than the parties hereto and their respective heirs, successors and permitted assigns.

NOTICE

ANY HOLDER OF THIS CONSUMER CREDIT CONTRACT IS SUBJECT TO ALL CLAIMS AND DEFENSES WHICH THE DEBTOR COULD ASSERT AGAINST THE SELLER OF GOODS OR SERVICES OBTAINED PURSUANT HERETO OR WITH THE PROCEEDS HEREOF. RECOVERY HEREUNDER BY THE DEBTOR SHALL NOT EXCEED AMOUNTS PAID BY THE DEBTOR HEREUNDER.

IMPORTANT NOTICE: YOU AND YOUR CONTRACTOR ARE RESPONSIBLE FOR MEETING THE TERMS AND CONDITIONS OF THIS CONTRACT. IF YOU SIGN THIS CONTRACT AND YOU FAIL TO MEET THE TERMS AND CONDITIONS OF THIS CONTRACT, YOU MAY LOSE YOUR LEGAL OWNERSHIP RIGHTS IN YOUR HOME. KNOW YOUR RIGHTS AND DUTIES UNDER THE LAW.

RESIDENTIAL CONSTRUCTION LIABILITY ACT (RCLA) NOTICE

This contract is subject to Chapter 27 of the Texas Property Code. The provisions of that chapter may affect your right to recover damages arising from the performance of this contract. If you have a complaint concerning a construction defect arising from the performance of this contract and that defect has not been corrected through normal warranty service, you must provide the notice required by Chapter 27 of the Texas Property Code to the contractor by certified mail, return receipt requested, not later than the 60th day before the date you file suit to recover damages in a court of law or initiate arbitration. The notice must refer to Chapter 27 of the Texas Property Code and must describe the construction defect. If requested by the contractor, you must provide the contractor an opportunity to inspect and cure the defect as

provided by Section 27.004 of the Texas Property Code.

BORROWER(S):

_____

Juanita Perez

YOU, THE OWNER, MAY CANCEL THIS TRANSACTION AT ANY TIME BEFORE MIDNIGHT OF THE THIRD BUSINESS DAY AFTER THE DATE OF THIS TRANSACTION. SEE THE ATTACHED NOTICE OF CANCELLATION FORM FOR AN EXPLANATION OF THIS RIGHT.

LENDER:

COUNTY OF HIDALGO, a political subdivision of the State of Texas

_____

By: **Diana R. Serna**
Its: **Director of Urban County Program**

CONTRACTOR:

_____

By: **Rene Garza**
Its: **R G Enterprises, LLC, dba G & G Contractors**

APPROVED AS TO FORM
Atlas & Hall, L.L.P.
By: Steve Crain
Date: June 19, 2013

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** day of **March, 2017** by **Diana R. Serna, Director of Urban County Program of the County of Hidalgo**, a political subdivision of the State of Texas, on behalf of said political subdivision.

_____
NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** of **March 2017**, by **Juanita Perez.**

_____
NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** day of **March 2017**, by **Rene Garza** with **R G Enterprises, LLC, dba G & G Contractors .**

_____
NOTARY PUBLIC, STATE OF TEXAS

YOU MAY CANCEL THIS TRANSACTION, WITHOUT ANY PENALTY OR OBLIGATION, WITHIN THREE BUSINESS DAYS FROM THE ABOVE DATE.

IF YOU CANCEL, ANY PROPERTY TRADED IN, ANY PAYMENTS MADE BY YOU UNDER THE CONTRACT OR SALE, AND ANY NEGOTIABLE INSTRUMENT EXECUTED BY YOU WILL BE RETURNED WITHIN TEN BUSINESS DAYS FOLLOWING RECEIPT BY THE MERCHANT OF YOUR CANCELLATION NOTICE, AND ANY SECURITY INTEREST ARISING OUT OF THE TRANSACTION WILL BE CANCELED.

IF YOU CANCEL YOU MUST MAKE AVAILABLE TO THE MERCHANT AT YOUR RESIDENCE, IN SUBSTANTIALLY AS GOOD CONDITION AS WHEN RECEIVED, ANY GOODS DELIVERED TO YOU UNDER THIS CONTRACT OR SALE; OR YOU MAY IF YOU WISH, COMPLY WITH THE INSTRUCTIONS OF THE MERCHANT REGARDING THE RETURN SHIPMENT OF THE GOODS AT THE MERCHANT'S EXPENSE AND RISK.

IF YOU DO NOT AGREE TO RETURN THE GOODS TO THE MERCHANT OR IF THE MERCHANT DOES NOT PICK THEM UP WITHIN TWENTY DAYS OF THE DATE OF YOUR NOTICE OF CANCELLATION, YOU MAY RETAIN OR DISPOSE OF THE GOODS WITHOUT ANY FURTHER OBLIGATION.

TO CANCEL THIS TRANSACTION, MAIL OR DELIVER A SIGNED AND DATED COPY OF THIS CANCELLATION NOTICE OR ANY OTHER WRITTEN NOTICE, OR SEND A TELEGRAM, TO RENE GARZA, R G ENTERPRISES, LLC, DBA G & G CONTRACTORS , AT 711 E. WISCONSIN RD, EDINBURG, TEXAS 78539 NOT LATER THAN MIDNIGHT OF MARCH 24, 2017.

I HEREBY CANCEL THIS TRANSACTION.

Dated: _____.

OWNER(S):

_____

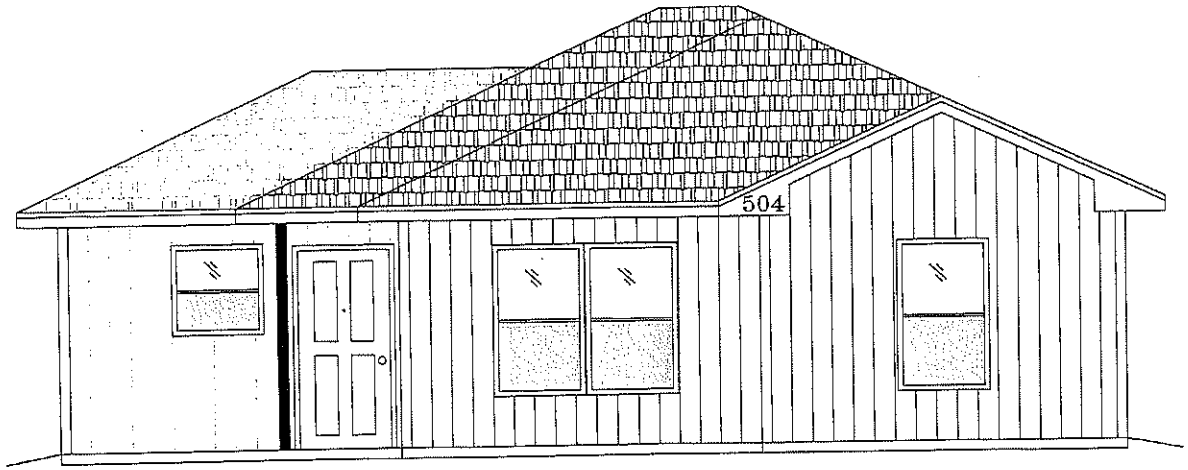
Juanita Perez

EXHIBIT "A"
LEGAL DESCRIPTION OF THE PROPERTY

Lot 10 in Block 5 of PALM VISTA, a subdivision adjacent to San Juan Texas, according to map of said SUBDIVISION, filed for record and records in Volume 8 page 5 of the Map Records of Hidalgo County Texas, as according to map subsequently recorded subdividing block 1 to 9, inclusive, of said subdivision into Lots said subsequent map recorded in Vol. 10 at page 5 of the Map Records of Hidalgo County Texas.

EXHIBIT "B"
PLANS AND SPECIFICATIONS,
TIMETABLE
AND
BUDGET

PEREZ RESIDENCE



JUANITA PEREZ
504 W. EBONY STREET
SAN JUAN, TEXAS 78589
CELL: 956-569-3863

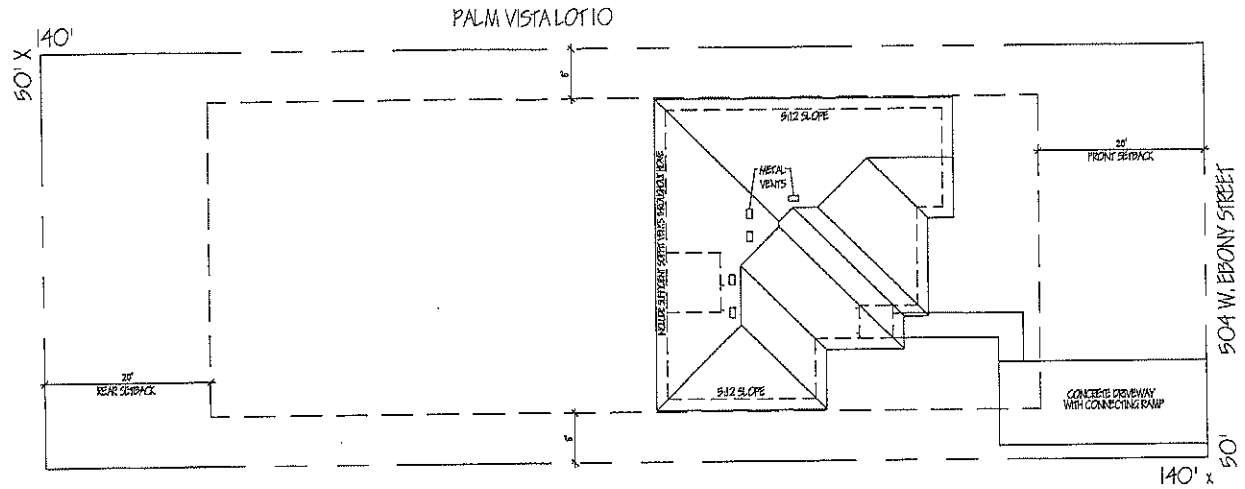
URBAN COUNTY PROGRAM
427 E. DURANTA STE 107- ALAMO
(956) 787-8127

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

JUANITA PEREZ
504 W. EBONY STREET SAN JUAN, TX

TOTAL AREA
992 SQ. FT.

C1.0



1 ROOF/PLOT PLAN

NOTE:

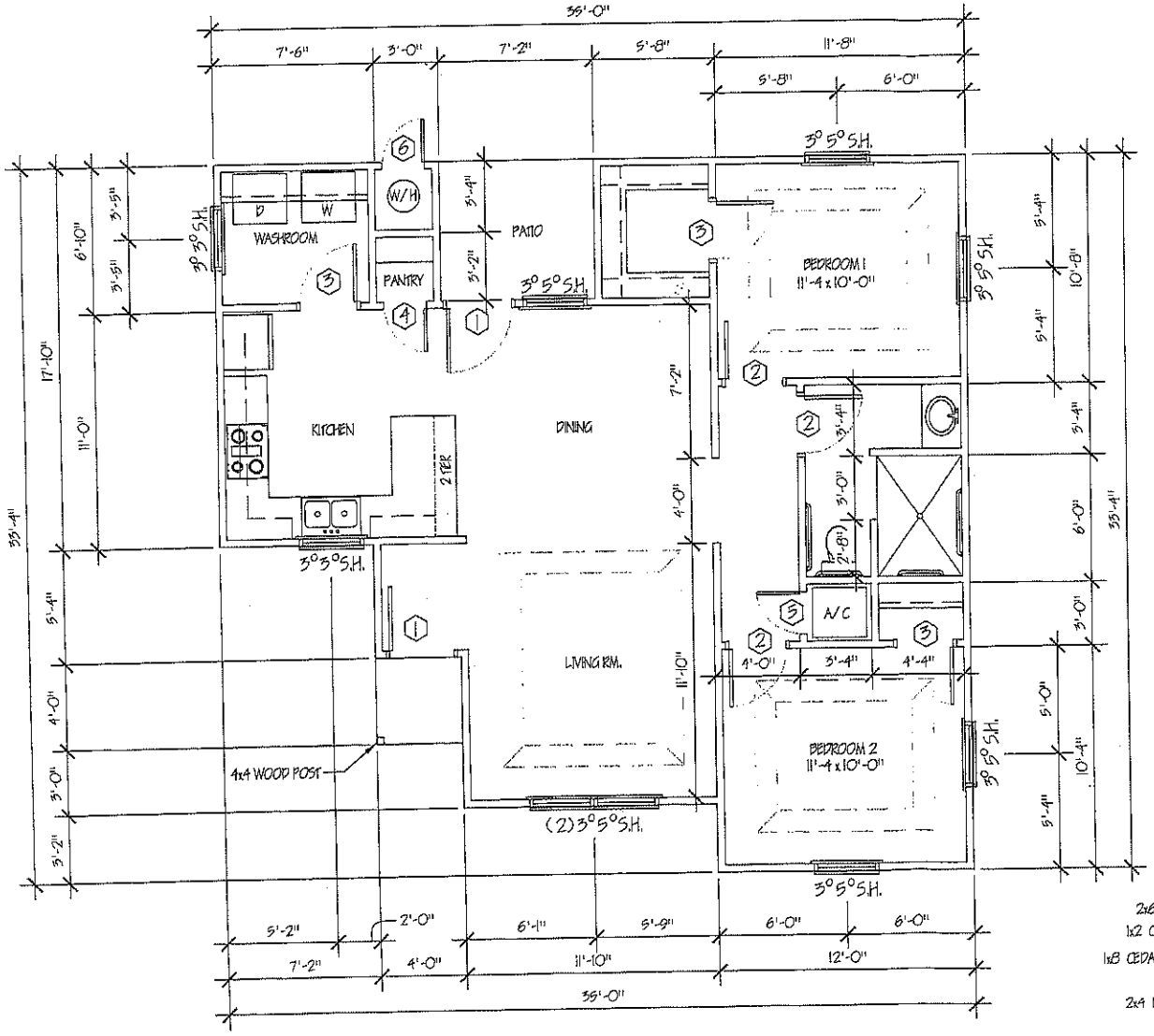
1. Please verify with city/ county on setbacks and for any requirements requarding sidewalk, driveway, landscaping, and any other obligations as per city requlations/ ordinances.
2. It is the responsibility of the Contractor to locate the rods and string the property. To avoid any problems it is now required and the responsibility of the Contractor to order a property survey by a professional engineer.
3. Any house that is made for handicap accessibility WILL ALWAYS require driveway with connecting sidewalk.
4. Provide 6" of landscape dirt around house with sufficient grass seed up to 10' of perimeter. In addition, remember to replace septic tank if needed and is more than 10 yrs old.

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

TOTAL AREA
992 SQ. FT.

JUANITA PEREZ
504 W. EBONY STREET SAN JUAN, TX

AS1.1



1 FLOOR PLAN
3/16" = 1'-0"

SQUARE FOOTAGE

LIVING AREA	930
PORCH/ PATIO	62
TOTAL SQ. FT.	992

DOOR SCEDULE

DR.#	TASK	SZ X 6 8	TYPE	LOCKS
1	INSTALL NEW UNIT W/ DUAL PEEP HOLES	3°	METAL W/ LOW PROFILE THRSH.D.	LEVER TYPE ENTRY LOCK W/ DEADBOLT.
2	INSTALL NEW UNIT	2⁸	HOLLOW CORE	LEVER TYPE PRIVACY
3	INSTALL NEW UNIT	2⁸	HOLLOW CORE	PASSAGE
4	INSTALL NEW UNIT	2°	HOLLOW CORE	PASSAGE
5	INSTALL NEW UNIT	2° x 4°	HOLLOW CORE	A/C CLOSET PASSAGE
6	INSTALL NEW UNIT	2°	HOLLOW METAL	LOCK W/ DEADBOLT

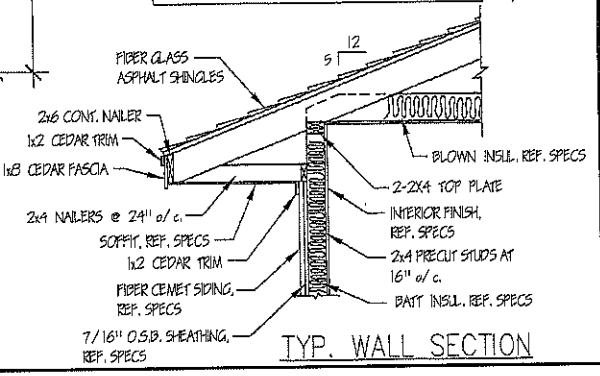
GENERAL NOTES

-5/12 SLOPE WITH 16" OVERHANG
-SUPPLY RIDGE / SOFFIT VENTS WHERE NEEDED
-INSTALL PORCH RAILING WHERE FINISH GRADE IS LOWER THAN 1" FROM PORCH FLOOR.
-INSTALL PORCH STEPS WHERE FINISH GRADE IS LOWER THAN 6" FROM PORCH FLOOR.
-CLIENT IS REQUESTING CONNECTIOS FOR A (GAS) ELECTRIC STOVE.
-INSTALL A MIN. OF TWO PHONE JACKS & CABLE CONNECTIONS AS PER OWNERS REQUEST.

EXTERIOR COLOR CHOICES TO BE OR MATCH:
SW 6092 (wall) SW6089 (trim)

INTERIOR COLOR CHOICES TO BE OR MATCH:
SW6105 -Divine white (wall) SW7006 Extra white (trim)

I HAVE READ AND FULLY AGREE WITH THE WRITE-UP AND PLANS AS PRESENTED TO ME THIS 7th DAY OF February 2019
Juanita M Perez



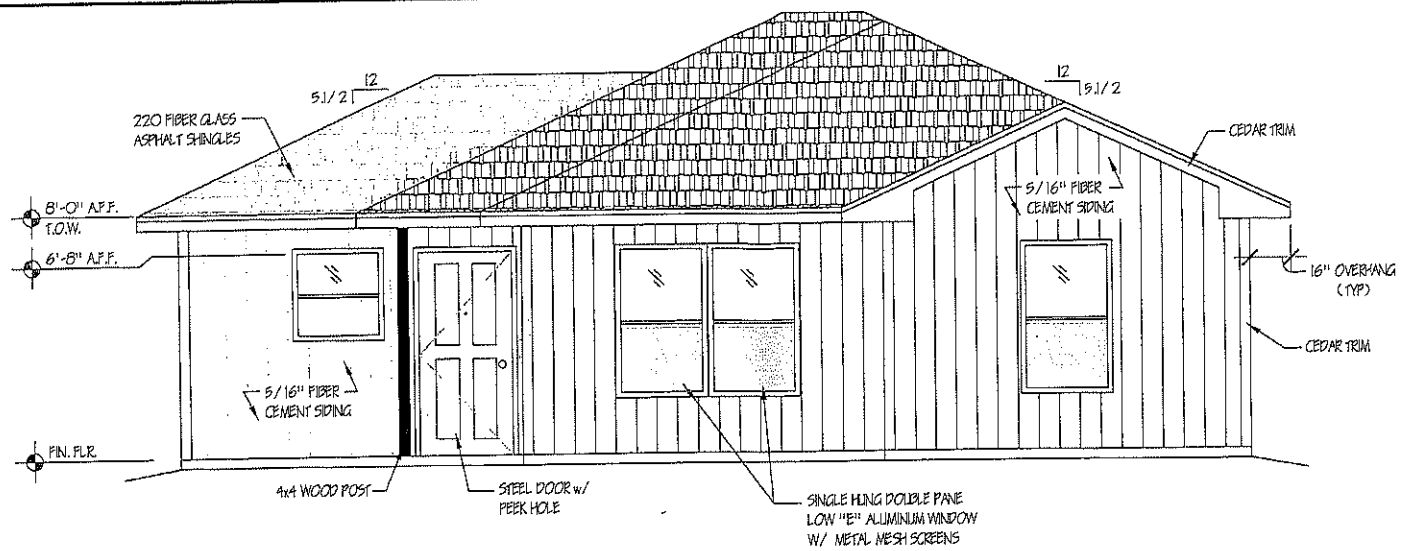
TYP. WALL SECTION

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

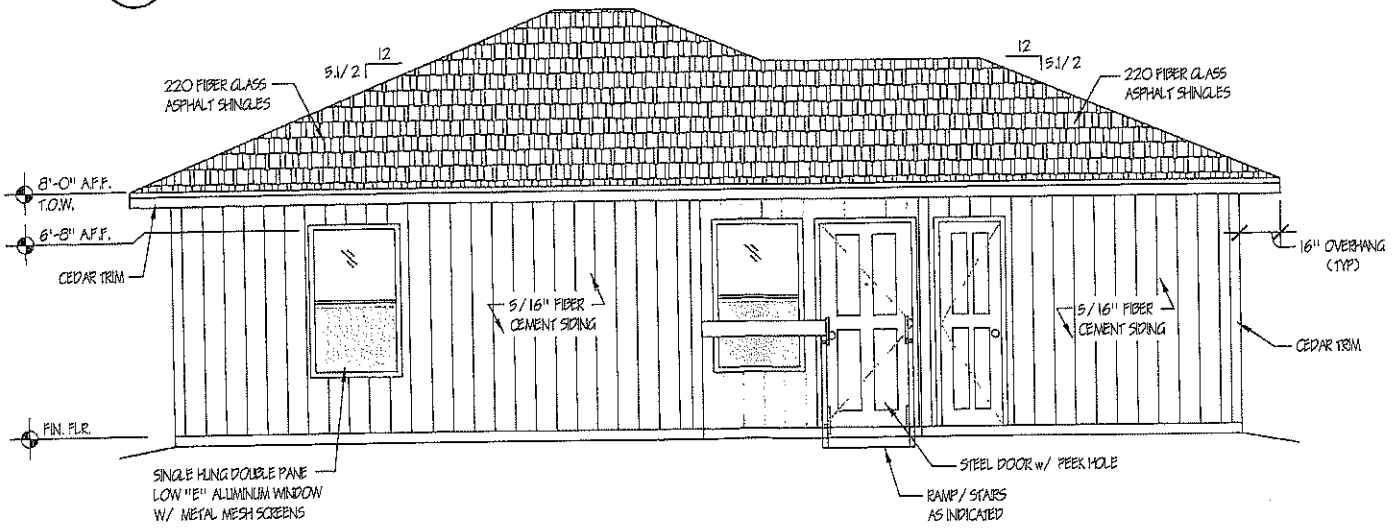
JUANITA PEREZ
504 W. EBONY STREET SAN JUAN, TX

TOTAL AREA
992 SQ. FT.

A1.1



1 FRONT ELEVATION



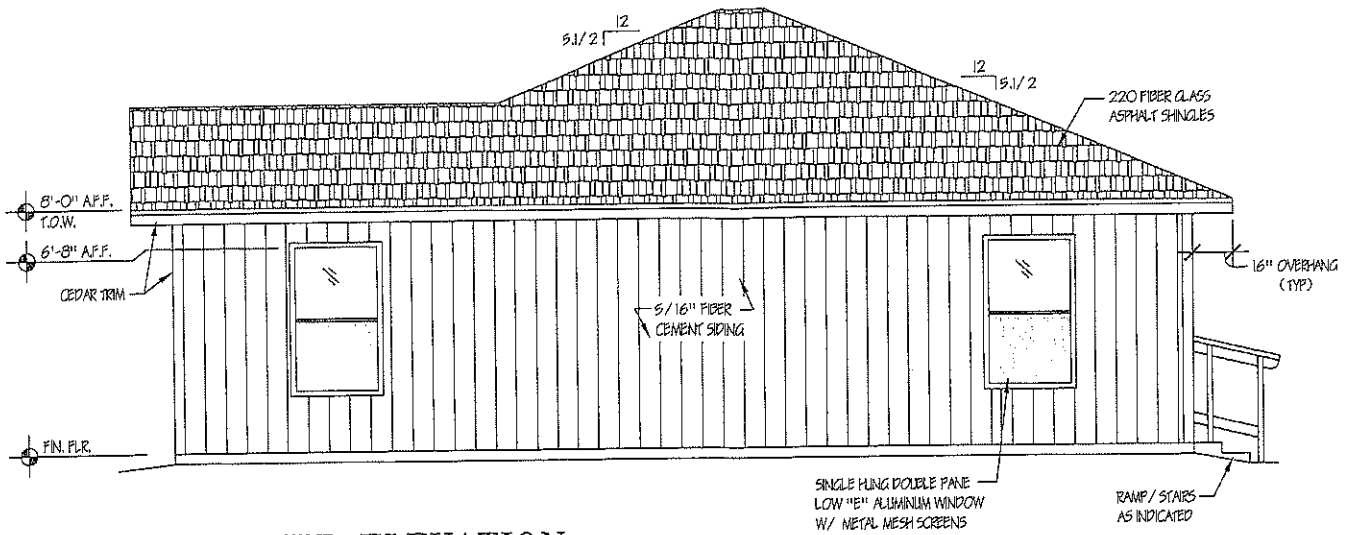
2 BACK ELEVATION

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

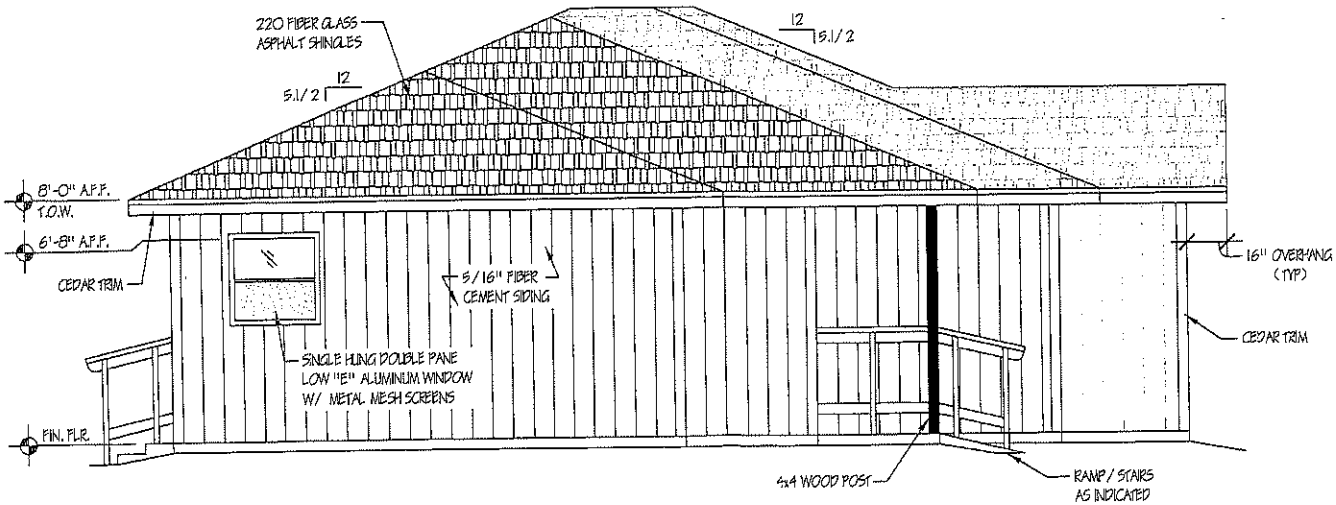
TOTAL AREA
992 SQ. FT.

JUANITA PEREZ
504 W. EBONY STREET SAN JUAN, TX

A1.2



1 RIGHT ELEVATION



2 LEFT ELEVATION

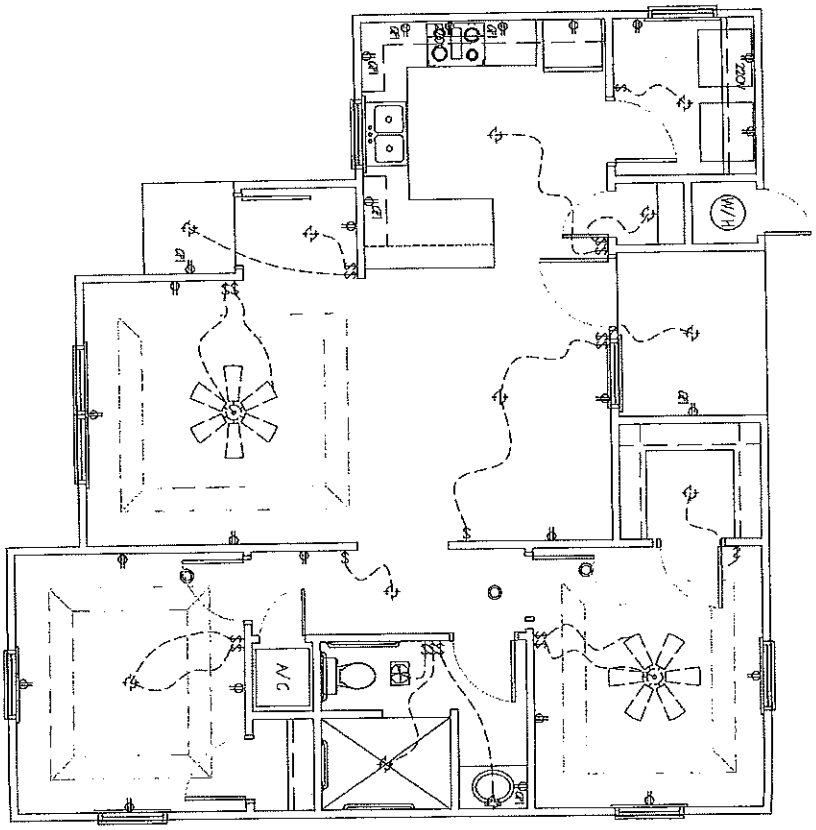
URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

JUANITA PEREZ
504 W. EBONY STREET SAN JUAN, TX

TOTAL AREA
992 SQ. FT.

A1.3

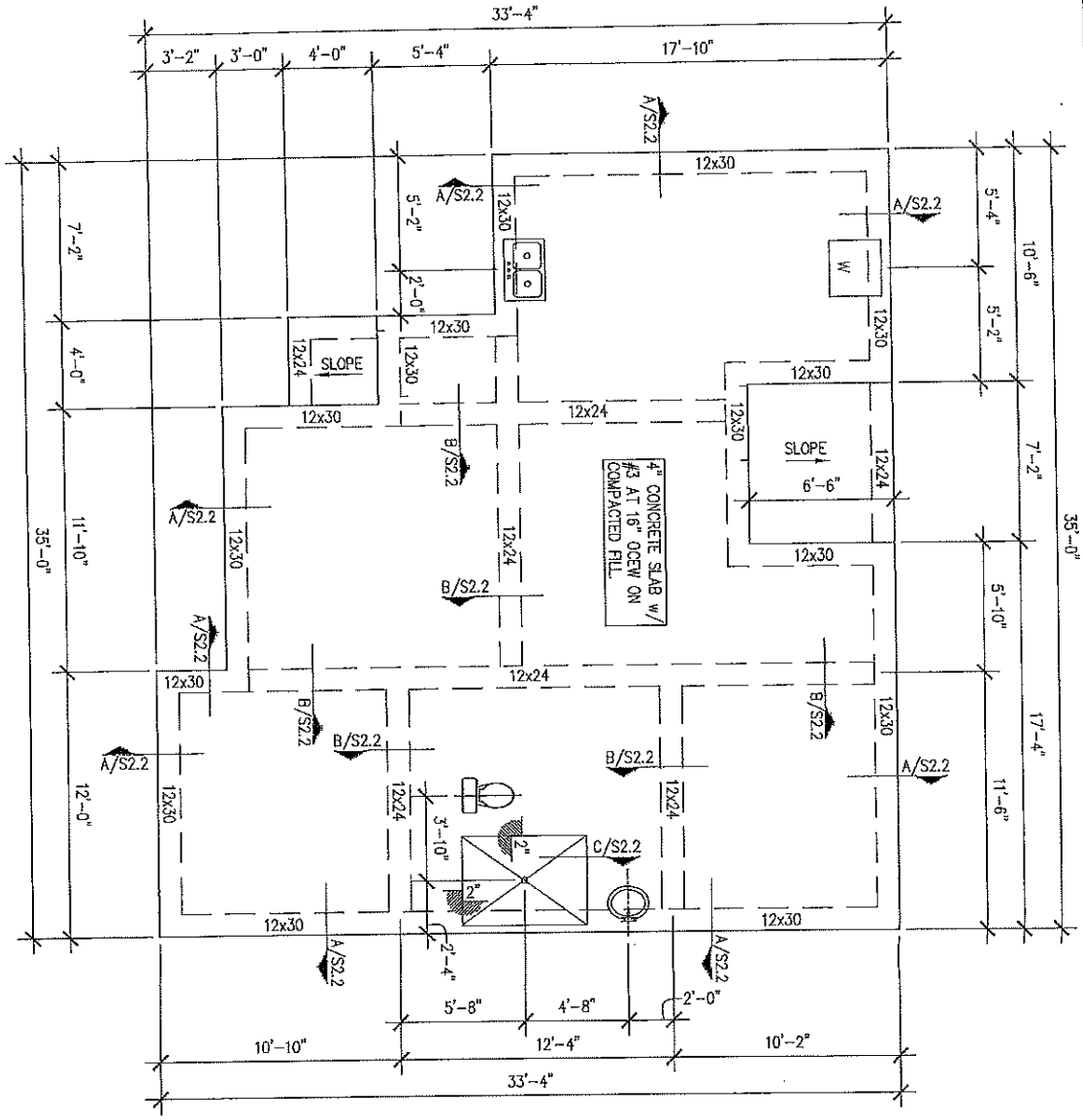
1 ELECTRICAL PLAN
3/16" = 1'-0"



ELECTRICAL LEGEND

W/H WATER HEATER	LIGHT FIXTURE
DUPLEX ELECTRICAL RECEPT.	$ LIGHT SWITCH
220V DUPLEX ELECTRICAL RECEPTACLE	T THERMOSTAT
GFI GROUND FAULT CIRCUIT INTERRUPTER	SMOKE DETECTOR
BATH/ROOM EXHAUST FAN	

	URBAN COUNTY PROGRAM OWNER OCCUPIED HOUSING REHABILITATION PROGRAM	
E1.1	JUANITA PEREZ 504 W. EBONY STREET SAN JUAN, TX	TOTAL AREA 992 SQ. FT.



1 FOUNDATION PLAN

3/16" = 1'-0"

NOTES:

1. 4" THICK SLAB ON GRADE w/ #3 BARS AT 16" O.C.E.W. AT MID-DEPTH OF SLAB OVER 6 MIL VISQUEEN OVER APPROVED COMPACTED FILL.
2. EXTERIOR GRADE BEAMS TO BE 12"x30" w/ 4-#5 BARS CONT. TOP AND BOTTOM w/ #3 STIRRUPS AT 24" o/c. A MINIMUM OF 6" IN DEPTH TO UNDISTURBED SOIL.
3. INTERIOR GRADE BEAMS TO BE 12"x24" w/ 4-#5 BARS CONT. TOP AND BOTTOM w/ #3 STIRRUPS AT 24" o/c. A MINIMUM OF 6" IN DEPTH TO UNDISTURBED SOIL.
4. CORNER BARS AT ALL CORNERS AND INTERSECTIONS SHALL BE #5 x 2'-0"x2'-0". APPLY 6x6 WIRE MESH AT SIDEWALKS AND DRIVEWAYS.
5. INSTALL ANCHOR BOLTS AT PERIMETER AT 48" o/c.
6. USE ONLY COMPACTED SELECT FILL DIRT. FINISH FLOOR TO BE 18" FROM TOP OF CURB, UNLESS OTHERWISE NOTED.

URBAN COUNTY PROGRAM

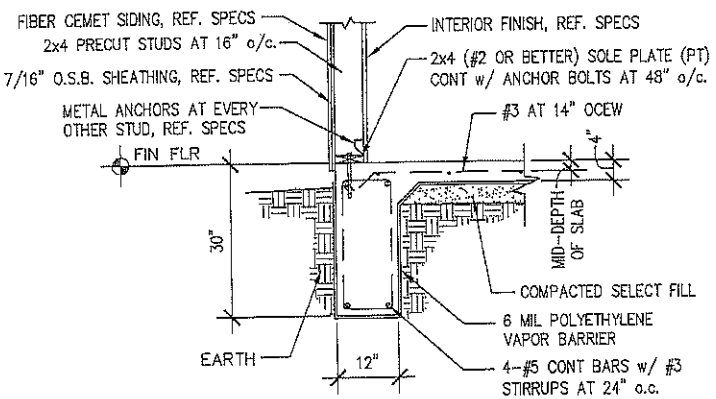
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

S2.1

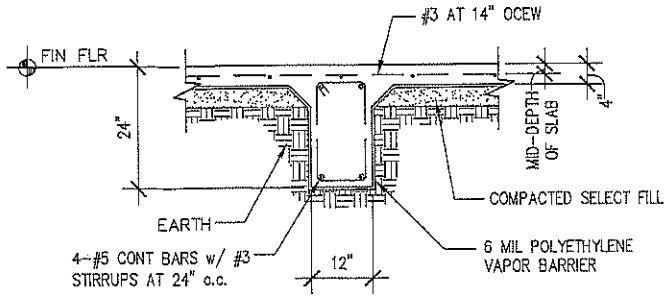
JUANITA PEREZ

504 W. EBONY STREET SAN JUAN, TX

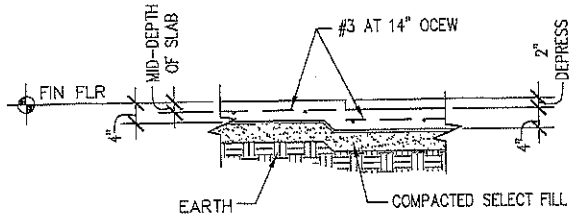
TOTAL AREA
992 SQ. FT.



A-EXTERIOR BEAM



B-INTERIOR BEAM



C-SHOWER DEPRESS

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

JUANITA PEREZ
504 W. EBONY STREET SAN JUAN, TX

TOTAL AREA
992 SQ. FT.

S2.2

SPECIFICATIONS

ALL *SPECIFICATIONS* SHALL ASSUME THE USE OF *CONTRACTOR'S MINIMUM GENERAL SPECIFICATIONS MANUAL*

OWNER (S) JUANITA PEREZ CASE NO.: # 2773 DATE: 2/6/17 ADDRESS: 107 PALMVIEW DRIVE ALAMO, TX PHONE: 956-569-3863 BY: ROBERT CAVAZOS

1. FOUNDATION WORK:

BUILD A NEW SLAB ON GRADE FOUNDATION TO COMPLY WITH PLANS, SPECS, CITY AND / COUNTY REQUIREMENTS. PROJECTS TO BE 18" ABOVE CENTER LINE OF STREET OR CURB OR 12" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. PROVIDE CONCRETE SLAB FOR A/C UNIT. PROVIDE A MIN. OF 12 X 25 DRIVEWAY (depending on city).

2. PLUMBING GENERAL: (SEE SPECS)

ALL PLUMBING ROUGH SHALL BE AS FOLLOWS:

- WATER SUPPLY TO HOUSE SHALL HAVE A ¾" CUTOFF VALVE BEFORE ENTRY TO HOUSE.
- INTERIOR WATER SUPPLY LINES FOR HOUSE SHALL BE ALL NEW PEX OF APPROPRIATE DIAMETER
- NEW PEX PIPES AND FITTINGS:
  - OF 1" MINIMUM DIAMETER FOR ALL EXTERIOR WATER SUPPLY LINES BELOW GROUND.
  - OF APROPRIATE DIAMETER FOR DWV (DRAIN, WASTE, AND VENTS).
- SEWER CONNECTION SHALL HAVE (1) PLASTIC PVC SEWER CLEAN OUT.

ALL PLUMBING FINISH SHALL BE AS FOLLOWS:

- RELATED PLUMBING ITEMS:
  - (2) EXTERIOR HOSE BRASS BIB FAUCETS;
  - ½" CUTOFF VALVES WITH ESCUTCHEONS FOR ALL FIXTURES.

FIXTURES:

- PLUMBING SEALANT FOR ALL DRAINS, AND SINK PERIMETERS
- ALL OTHER RELATED PLUMBING (SEE SPECS)

FIXTURES: (SEE SPECS)

- KITCHEN SINK W/ RELATED PLUMBING & FAUCETS
- PEDESTAL SINK W/ RELATED PLUMBING & FAUCETS
- TOILET OF MATCHING COLOR
- SHOWER WITH RELATED PLUMBING AND HANDICAP ACCESSIBLE.
- SHOWER FAUCETS & REMOVABLE SHOWER HEAD
- MEDICINE CABINETS/TOWEL RACKS/ T.P. DISPENCER/ TOOTHBRUSH & SOAP HOLDER, & SHOWER ROD (SEE SPECS)
- WATER HEATER INSTALLED AS-PER SPECS. (GAS OR ELECTRIC AS PER OWNER REQUEST)

OTHER RELATED ITEMS

- RANGE CONNECTIONS AS PER OWNERS REQUST.(SEE SECTION 23.)
- 4" DRYER EXAUST VENT.
- IN WALL WASHING MACHINE BOX, WITH BRASS FAUCETS & RELATED PLUMBING.

HOOK UP ALL DRAINAGE LINES TO CITY SEWER SYSTEM IF AVAILABLE. SEE CITY FOR INFORMATION.TEST SEPTIC SYSTEM IF EXISTING FOR INTEGRITY AND REPLACE IF NECESSARY AND MORE THAN 10 YEARS OF AGE

3. INTERIOR/EXTERIOR WALLS & CEILINGS:

ALL INTERIOR AND EXTERIOR WALL FRAMING:

- 2"x4" (#2 OR BETTER) FOR USE IN: SOLE PLATES (TREATED LUMBER)
  - DOUBLE TOP PLATES
  - 92 5/8" PRE-CUT STUDS @ 16" O.C.
  - WINDOW SILLS
  - CEILING JOIST CHAIN BLOCKING @ 48" O.C.
- 2"x6" (#2 OR BETTER) FOR USE IN:
  - WINDOW & DOOR HEADERS WITH 1"/2" PLYWOOD SPACER.
  - CEILING JOIST @ 24" O.C., FOR CLEARANCES LARGER THAN 12' CEILING JOIST SHALL BE @ 16" O.C.
  - INSTALL BOOT TIES IN EVERY CORNER OF THE HOUSE ALONG WITH METAL ANCHORS ON BOTH BOTTOM AND TOP PLATES OF HOME

ALL EXTERIOR CEILING COVERINGS:

- 3/8" CD EXTERIOR PLYWOOD FOR PORCH CEILINGS.

ALL INTERIOR WALL & CEILING COVERINGS.

- ½" SHEETROCK FINISHED AS PER SPECS.
- ⅝ "DAMP RESISTANT SHEETROCK FOR BATH AREAS.

ALL INTERIOR CEILINGS SHALL HAVE ORANGE PEEL TEXTURE.
ALL INTERIOR WALL SURFACESS SHALL HAVE ORANGE PEEL TEXTURE.
ALL EXTERTIOR TRIMMINGS SHOULD CONSIST OF CEDAR WOOD.

4. ROOF: (SLOPE=5/12)

ROOF SHALL HAVE:

- A HIP/GABLE STYLE ROOF WITH 16" OVERHANGS.
- A HIP/GABLE STYLE FRONT PORCH AS PER PLANS.
- PORCH COLUMNS MUST BE FASTENED TO CONCRETE.
- AN ADEQUATE COMBINATION OF RIDGE & SOFFIT VENTS WITH AIR CHUTES.
- ADEQUATE RAIN GUTTERS WITH DOWN SPOUTS FOR THE ROOF AREA THAT MAY AFFECT OWNERS.
- SHINGLES TO BE OF LIGHT COLOR (no black shingles)

5. PORCH & CANOPY FLOORS:

THE HOUSE SHALL HAVE PORCH FLOORS AS FOLLOWS:

- A FRONT PORCH FLOOR.
- A SIDE/BACK PORCH FLOOR.

PROVIDE RAMP & (2)-HANDRAILS TO EACH FRONT AND/OR SIDE PORCH STEPS

6. INSULATION:

INSULATE:

- ALL LIVING AREA CEILINGS WITH BLOWN IN INSULATION TO AN R-49 FACTOR. (need a combined R-30 & R-19 to meet requirement)
- HAVE RULER INSTALLED FOR EVER 300 SQUARE FEET BEFORE FRAMING AND ROUGH-IN INSPECTION IS SCHEDULED.
- INFILTRATION FOAM SHALL BE USED AROUND ALL WINDOWS, WIRES, PLUMBING, ELECTRICAL, 2X4 BOTTOM PLATES, AND ALL PENETRATED AREAS.
- ALL PERIMETER WALLS WITH R-15 F.G. BATT.
- ALL EXTERIOR PIPES EXPOSED TO WEATHER SHALL BE INSULATED.

7. INTERIOR FINISH:

ALL TRIM SHALL BE INSTALLED AS PER SPECS.
ALL PAINT SHALL BE APPLIED AS PER SPECS (2-COATS) WITH PAINT COMPARABLE IN QUALITY TO SHERWIN WILLIAMS. ALLOW A VARIETY OF DIFFERENT COLORS FOR CLIENT TO CHOOSE FROM. (2 COLOR CHOICE MIN).

8. EXTERIOR FINISH:

PAINT ENTIRE HOUSE AS PER SPECS WITH PAINT COMPARABLE IN QUALITY TO SHERWIN WILLIAMS. PRIMER TO BE OIL BASED & PAINT MUST BE EQUIVALENT TO A-100. (2 COLOR CHOICE MIN).

9. SIDING:

THE SIDING SHALL BE 5/16" FIBER CEMENT WITH ALL CEDAR TRIM TO ENTIRE HOUSE.
INSTALL 7/16" O.S.B. TO THE ENTIRE PERIMETER OF THE HOUSE AS PER MANUFACTURER'S SPECIFICATIONS. REFERENCE DETAIL.

10. WINDOWS:

SHALL BE NEW LOW "E" DOUBLE PANE INSULATED ALUMINUM WINDOWS, SIZE AS PER PLAN. KEEP LABELS ON WINDOWS UNTIL FINAL INSPECTION HAS BEEN CLEARED.

11. CABINETS GENERAL:

BUILD AND/OR INSTALL NEW KITCHEN CABINETS TO INCLUDE:

- A RANGE CABINET.
- A KITCHEN/ BATHROOM FORMICA COUNTER TOP OF MATCHING COLOR.

BUILD AND / OR INSTALL A NEW VANITY CABINET (IF APPLICABLE) FOR BATHROOM WITH FORMICA TO MATCH LAVATORY, SINK, AND WALLS. ALL CABINETRY PIECES SHOULD BE NEW AND COMPLETE AND BUILT TO PROFESSIONAL STANDARDS.

12. FLOOR, SUBFLOOR, & FINISH FLOORING:

APPLY VCT FLOOR TILE TO ALL LIVING AREA HOUSE FLOORS.

13. ELECTRICAL GENERAL

ALL ELECTRICAL INSTALLATIONS & WORK AS PER ELECTRICAL CODE WITH THE FOLLOWING CONDITIONS:

- PROVIDE RANGE OUTLET AS PER OWNER'S REQUEST.
- PROVIDE APPROPRIATE WASHER & DRYER CONNECTION.
- (2) 52" CEILING FANS (CEILING HUGGER STYLE) COMPARABLE IN QUALITY TO THE "HUNTER" BRAND, THE CONTACTOR SHALL ALLOW $120.00 FOR MATERIAL & LABOR, LOCATON AS PER OWNER REQUEST.
- INSTALL GFCI OUTLETS IN BATHROOMS, KITCHEN, AND EXTERIOR WALLS.
- EACH ELECTRICAL PANEL OR BREAKERBOX, LIGHT SWITCH, & THERMOSTAT NO HIGHER THAN 48" ABOVE FLOOR
- EACH ELECTRICAL PLUG TO BE 15" ABOVE THE FLOOR
- ANY OUTLETS WITHIN 6' FROM KITCHEN OR BATHROOM SINKS MUST BE GFCI

14. RANGE HOOD:

INSTALL A RANGE HOOD TO FIT OWNER'S RANGE SIZE (30" OR 36") AND VENT TO EXTERIOR.

15. BATHROOM ACCESSORIES:

ALL ACCESSORIES & MEDICINE CABINETS AS PER SPECS, INCLUDE CURTAIN ROD & PLASTIC RETAINING DAM TO HELP PREVENT WATER FROM ESCAPING SHOWER. INSTALL PEDESTAL SINK AND CABINET ABOVE TOILET. (ALSO INCLUDE TOILET PAPER, TOOTHBRUSH, AND SOAP HOLDER.)

16. ACCESS FOR PHYSICAL DISABILITIES:

INSTALL ONE CONC. RAMP AS PER OWNERS REQUEST THAT CONNECTS WITH 12 X 25 DRIVEWAY AND STEPS WITH HANDRAILS
BATHROOM SHOULD ACCOMMODATE GRAB BARS WHERE INDICATED IN PLANS

17. HEATING & A/C:

PROVIDE & INSTALL A 16 SEER CENTRAL AIR CONDITIONING COMPARABLE IN QUALITY TO A CARRIER BRAND UNIT FOR THE ENTIRE HOUSE. INCLUDE DIGITAL THERMOSTAT.

18. SMOKE DETECTORS:

INSTALL A SMOKE DETECTOR INSIDE EACH SLEEPING ROOM, OUTSIDE SLEEPING ROOMS, ALL WIRED IN SERIES.

19. GENERAL NOTES.

CONTRACTOR IS RESPONSIBLE FOR:

- YOU'RE BID TO INCLUDE ANY COST RELATED TO REQUIREMENTS FROM CITY. CHANGE ORDERS FOR THIS PARTICULAR PURPOSE WILL NOT BE ACCEPTED OR PROCESSED TO CORRECT THE ABOVE MENTIONED.
- YOUR BID TO INCLUDE ANY COST RELATED TO RES-CHECK & ENERGY COMPLIANCE REQUIREMENTS.
- THE DEMOLISH AND DISPOSAL EXISTING STRUCTURE.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING SIDEWALKS, DRIVEWAYS, AND UTILITY LINES DURING DEMOLITION.
- THE COMPLIANCE OF ALL THE REQUIRED BUILDING ELEVATIONS.
- PROVIDE 6" OF LANDSCAPE DIRT AROUND THE HOUSE ALONG WITH SUFFICIENT GRASS SEEDS UP TO 10' OF PERIMETER.
- PROVIDING THE APPROPRIATE ELECTRICAL AND /OR GAS CONNECTIONS FOR RANGE AS PER APPICANT'S REQUEST AND ACCORDING TO APPLICABLE PLUMBING/ELECTRICAL CODE.
- PROVIDE PHONE JACKS & CABLE CONNECTIONS IN EVERY BDRM & LIVING SPACE. KITCHEN PHONE IF REQUESTED.
- PROVIDE TERMITE PRE-TREATMENT TO ENTIRE FOUNDATION PAD.
- OBTAINING, DISPLAYING, AND SUBMITTING ALL PROPER PERMITS & INSPECTIONS.
- ALL CONTRACTORS WILL BE RESPONSIBLE FOR ANY ADDITIONAL PLANS, SPECIFICATIONS AND/OR DETAILS THAT ARE REQUIRED BY CITIES OR COUNTY AT THE TIME OF ATTAINING PERMITS.
- MINIMUM 12x-25 CONC. DRIVEWAY WITH CONNECTING SIDEWALK TO RAMP FOR HANDICAP APPLICANTS.
- ALL THE GENERAL INFORMATION CONTAINED WITHIN SECTION 23. GENERAL NOTES OF THE CONTRACTOR'S GENERAL SPECIFICATIONS MANUAL.
- PROVIDE AND INSTALL PROJECTS SIGNS AT EACH CONSTRUCTION SITE PRIOR TO THE START OF CONSTRUCTION. FINES WILL BE ENFORCED.
- CONTRACTOR IS RESPONSIBLE FOR SUPPLYING PORT A POTTY TRHOUGHOUT CONSTRUCTION PROCESS (demo to final inspection) FINES WILL BE ENFORCED.
- SHOWER ENTRANCES TO BE 36" WIDE.
- ALL UCP HOMES MUST COMPLY WITH TEXAS GOVERNMENT CODE §2306.514

THE HOMEOWNER SHALL BE RESPONSIBLE FOR

- REMOVE AND DISPOSE OF ALL DEBRIS ON SITE BEFORE THE BEGINNING OFCONSTRUCTION, INCLUDING BUT NOT LIMITED TO TIRES, ABANDONEDVEHICLES, OLD LUMBER, ETC.
- MAKING NECESSARY DEPOSITS FOR ANY UTILITIES TO BE CONNECTED TO THE NEW DWELLING.

SPECIFICATIONS

ALL *SPECIFICATIONS* SHALL ASSUME THE USE OF *CONTRACTOR'S MINIMUM GENERAL SPECIFICATIONS MANUAL*

OWNER (S) JUANITA PEREZ CASE NO.: # 2773 DATE: 2/6/17 ADDRESS: 107 PALMVIEW DRIVE ALAMO, TX PHONE: 956-569-3863 BY: ROBERT CAVAZOS

I HAVE READ AND FULLY AGREE WITH THE WRITE-UP AND PLANS AS PRESENTED TO ME.

Juanita M Perez

NAME OF APPLICANT

NAME OF CO-APPLICANT

TIME TABLE

ACTIVITY	DATE(S)
Contract Signing	March 7, 2017
Demolition	March 16, 2017
Construction Start	March 17, 2017
Anticipated Draws	After 50% construction completion After 100% construction completion 30 days after construction completion
End Construction	June 5, 2017

BUDGET

	Total Cost
Pre-Development	$ 0.00
Acquisition	$ 0.00
Demolition/Construction	$59,740.00
Other Costs:	$ 0.00
TOTAL PROJECT COSTS	$59,740.00

EXHIBIT "C"
SPECIAL CONDITIONS

None.

CONSTRUCTION LOAN AGREEMENT

OWNER-OCCUPIED REHABILITATION LOAN PROGRAM

This Construction Loan Agreement (this "Agreement"), is entered into effective as **March 21, 2017**, among Borrower, Lender and Contractor who are identified and whose addresses are stated below. This Agreement relates to the manner of disbursement of the loan proceeds on the Note for the benefit of Borrower for the rehabilitation and/or renovation of the Improvements on the Property under the Lender's Owner-Occupied Housing Rehabilitation Program. The Note is secured by liens on the Property and Improvements granted the Mechanic's Lien Contract and the Deed of Trust.

BORROWER: **Juanita Medina**

BORROWER'S ADDRESS:

P.O. Box 1183
Alamo, Texas 78516

LENDER: County of Hidalgo, a political subdivision of the State of Texas

LENDER'S ADDRESS:

County of Hidalgo, Urban County Program
Owner-Occupied Rehabilitation Loan Program
427 E. Duranta Ave., Suite 107
Alamo, Texas 78516

CONTRACTOR: **Emigdio Villanueva, Quality Investment**

CONTRACTOR'S ADDRESS:

519 E. 19th St., Ste B
Mission, Texas 78572

NOTE:

Mechanic's Lien Note ("Mechanic's Lien Note") of even date herewith, in the original principal amount of **$59,999.99**, executed by Borrower, and payable to the order of Contractor, which note has been renewed and extended into a Promissory Note of even date herewith, in the original principal amount of **$59,999.99**, executed by Borrower, and payable to Lender.

CONTRACT:

Mechanic's Lien Contract and Transfer of Lien of even date herewith, executed by Borrower and Contractor providing for the rehabilitation and/or renovation to the Improvements and (i) granting Contractor liens against the Property to secure payment of the Mechanic's Lien Note; and (ii) transferring such liens to Lender.

SECURITY FOR PAYMENT:

Mechanic's and materialman's lien on the Property granted by Borrower to Contractor in the Mechanic's Lien Contract and Transfer of Lien (the "Mechanic's Lien Contract"), which liens were transferred thereunder to Lender, which Mechanic's Lien Contract and Transfer of Lien is recorded in the Real Property Records of Hidalgo County, Texas, and a deed of trust lien on the Property granted by Borrower for the benefit of Lender in a Deed of Trust ("Deed of Trust") of even date herewith, which Deed of Trust is recorded in the Real Property Records of Hidalgo County, Texas

PROPERTY: See Exhibit "A" attached hereto and made a part hereof for all purposes

IMPROVEMENTS:

Renovation and/or rehabilitation to Borrower's residence located on the Property according to: (i) Plans and Specifications, Timetable and Budget attached hereto as Exhibit "B"; (ii) an Owner-Occupied Rehabilitation Loan Program Contract (the "Rehabilitation Contract") of even date herewith entered into by and between Borrower and Lender; and (iii) the accepted bid submitted to Lender by Contractor.

AMOUNT AVAILABLE FOR CONSTRUCTION: **$59,999.99**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Borrower, Lender and Contractor agree as follows:

1. Purpose and Limitation of Advances.

(a) Subject to the provisions of this Agreement, and in compliance with Subchapter K, Chapter 53, Texas Property Code, Lender will advance funds to Contractor for the benefit of Borrower in the aggregate amount of the Note. Provided Contractor has obtained the performance bond required in Paragraph 1 (b) of this Agreement, Lender will advance the Amount Available for Construction during the course of the construction of the Improvements, in accordance with this Agreement. The Amount Available for Construction will be advanced solely to pay Contractor for costs of labor performed and materials furnished by Contractor pursuant to the Contract.

(b) Contractor may furnish a performance bond ("Bond"), at Contractor's sole cost and expense, to be kept in force throughout the period of this Agreement, in an amount equal to the Amount Available for Construction. The Bond shall: (i) cover Contractor's faithful performance of the Contract, free of liens upon the Property; (ii) name as obligees both Borrower and Lender, jointly and severally; (iii) be written by surety companies qualified to do business in the State of Texas; and (iv) be in such form and with such sureties as the Lender may approve.

(c) Construction advances are to be made by Lender to Borrower for work done.

(d) If Contractor has provided Lender and Borrower the Bond permitted by this Agreement, Contractor may submit a request for 40% of the Amount Available for Construction ("Initial Advance") when 50% of the work related to the Improvements have been completed and Contractor and Borrower have complied with the provisions of Paragraph 3 of this Agreement. A second request for construction advance for 50% of the Amount Available for Construction ("Final Advance") may be submitted when the Improvements have been completed and accepted by Borrower and Lender and Contractor and Borrower have complied with the provisions of Paragraph 4 of this Agreement.

(e) If Contractor has not provided Lender and Borrower the Bond permitted by this Agreement, Contractor may submit a request for 90% of the Amount Available for Construction when the Improvements have been completed and accepted by Borrower and Lender, and Contractor and Borrower have complied with the provisions of Paragraph 4 (except as to the Bond) of this Agreement.

(f) All requests for construction advances shall comply with Subchapter K, Chapter 53, Texas Property Code, and be made on forms approved by Lender. Each construction advance shall be in an amount equal to the Amount Available for Construction times the applicable percentage as determined by Lender and/or its inspectors. Lender may prepare a chart for determining the percentage of completion and the schedule of advances to be made by Lender, and Lender may limit advances according to the schedule based on the percentage of the Improvements that are complete at the time of any request for construction advance.

(g) Whenever in the sole opinion of Lender the cost of completing the Improvements pursuant to the plans and specifications approved by Lender exceeds the total amount of unadvanced loan proceeds, Borrower, at Lender's request, shall pay such excess to the satisfaction of Lender prior to any further advances under the Note.

2. Lender's Payments on Behalf of Borrower. Lender shall make payments for the cost of construction of the Improvements by check payable to the Owner and Contractor, or to Contractor, and in Lender's discretion, following Contractor's default under this Agreement or the Contract, jointly to Contractor and Contractor's subcontractors or suppliers.

3. Conditions to Initial Advance. Lender shall have no obligation to make the Initial Advance of funds to Borrower unless and until Contractor has furnished Borrower and Lender the Bond permitted by this Contract, and the following conditions have been satisfied:

(a) Borrower has executed and delivered to Lender this Agreement, the Contract, the Note, the Deed of Trust, the Owner-Occupied Rehabilitation Loan Program Contract of even date herewith by and between Borrower and Lender, and Affidavit of Commencement and other documents securing the loan evidenced by the Note; and Contractor has executed and delivered to Lender this Agreement, the Contract, an Affidavit of Commencement and other documents securing the loan evidenced by the Note;

(b) Borrower and Contractor have furnished Lender all documents required by Lender to evidence compliance with Subchapter K, Chapter 53, Texas Property Code;

(c) To the extent applicable, Contractor has furnished Lender evidence that Contractor has established a construction account in compliance with Chapter 162, Texas Property Code;

(d) Contractor has provided Lender a copy of the final plans and specifications for the construction of the Improvements acceptable to Lender, along with a timetable and budget for completion of the Improvements as required by this Agreement and the Contractor's accepted bid;

(e) Contractor has provided Lender a copy of the building permit for the Improvements;

(f) Contractor has provided Borrower and Lender a list of all subcontractors used or to be used for completion of the Improvements, and executed partial releases and lien waivers from Contractor and any subcontractors and suppliers who performed work and/or materials at any time in connection with the Improvements, in a form acceptable to Lender, for all amounts to be disbursed to Contractor against the Amount Available for Construction;

(g) Contractor has provided Lender a copy of all insurance policies, which Contractor is required to maintain under the Contract, or in lieu thereof, a certificate of insurance which confirms Contractor has obtained all insurance required under the Contract;

(h) Contractor has provided Lender evidence that Contractor is in compliance with Chapter 416, Texas Property Code; and

(i) Borrower and Contractor have provided Lender such other items as Lender shall reasonably require.

4. Final Advance. The Final Advance (except for retainage, which will be disbursed in accordance with paragraph 5) shall be disbursed at the completion of the Improvements when Contractor has delivered to Lender all documents required under Paragraph 3 and the following:

(a) an affidavit of completion executed by Borrower and Contractor (the "Affidavit of Completion"), a final bills- paid affidavit executed by Contractor (the "Final Bills-Paid Affidavit"), and final waivers of lien and releases executed by Contractor and any subcontractors and suppliers who performed work and/or materials at any time in connection

with the Improvements (collectively, the "Releases"), which documents comply with Subchapter K, Chapter 53, Texas Property Code and are acceptable to Lender, together with supporting evidence that: (i) the construction work for the Improvements has been fully completed; and (ii) all bills for labor and material have been paid in full;

(b) Evidence that Borrower and Contractor have complied with all applicable laws pertaining to the location, development, and construction of the Improvements and that all governmental authorities having jurisdiction have approved: (i) the location, development, and construction of the Improvements to the Property; and (ii) all other matters requiring approval by governmental authorities; and

(c) Borrower and Contractor have provided such other items as Lender shall reasonably require.

5. Disbursement of Retainage. The retainage will not be disbursed until: (i) (a) the Releases have been filed in the Real Property Records of Hidalgo County, Texas, (b) the deadline to file an affidavit claiming a lien against the Property in connection with the Improvements (that is, the fifteenth (15^{th}) day of the third calendar month after the day the indebtedness accrues) has expired and no such affidavits have been filed, or (c) if any affidavits claiming a lien against the Property in connection with the Improvements have been filed, the claims set forth in such affidavits have been resolved and the affidavits have been released of record; (iii) the Affidavit of Completion and the Final Bills-Paid Affidavit have been filed in the Real Property Records of Hidalgo County, Texas; and (iv) Borrower and Contractor have complied with Paragraph 4 of this Agreement.

6. Inspections. Lender shall be entitled to: (i) use its own personnel; or (ii) to designate an architect, engineer or other third party; to make any inspections or certifications required by Lender, and Lender shall not be required to make any loan advance until Lender has received inspections and certifications satisfactory to it. Prior to each loan advance, and at such other times as Lender may require, either Borrower or Contractor will be required to call for a physical inspection by Lender or other party designated by Lender.

7. Borrower's and Contractor's Additional Obligations. Borrower and Contractor further agree that:

(a) The Improvements will be constructed and fully equipped in a good and workmanlike manner with materials of high quality, using all new materials, strictly in accordance with the plans and specifications approved by Lender, and that the Improvements will comply with: (i) all applicable Housing Quality Standards contained in 24 Code of Federal Regulations, as amended, if the Property is located outside the jurisdiction of a municipality; or (ii) all applicable local building codes and ordinances of the municipality if the Property is located within the jurisdiction of a municipality, unless the municipality has no local building codes and ordinances, in which event Owner shall comply with all applicable Housing Quality Standards contained in 24 Code of Federal Regulations, as amended;

(b) No changes will be made in the plans and specifications submitted to Lender except on the written approval of the same by Lender;

(c) No extras shall be allowed to any contractor or subcontractor or any change made in any contract or subcontract without the Lender's prior written approval and consent;

(d) Contractor will promptly furnish Lender, at Lender's request, after execution thereof, executed copies of all contracts between Contractor and subcontractors, and of all contracts between Contractor and its suppliers, as well as contracts between subcontractors and their suppliers;

(e) Borrower and Contractor will cooperate with Lender in arranging for inspections by representatives of Lender of the progress of construction from time to time and will promptly comply with Lender's requirements or satisfy any objections regarding construction of the Improvements or the progress thereof;

(f) Borrower and Contractor will not suffer or permit any mechanics' or materialmen's lien claims to be filed or otherwise asserted against the Property and will promptly discharge the same in case of the filing of any claims for lien or proceedings for the enforcement thereof; provided, however, that Borrower shall have the right to contest in good faith and with reasonable diligence the validity of any such lien or claim on furnishing to Lender such security or indemnity as it may require;

(g) Borrower will pay all real estate taxes and assessments of every kind on the Property before the same become delinquent, and Lender may at any time require Borrower to provide evidence that taxes have been paid current;

(h) In the event that Lender shall expend any amount in performance of any of Borrower's covenants or agreements under the Note or any document securing the Note, such amounts shall constitute additional indebtedness secured under the Contract;

(i) All of the personal property, fixtures, attachments, and equipment delivered on, attached to, or used in connection with the construction of the Improvements or the operation thereof will be kept free and clear of all liens, encumbrances, and security interests whatsoever, and Borrower will be the absolute owner of such personal property, fixtures, attachments, and equipment and Contractor and Borrower will, from time to time, furnish Lender with satisfactory evidence of such ownership, including searches of applicable public records;

(j) Borrower and Contractor will comply with their respective obligations under this Agreement and the Contract and with all applicable laws, rules, ordinances and regulations;

(k) Borrower and Contractor will comply with the Special Conditions, if any, set forth in Exhibit "C" attached hereto;

(l) Contractor will pay all premiums on all insurance policies required from time to time during the progress of construction, and furnish to Lender additional and renewal insurance policies with companies, coverage, and amounts satisfactory to Lender; and

(m) Contractor will keep accurate and proper books and records of the construction of the Improvements, and will at all reasonable hours allow Lender or its representative to examine such books and records and all contracts and bills relating to the construction of the Improvements.

(l) Contractor shall not discriminate against any employee or applicant for employment because of sex, race, creed, color, national origin or handicap and shall take affirmative action to ensure that during the application process and during employment applicants and employees are treated without regard to their race, creed, color, national origin or handicap. Such action shall include, but not be limited to hiring and employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor shall continuously post in conspicuous places, readily available to employees and applicants for employment, notices to be provided or approved by the County of Hidalgo, setting forth the provisions of this non-discrimination provision and such other notices as may be required by law.

8. Actions For Lender's Benefit Only. **THE AUTHORITY HEREIN CONFERRED ON LENDER AND ANY ACTION TAKEN BY LENDER IN MAKING INSPECTIONS OF THE PROPERTY, PROCURING SWORN STATEMENTS AND WAIVERS OF LIENS, APPROVING CONTRACTS AND SUBCONTRACTS AND APPROVING PLANS AND SPECIFICATIONS WILL BE TAKEN BY LENDER FOR ITS OWN PROTECTION ONLY, AND LENDER SHALL NOT BE DEEMED TO HAVE ASSUMED ANY RESPONSIBILITY TO BORROWER OR ANY OTHER PERSON WITH RESPECT TO ANY SUCH ACTION HEREIN AUTHORIZED OR TAKEN BY LENDER OR WITH RESPECT TO THE PROPER CONSTRUCTION OF THE IMPROVEMENTS, PERFORMANCE OF CONTRACTS OR SUBCONTRACTS BY ANY CONTRACTORS OR SUBCONTRACTORS, OR PREVENTION OF CLAIMS FOR MECHANIC'S LIEN.**

9. Non-Waiver By Lender. No waiver of any breach or default hereunder shall constitute or be construed as a waiver by Lender of any subsequent breach or default or of any breach or default of any other provision. No waiver of any term or provision of this Agreement shall be binding unless executed in writing by the party entitled to the benefit thereof. Pursuit by Lender of any remedies set forth in this Agreement does not preclude pursuit by Lender of other remedies in this Agreement or provided by law.

10. Conflict of Interest. **BORROWER AND CONTRACTOR REPRESENT AND WARRANT TO LENDER THAT, TO THE BEST OF THEIR KNOWLEDGE, NO EMPLOYEE, AGENT, CONSULTANT, OFFICER, OR ELECTED OR APPOINTED OFFICIAL OF LENDER WHO EXERCISES OR HAS EXERCISED ANY FUNCTIONS OR RESPONSIBILITIES WITH RESPECT TO THE ACTIVITIES ASSISTED WITH THE LENDER'S OWNER-OCCUPIED REHABILITATION LOAN PROGRAM OR WHO ARE IN A POSITION TO PARTICIPATE IN A DECISION MAKING PROCESS OR GAIN INSIDE INFORMATION WITH REGARD TO THESE ACTIVITIES, DURING THEIR TENURE OR WITHIN ONE YEAR THEREAFTER, HAS A FINANCIAL INTEREST OR BENEFIT IN THE LOAN RELATED TO THIS AGREEMENT, OR THE PROCEEDS THEREUNDER, EITHER FOR THEMSELVES OR THOSE WITH WHOM THEY HAVE FAMILY OR BUSINESS TIES.**

11. Dispute Resolution. All disputes between Contractor and Borrower regarding the construction project which is the subject of this Agreement, including, but not limited to, all disputes with regard to the Contract and this Agreement, shall, in the first instance, be submitted, in writing, with supporting documentation, within ten (10) days of the incident giving rise to the dispute, to Lender's program director having responsibility for the Lender's owner-occupied rehabilitation loan program for resolution. Except for good cause shown, any dispute not submitted within such ten (10) day period shall be deemed waived. While a dispute is pending, Contractor and Borrower shall otherwise proceed to perform all obligations under the Contract and this Agreement not otherwise in dispute.

12. Sole and Only Agreement. This Agreement and its exhibits and the instruments executed in connection therewith constitute the sole and only agreement of the parties hereto and supersedes any prior understandings or written or oral agreements between the parties respecting the within subject matter.

13. Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provisions shall be excluded from this Agreement and the balance of this Agreement shall be interpreted as if such provisions were so excluded and shall be enforceable in accordance with its terms.

14. Interpretation. No provision of this Agreement will be interpreted in favor of, or against, any of the parties hereto by reason of the extent to which any such party or its counsel participated in the drafting thereof or by reason of the extent to which any such provision in inconsistent with any prior draft hereof or thereof. In the event of a conflict between this Agreement, the Mechanic's Lien Contract and/or the Rehabilitation Contract, the provisions in the document containing the most stringent requirement for the matter in dispute shall control

15. Jurisdiction and Venue. The parties agree that any suit, action or proceeding brought by a party against the other in connection with or arising from this Agreement ("Judicial Action") shall be brought only in any United States Federal or Texas state court located in Hidalgo County,

Texas and the parties hereby consent to the exclusive jurisdiction of such courts (and the appropriate appellate courts) in any such Judicial Action and waives any objection to venue laid therein. If either party is a prevailing party in a Judicial Action, such party is entitled to recover from the non-prevailing party all costs of such proceeding and reasonable attorney's fees.

16. General Provisions. This Agreement:

a. may not be assigned by Owner or Contractor without the prior written consent of County;

b. may not be amended or modified, in whole or in part, unless such amendment or modification is executed in writing by both parties;

c. binds and inures to the benefit of the parties and their respective heirs, successors and permitted assigns; and

d. is for the sole benefit of the parties hereto and their respective heirs, successors and permitted assigns. Nothing herein shall give, or be construed to give, any legal or equitable rights hereunder to any other person or entity other than the parties hereto and their respective heirs, successors and permitted assigns.

NOTICE

ANY HOLDER OF THIS CONSUMER CREDIT CONTRACT IS SUBJECT TO ALL CLAIMS AND DEFENSES WHICH THE DEBTOR COULD ASSERT AGAINST THE SELLER OF GOODS OR SERVICES OBTAINED PURSUANT HERETO OR WITH THE PROCEEDS HEREOF. RECOVERY HEREUNDER BY THE DEBTOR SHALL NOT EXCEED AMOUNTS PAID BY THE DEBTOR HEREUNDER.

IMPORTANT NOTICE: YOU AND YOUR CONTRACTOR ARE RESPONSIBLE FOR MEETING THE TERMS AND CONDITIONS OF THIS CONTRACT. IF YOU SIGN THIS CONTRACT AND YOU FAIL TO MEET THE TERMS AND CONDITIONS OF THIS CONTRACT, YOU MAY LOSE YOUR LEGAL OWNERSHIP RIGHTS IN YOUR HOME. KNOW YOUR RIGHTS AND DUTIES UNDER THE LAW.

RESIDENTIAL CONSTRUCTION LIABILITY ACT (RCLA) NOTICE

This contract is subject to Chapter 27 of the Texas Property Code. The provisions of that chapter may affect your right to recover damages arising from the performance of this contract. If you have a complaint concerning a construction defect arising from the performance of this contract and that defect has not been corrected through normal warranty service, you must provide the notice required by Chapter 27 of the Texas Property Code to the contractor by certified mail, return receipt requested, not later than the 60th day before the date you file suit to recover damages in a court of law or initiate arbitration. The notice must refer to Chapter 27 of the Texas Property Code and must

describe the construction defect. If requested by the contractor, you must provide the contractor an opportunity to inspect and cure the defect as provided by Section 27.004 of the Texas Property Code.

BORROWER(S):

_____

Juanita Medina

YOU, THE OWNER, MAY CANCEL THIS TRANSACTION AT ANY TIME BEFORE MIDNIGHT OF THE THIRD BUSINESS DAY AFTER THE DATE OF THIS TRANSACTION. SEE THE ATTACHED NOTICE OF CANCELLATION FORM FOR AN EXPLANATION OF THIS RIGHT.

LENDER:

COUNTY OF HIDALGO, a political subdivision of the State of Texas

_____

By: **Diana R. Serna**
Its: **Director of Urban County Program**

CONTRACTOR:

_____

By: **Emigdio Villanueva**
Its: **Quality Investments**

APPROVED AS TO FORM
Atlas & Hall, L.L.P.
By: Steve Crain
Date: June 19, 2013

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21** day of **March 2017**, by **Diana R. Serna, Director of Urban County Program of the County of Hidalgo**, a political subdivision of the State of Texas, on behalf of said political subdivision.

NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21 day** of **March 2017**, by **Juanita Medina.**

NOTARY PUBLIC, STATE OF TEXAS

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

This instrument was acknowledged before me on this **21 day** of **March 2017**, by **Emigdio Villanueva Quality Investment.**

NOTARY PUBLIC, STATE OF TEXAS

YOU MAY CANCEL THIS TRANSACTION, WITHOUT ANY PENALTY OR OBLIGATION, WITHIN THREE BUSINESS DAYS FROM THE ABOVE DATE.

IF YOU CANCEL, ANY PROPERTY TRADED IN, ANY PAYMENTS MADE BY YOU UNDER THE CONTRACT OR SALE, AND ANY NEGOTIABLE INSTRUMENT EXECUTED BY YOU WILL BE RETURNED WITHIN TEN BUSINESS DAYS FOLLOWING RECEIPT BY THE MERCHANT OF YOUR CANCELLATION NOTICE, AND ANY SECURITY INTEREST ARISING OUT OF THE TRANSACTION WILL BE CANCELED.

IF YOU CANCEL YOU MUST MAKE AVAILABLE TO THE MERCHANT AT YOUR RESIDENCE, IN SUBSTANTIALLY AS GOOD CONDITION AS WHEN RECEIVED, ANY GOODS DELIVERED TO YOU UNDER THIS CONTRACT OR SALE; OR YOU MAY IF YOU WISH, COMPLY WITH THE INSTRUCTIONS OF THE MERCHANT REGARDING THE RETURN SHIPMENT OF THE GOODS AT THE MERCHANT'S EXPENSE AND RISK.

IF YOU DO NOT AGREE TO RETURN THE GOODS TO THE MERCHANT OR IF THE MERCHANT DOES NOT PICK THEM UP WITHIN TWENTY DAYS OF THE DATE OF YOUR NOTICE OF CANCELLATION, YOU MAY RETAIN OR DISPOSE OF THE GOODS WITHOUT ANY FURTHER OBLIGATION.

TO CANCEL THIS TRANSACTION, MAIL OR DELIVER A SIGNED AND DATED COPY OF THIS CANCELLATION NOTICE OR ANY OTHER WRITTEN NOTICE, OR SEND A TELEGRAM, TO EMIGDIO VILLANUEVAS, QUALITY INVESTMENTS, AT 519 E. 19TH ST., STE B, MISSION, TEXAS 78572 NOT LATER THAN MIDNIGHT OF MARCH 24, 2017.

I HEREBY CANCEL THIS TRANSACTION.

Dated: _____.

OWNER(S):

_____

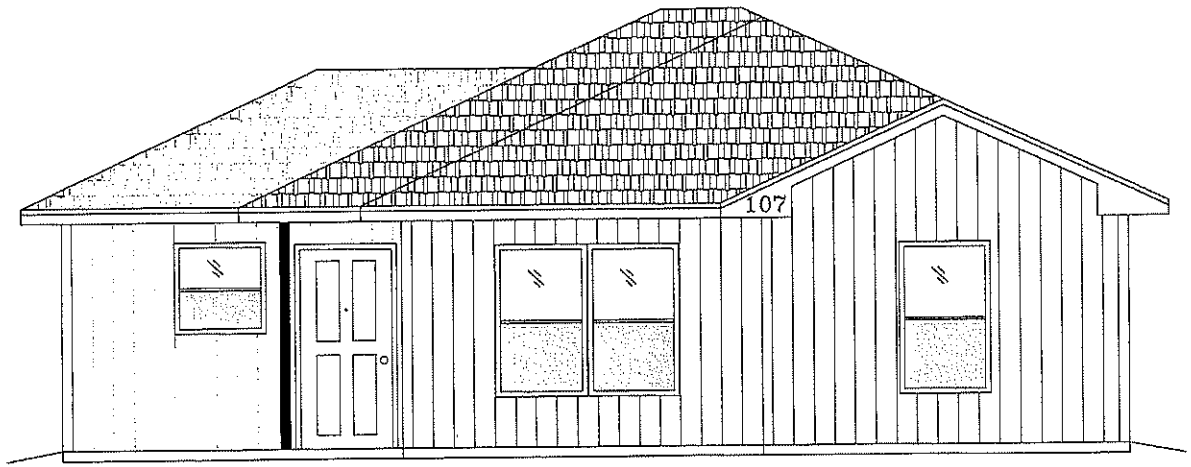
Juanita Medina

EXHIBIT "A"
LEGAL DESCRIPTION OF THE PROPERTY

Lot 8 of the Palmview Subdivision, of the East 330 feet of Lot 14, Block 37, Alamo Land and Sugar Company's Subdivision of lands out of porcion 72, Los Torritos, Santa Ana and El Gato Grants, in Hidalgo County Texas.

EXHIBIT "B"
PLANS AND SPECIFICATIONS,
TIMETABLE
AND
BUDGET

MEDINA RESIDENCE



JUANITA MEDINA
107 PALMVIEW DRIVE
ALAMO, TEXAS 78516
CELL: 956-472-1701

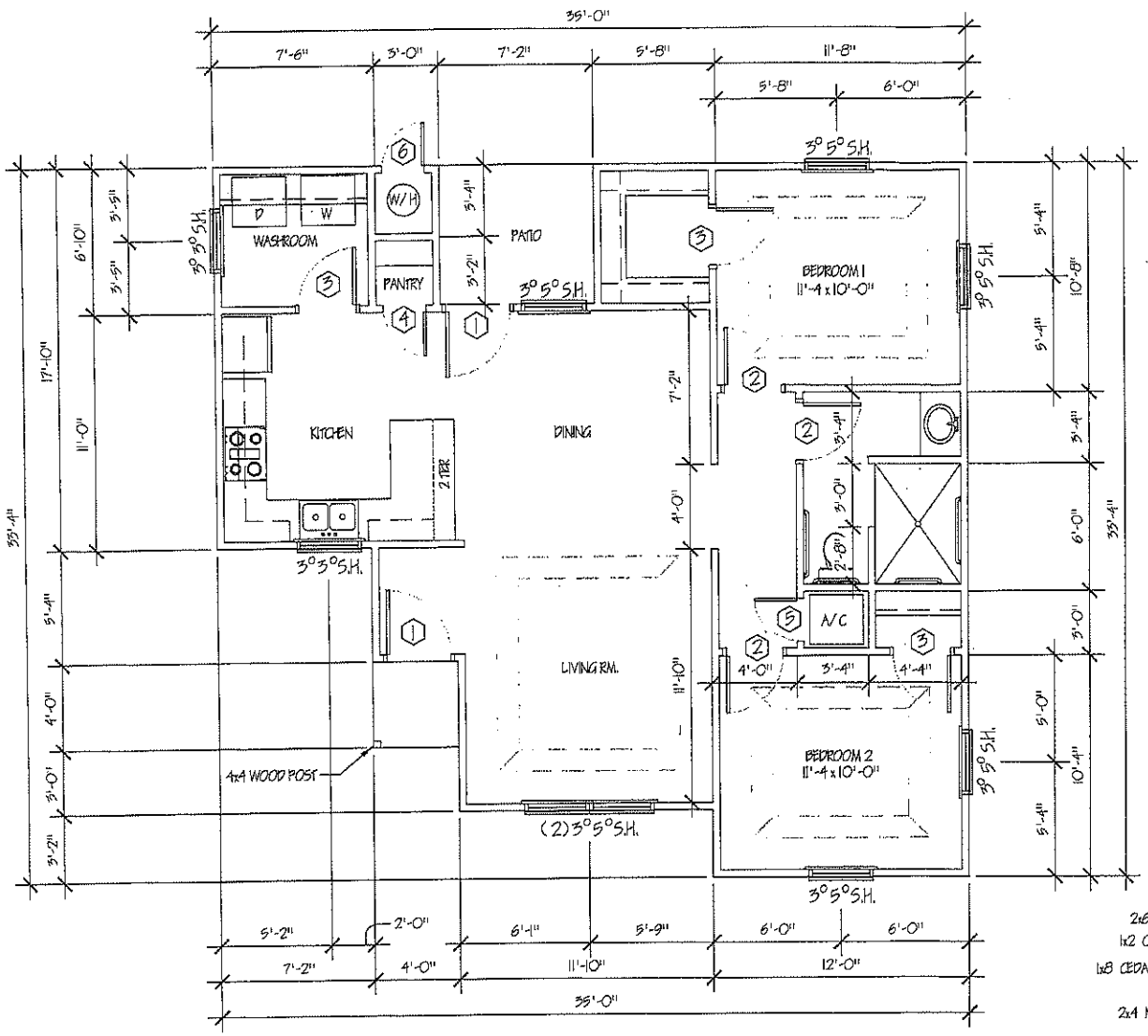
URBAN COUNTY PROGRAM
427 E. DURANTA STE 107- ALAMO
(956) 787-8127

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

JUANITA MEDINA
107 PALMVIEW DRIVE ALAMO, TX

TOTAL AREA
992 SQ. FT.

C1.0



1 FLOOR PLAN
3/16" = 1'-0"

SQUARE FOOTAGE

LIVING AREA	930
PORCH/ PATIO	62
TOTAL SQ. FT.	992

DOOR SCEDULE

DR#	TASK	SIZ X 6' 8"	TYPE	LOCKS
1	INSTALL NEW UNIT W/ DUAL PEEP HOLES	3°	METAL W/ LOW PROFILE THRESH.D.	LEVER TYPE ENTRY LOCK W/ DEADBOLT.
2	INSTALL NEW UNIT	2⁸	HOLLOW CORE	LEVER TYPE PRIVACY
3	INSTALL NEW UNIT	2⁸	HOLLOW CORE	PASSAGE
4	INSTALL NEW UNIT	2°	HOLLOW CORE	PASSAGE
5	INSTALL NEW UNIT	2°x4°	HOLLOW CORE	A/C CLOSET PASSAGE
6	INSTALL NEW UNIT	2°	HOLLOW METAL	LOCK W/ DEADBOLT

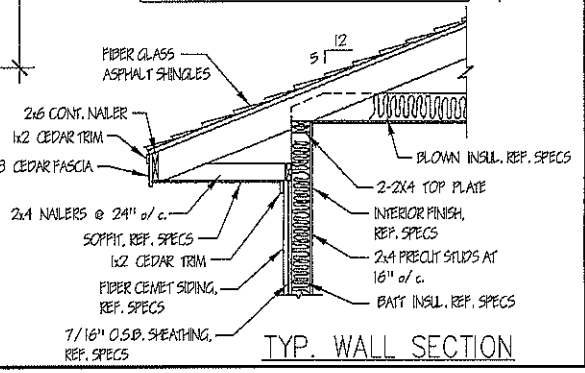
GENERAL NOTES

-5/12 SLOPE WITH 16" OVERHANG
-SUPPLY RIDGE / SOFFIT VENTS WHERE NEEDED
-INSTALL PORCH RAILING WHERE FINISH GRADE IS LOWER THAN 1' FROM PORCH FLOOR.
-INSTALL PORCH STEPS WHERE FINISH GRADE IS LOWER THAN 6" FROM PORCH FLOOR.
-CLIENT IS REQUESTING CONNECTIOS FOR A GAS / (ELECTRIC STOVE)
-INSTALL A MIN. OF TWO PHONE JACKS & CABLE CONNECTIONS AS PER OWNERS REQUEST.

EXTERIOR COLOR CHOICES TO BE OR MATCH:
Honey Buns SW 6375 (wall) Inviting Ivory SW 6372 (trim)

INTERIOR COLOR CHOICES TO BE OR MATCH:
SW 6112 (wall) Ultra White (trim)
Light Wood Stain

I HAVE READ AND FULLY AGREE WITH THE WRITE-UP AND PLANS AS PRESENTED TO ME THIS 9th DAY OF February 2017
Juanita Medina



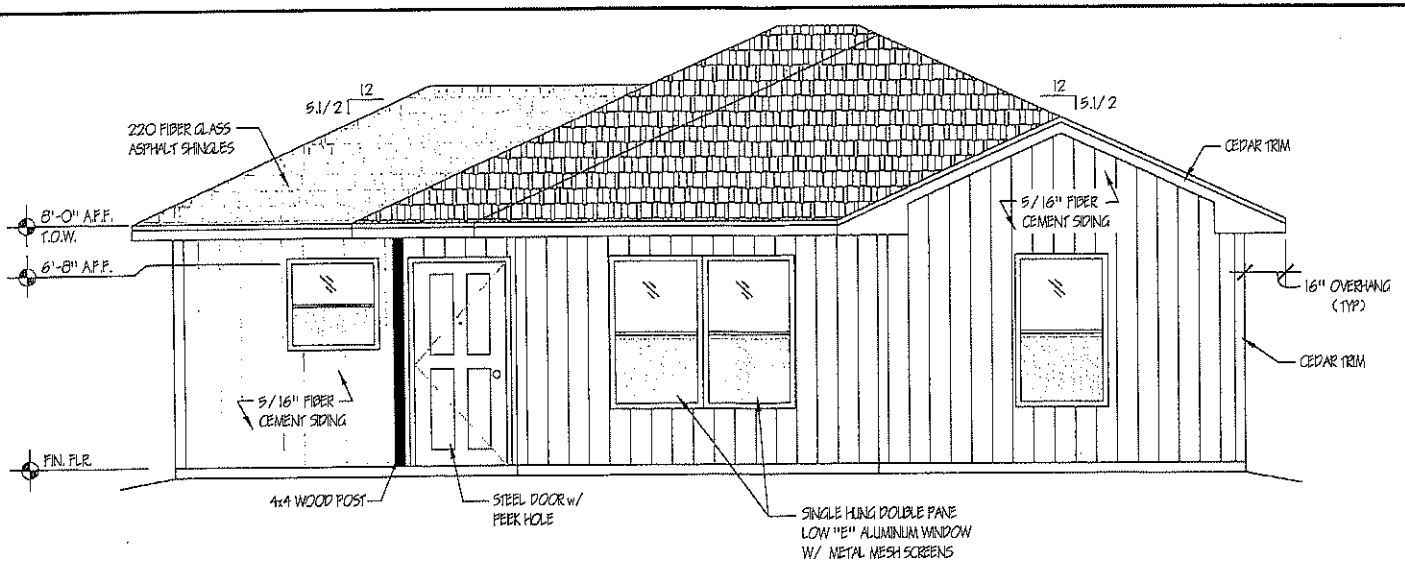
TYP. WALL SECTION

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

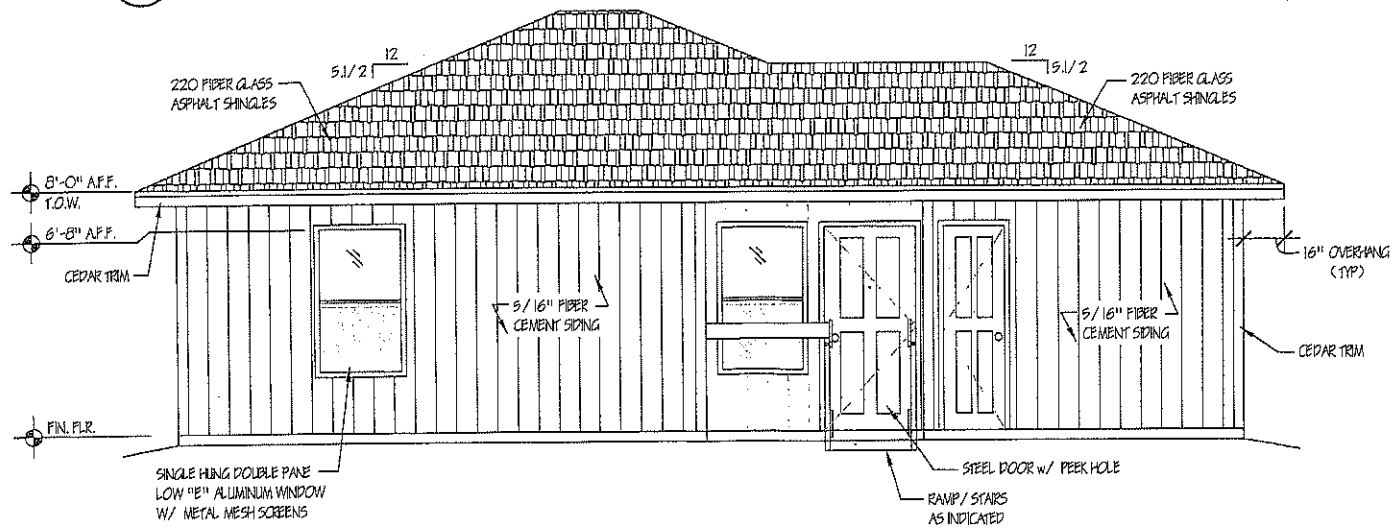
JUANITA MEDINA
107 PALMVIEW DRIVE ALAMO, TX

TOTAL AREA
992 SQ. FT.

A1.1



1 FRONT ELEVATION



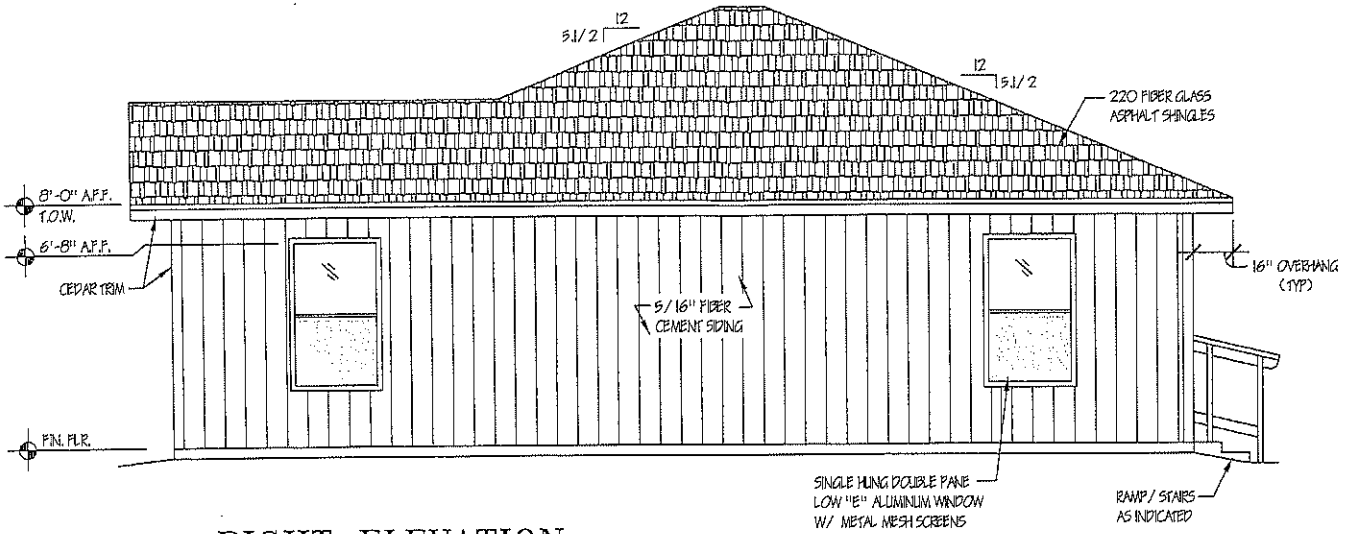
2 BACK ELEVATION

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

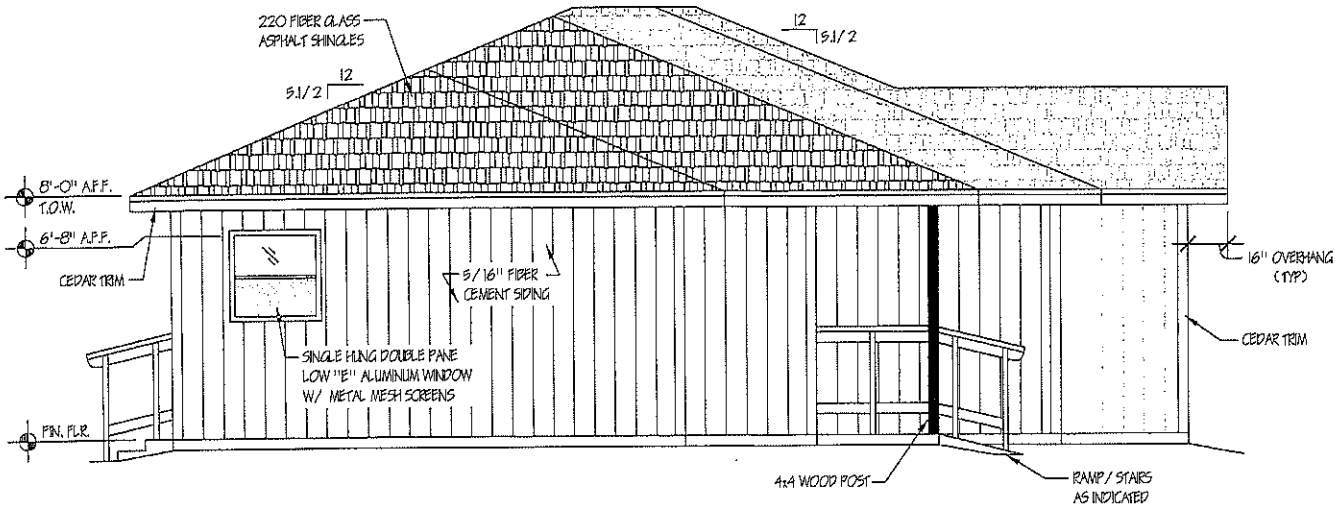
JUANITA MEDINA
107 PALMVIEW DRIVE ALAMO, TX

TOTAL AREA
992 SQ. FT.

A1.2



1 RIGHT ELEVATION



2 LEFT ELEVATION

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

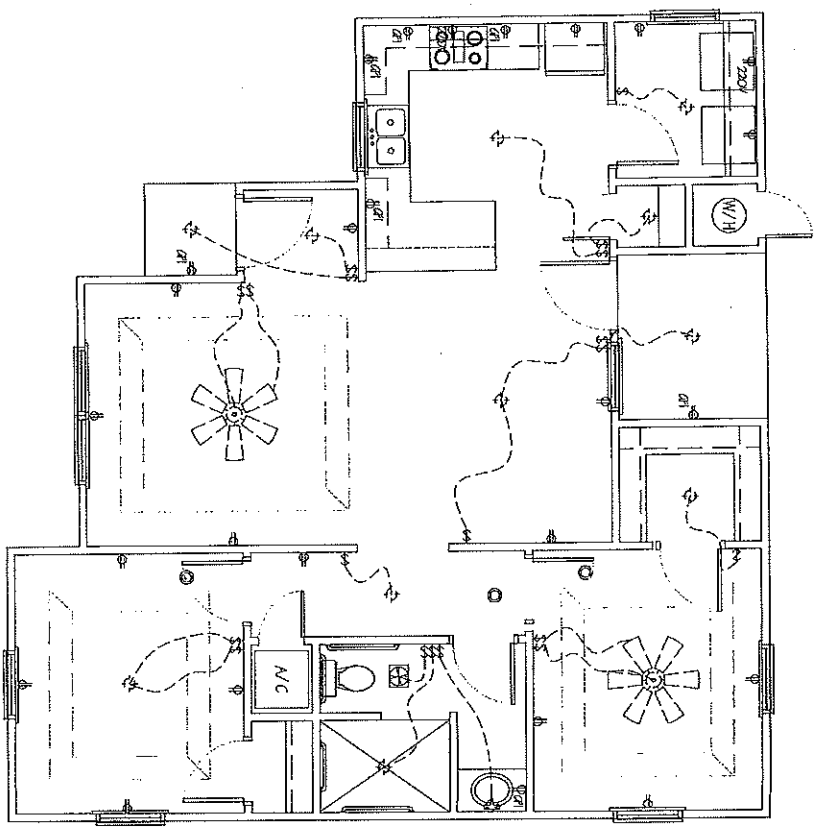
JUANITA MEDINA
107 PALMVIEW DRIVE ALAMO, TX

TOTAL AREA
992 SQ. FT.

A1.3

1 ELECTRICAL PLAN

3/16" = 1'-0"



ELECTRICAL LEGEND

WH	WATER HEATER		LIGHT FIXTURE
	DUPLEX ELECTRICAL RECEPT.	$	LIGHT SWITCH
220V	220-VOLT DUPLEX ELECTRICAL RECEPTACLE	T	THERMOSTAT
GFI	GROUND FAULT CIRCUIT INTERRUPTER		SMOKE DETECTOR
	BATHROOM EXHAUST FAN		

URBAN COUNTY PROGRAM

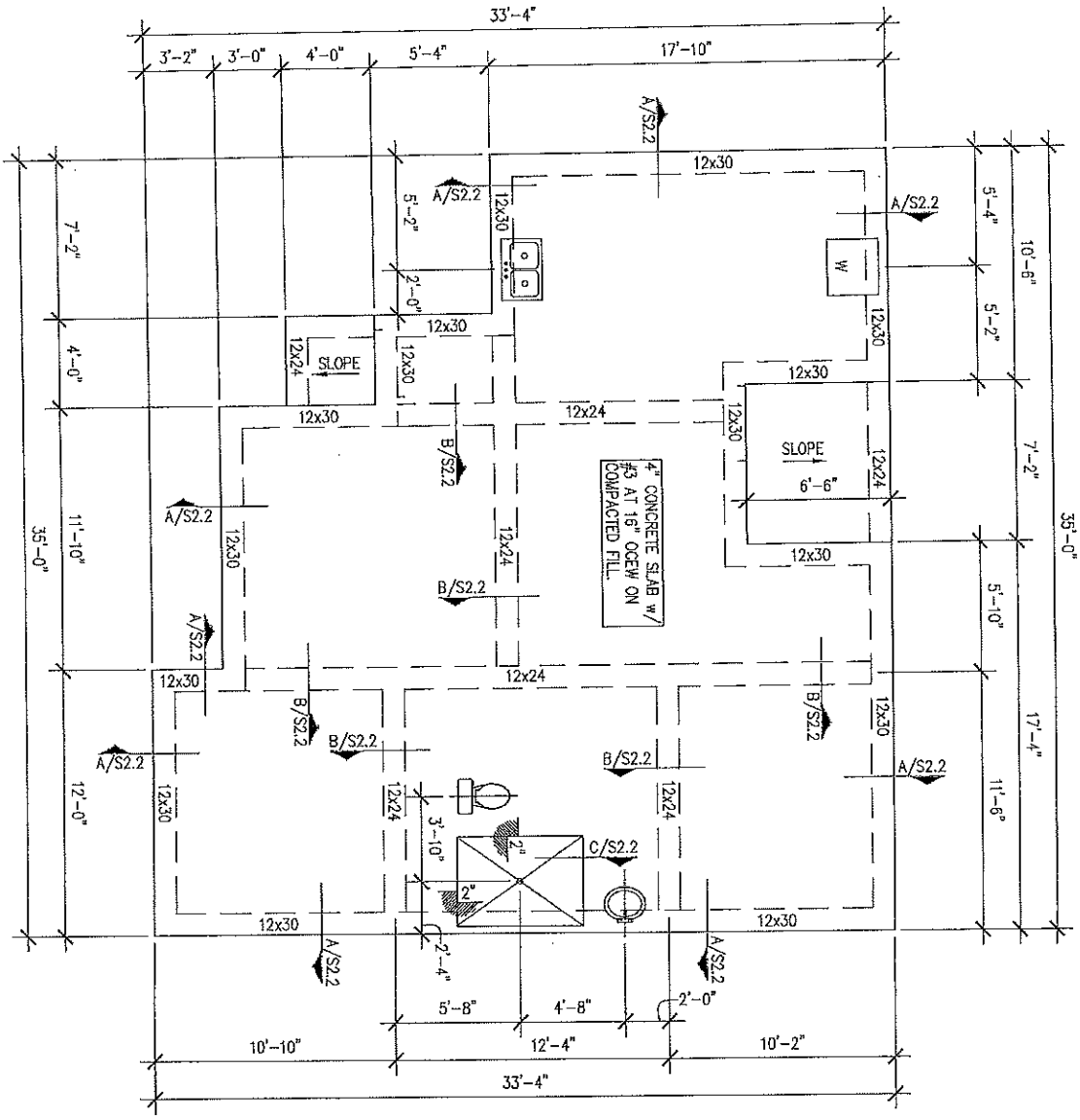
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

E1.1

JUANITA MEDINA

107 PALMVIEW DRIVE ALAMO, TX

TOTAL AREA
992 SQ. FT.



1 FOUNDATION PLAN

3/16" = 1'-0"

NOTES:

1. 4" THICK SLAB ON GRADE w/ #3 BARS AT 16" O.C.E.W. AT MID-DEPTH OF SLAB OVER 6 MIL. VISQUEEN OVER APPROVED COMPACTED FILL.
2. EXTERIOR GRADE BEAMS TO BE 12"x30" w/ 4-#5 BARS CONT. TOP AND BOTTOM w/ #3 STIRRUPS AT 24" o/c. A MINIMUM OF 6" IN DEPTH TO UNDISTURBED SOIL.
3. INTERIOR GRADE BEAMS TO BE 12"x24" w/ 4-#5 BARS CONT. TOP AND BOTTOM w/ #3 STIRRUPS AT 24" o/c. A MINIMUM OF 6" IN DEPTH TO UNDISTURBED SOIL.
4. CORNER BARS AT ALL CORNERS AND INTERSECTIONS SHALL BE #5 x 2'-0"x2'-0". APPLY 6x6 WIRE MESH AT SIDEWALKS AND DRIVEWAYS.
5. INSTALL ANCHOR BOLTS AT PERIMETER AT 48" o/c.
6. USE ONLY COMPACTED SELECT FILL DIRT. FINISH FLOOR TO BE 18" FROM TOP OF CURB, UNLESS OTHERWISE NOTED.

URBAN COUNTY PROGRAM

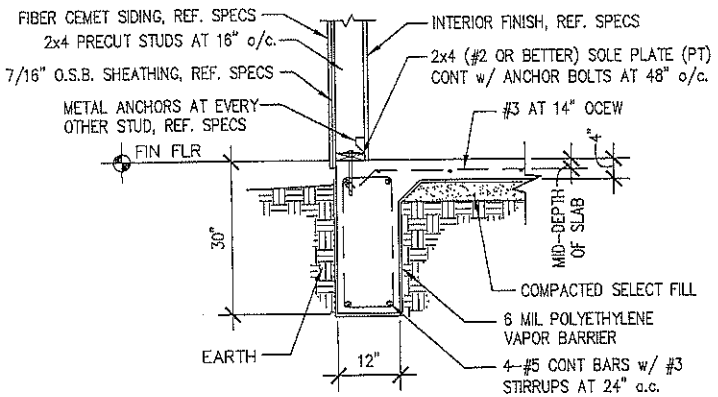
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

S2.1

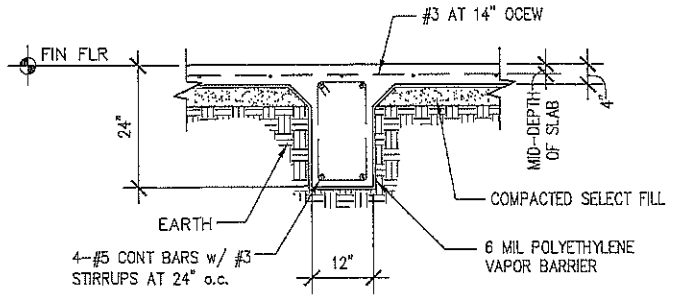
JUANITA MEDINA

107 PALMVIEW DRIVE ALAMO, TX

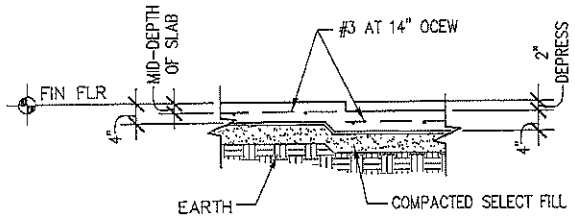
TOTAL AREA
992 SQ. FT.



A-EXTERIOR BEAM



B-INTERIOR BEAM



C-SHOWER DEPRESS

TOTAL AREA
992 SQ. FT.

URBAN COUNTY PROGRAM
OWNER OCCUPIED HOUSING REHABILITATION PROGRAM

JUANITA MEDINA
107 PALMVIEW DRIVE ALAMO, TX

S2.2

SPECIFICATIONS

ALL *SPECIFICATIONS* SHALL ASSUME THE USE OF *CONTRACTOR'S MINIMUM GENERAL SPECIFICATIONS MANUAL*

OWNER (S) JUANITA MEDINA CASE NO.: # 3044 DATE: 2/6/17 ADDRESS: 107 PALMVIEW DRIVE ALAMO, TX PHONE: 956-477-1701 BY: ROBERT CAVAZOS

1. FOUNDATION WORK:

BUILD A NEW SLAB ON GRADE FOUNDATION TO COMPLY WITH PLANS, SPECS, CITY AND / COUNTY REQUIREMENTS. PROJECTS TO BE 18" ABOVE CENTER LINE OF STREET OR CURB OR 12" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. PROVIDE CONCRETE SLAB FOR A/C UNIT. PROVIDE A MIN. OF 12 X 25 DRIVEWAY (depending on city).

2. PLUMBING GENERAL: (SEE SPECS)

ALL PLUMBING ROUGH SHALL BE AS FOLLOWS:

- WATER SUPPLY TO HOUSE SHALL HAVE A ¾" CUTOFF VALVE BEFORE ENTRY TO HOUSE.
- INTERIOR WATER SUPPLY LINES FOR HOUSE SHALL BE ALL NEW PEX OF APPROPRIATE DIAMETER
- NEW PEX PIPES AND FITTINGS:
  - OF 1" MINIMUM DIAMETER FOR ALL EXTERIOR WATER SUPPLY LINES BELOW GROUND.
  - OF APPROPRIATE DIAMETER FOR DWV (DRAIN, WASTE, AND VENTS).
- SEWER CONNECTION SHALL HAVE (1) PLASTIC PVC SEWER CLEAN OUT.

ALL PLUMBING FINISH SHALL BE AS FOLLOWS:

- RELATED PLUMBING ITEMS:
  - (2) EXTERIOR HOSE BRASS BIB FAUCETS:
  - ½" CUTOFF VALVES WITH ESCUTCHEONS FOR ALL FIXTURES.

FIXTURES:

- PLUMBING SEALANT FOR ALL DRAINS, AND SINK PERIMETERS
- ALL OTHER RELATED PLUMBING (SEE SPECS)

FIXTURES: (SEE SPECS)

- KITCHEN SINK W/ RELATED PLUMBING & FAUCETS
- PEDESTAL SINK W/ RELATED PLUMBING & FAUCETS
- TOILET OF MATCHING COLOR
- SHOWER WITH RELATED PLUMBING AND HANDICAP ACCESSIBLE.
- SHOWER FAUCETS & REMOVABLE SHOWER HEAD
- MEDICINE CABINETS/TOWEL RACKS/ T.P. DISPENCER/ TOOTHBRUSH & SOAP HOLDER, & SHOWER ROD (SEE SPECS)
- WATER HEATER INSTALLED AS-PER SPECS. (GAS OR ELECTRIC AS PER OWNER REQUEST)

OTHER RELATED ITEMS

- RANGE CONNECTIONS AS PER OWNERS REQUST.(SEE SECTION 23.)
- 4" DRYER EXAUST VENT.
- IN WALL WASHING MACHINE BOX, WITH BRASS FAUCETS & RELATED PLUMBING.

HOOK UP ALL DRAINAGE LINES TO CITY SEWER SYSTEM IF AVAILABLE. SEE CITY FOR INFORMATION.TEST SEPTIC SYSTEM IF EXISTING FOR INTEGRITY AND REPLACE IF NECESSARY AND MORE THAN 10 YEARS OF AGE

3. INTERIOR/EXTERIOR WALLS & CEILINGS:

ALL INTERIOR AND EXTERIOR WALL FRAMING:

- 2"x4" (#2 OR BETTER) FOR USE IN: SOLE PLATES (TREATED LUMBER)
  - DOUBLE TOP PLATES
  - 92 5/8" PRE-CUT STUDS @ 16" O.C.
  - WINDOW SILLS
  - CEILING JOIST CHAIN BLOCKING @ 48" O.C.
- 2"x6" (#2 OR BETTER) FOR USE IN:
  - WINDOW & DOOR HEADERS WITH 1"/2" PLYWOOD SPACER.
  - CEILING JOIST @ 24" O.C., FOR CLEARANCES LARGER THAN 12' CEILING JOIST SHALL BE @ 16" O.C.
  - INSTALL BOOT TIES IN EVERY CORNER OF THE HOUSE ALONG WITH METAL ANCHORS ON BOTH BOTTOM AND TOP PLATES OF HOME

ALL EXTERIOR CEILING COVERINGS:

- 3/8" CD EXTERIOR PLYWOOD FOR PORCH CEILINGS.

ALL INTERIOR WALL & CEILING COVERINGS.

- ½" SHEETROCK FINISHED AS PER SPECS.
- ½ "DAMP RESISTANT SHEETROCK FOR BATH AREAS.

ALL INTERIOR CEILINGS SHALL HAVE ORANGE PEEL TEXTURE.
ALL INTERIOR WALL SURFACESS SHALL HAVE ORANGE PEEL TEXTURE.
ALL EXTERTIOR TRIMMINGS SHOULD CONSIST OF CEDAR WOOD.

4. ROOF: (SLOPE=5/12)

ROOF SHALL HAVE:

- A HIP/GABLE STYLE ROOF WITH 16" OVERHANGS.
- A HIP/GABLE STYLE FRONT PORCH AS PER PLANS.
- PORCH COLUMNS MUST BE FASTENED TO CONCRETE.
- AN ADEQUATE COMBINATION OF RIDGE & SOFFIT VENTS WITH AIR CHUTES.
- ADEQUATE RAIN GUTTERS WITH DOWN SPOUTS FOR THE ROOF AREA THAT MAY AFFECT OWNERS.
- SHINGLES TO BE OF LIGHT COLOR (no black shingles)

5. PORCH & CANOPY FLOORS:

THE HOUSE SHALL HAVE PORCH FLOORS AS FOLLOWS:

- A FRONT PORCH FLOOR.
- A SIDE/BACK PORCH FLOOR.

PROVIDE RAMP & (2)-HANDRAILS TO EACH FRONT AND/OR SIDE PORCH STEPS

6. INSULATION:

INSULATE:

- ALL LIVING AREA CEILINGS WITH BLOWN IN INSULATION TO AN R-49 FACTOR. (need a combined R-30 & R-19 to meet requirement)
- HAVE RULER INSTALLED FOR EVER 300 SQUARE FEET BEFORE FRAMING AND ROUGH-IN INSPECTION IS SCHEDULED.
- INFILTRATION FOAM SHALL BE USED AROUND ALL WINDOWS, WIRES, PLUMBING, ELECTRICAL, 2X4 BOTTOM PLATES, AND ALL PENETRATED AREAS.
- ALL PERIMETER WALLS WITH R-15 F.G. BATT.
- ALL EXTERIOR PIPES EXPOSED TO WEATHER SHALL BE INSULATED.

7. INTERIOR FINISH:

ALL TRIM SHALL BE INSTALLED AS PER SPECS.
ALL PAINT SHALL BE APPLIED AS PER SPECS (2-COATS) WITH PAINT COMPARABLE IN QUALITY TO SHERWIN WILLIAMS. ALLOW A VARIETY OF DIFFERENT COLORS FOR CLIENT TO CHOOSE FROM. (2 COLOR CHOICE MIN).

8. EXTERIOR FINISH:

PAINT ENTIRE HOUSE AS PER SPECS WITH PAINT COMPARABLE IN QUALITY TO SHERWIN WILLIAMS. PRIMER TO BE OIL BASED & PAINT MUST BE EQUIVALENT TO A-100. (2 COLOR CHOICE MIN).

9. SIDING:

THE SIDING SHALL BE 5/16" FIBER CEMENT WITH ALL CEDAR TRIM TO ENTIRE HOUSE.
INSTALL 7/16" O.S.B. TO THE ENTIRE PERIMETER OF THE HOUSE AS PER MANUFACTURER'S SPECIFICATIONS. REFERENCE DETAIL.

10. WINDOWS:

SHALL BE NEW LOW "E" DOUBLE PANE INSULATED ALUMINUM WINDOWS, SIZE AS PER PLAN. KEEP LABELS ON WINDOWS UNTIL FINAL INSPECTION HAS BEEN CLEARED.

11. CABINETS GENERAL:

BUILD AND/OR INSTALL NEW KITCHEN CABINETS TO INCLUDE:

- A RANGE CABINET.
- A KITCHEN/ BATHROOM FORMICA COUNTER TOP OF MATCHING COLOR.

BUILD AND / OR INSTALL A NEW VANITY CABINET (IF APPLICABLE) FOR BATHROOM WITH FORMICA TO MATCH LAYATORY, SINK, AND WALLS. ALL CABINETRY PIECES SHOULD BE NEW AND COMPLETE AND BUILT TO PROFESSIONAL STANDARDS.

12. FLOOR, SUBFLOOR, & FINISH FLOORING:

APPLY VCT FLOOR TILE TO ALL LIVING AREA HOUSE FLOORS.

13. ELECTRICAL GENERAL

ALL ELECTRICAL INSTALLATIONS & WORK AS PER ELECTRICAL CODE WITH THE FOLLOWING CONDITIONS:

- PROVIDE RANGE OUTLET AS PER OWNER'S REQUEST.
- PROVIDE APPROPRIATE WASHER & DRYER CONNECTION.
- (2) 52" CEILING FANS (CEILING HUGGER STYLE) COMPARABLE IN QUALITY TO THE "HUNTER" BRAND, THE CONTACTOR SHALL ALLOW $120.00 FOR MATERIAL & LABOR, LOCATON AS PER OWNER REQUEST.
- INSTALL GFCI OUTLETS IN BATHROOMS, KITCHEN, AND EXTERIOR WALLS.
- EACH ELECTRICAL PANEL OR BREAKERBOX, LIGHT SWITCH, & THERMOSTAT NO HIGHER THAN 48" ABOVE FLOOR
- EACH ELECTRICAL PLUG TO BE 15" ABOVE THE FLOOR
- ANY OUTLETS WITHIN 6' FROM KITCHEN OR BATHROOM SINKS MUST BE GFCI

14. RANGE HOOD:

INSTALL A RANGE HOOD TO FIT OWNER'S RANGE SIZE (30" OR 36") AND VENT TO EXTERIOR.

15. BATHROOM ACCESSORIES:

ALL ACCESSORIES & MEDICINE CABINETS AS PER SPECS, INCLUDE CURTAIN ROD & PLASTIC RETAINING DAM TO HELP PREVENT WATER FROM ESCAPING SHOWER. INSTALL PEDESTAL SINK AND CABINET ABOVE TOILET. (ALSO INCLUDE TOILET PAPER, TOOTHBRUSH, AND SOAP HOLDER.)

16. ACCESS FOR PHYSICAL DISABILITIES:

INSTALL ONE CONC. RAMP AS PER OWNERS REQUEST THAT CONNECTS WITH 12 X 25 DRIVEWAY AND STEPS WITH HANDRAILS
BATHROOM SHOULD ACCOMMODATE GRAB BARS WHERE INDICATED IN PLANS

17. HEATING & A/C:

PROVIDE & INSTALL A 16 SEER CENTRAL AIR CONDITIONING COMPARABLE IN QUALITY TO A CARRIER BRAND UNIT FOR THE ENTIRE HOUSE. INCLUDE DIGITAL THERMOSTAT.

18. SMOKE DETECTORS:

INSTALL A SMOKE DETECTOR INSIDE EACH SLEEPING ROOM, OUTSIDE SLEEPING ROOMS, ALL WIRED IN SERIES.

19. GENERAL NOTES.

CONTRACTOR IS RESPONSIBLE FOR:

- YOU'RE BID TO INCLUDE ANY COST RELATED TO REQUIREMENTS FROM CITY. CHANGE ORDERS FOR THIS PARTICULAR PURPOSE WILL NOT BE ACCEPTED OR PROCESSED TO CORRECT THE ABOVE MENTIONED.
- YOUR BID TO INCLUDE ANY COST RELATED TO RES-CHECK & ENERGY COMPLIANCE REQUIREMENTS.
- THE DEMOLISH AND DISPOSAL EXISTING STRUCTURE.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING SIDEWALKS, DRIVEWAYS, AND UTILITY LINES DURING DEMOLITION.
- THE COMPLIANCE OF ALL THE REQUIRED BUILDING ELEVATIONS.
- PROVIDE 6" OF LANDSCAPE DIRT AROUND THE HOUSE ALONG WITH SUFFICIENT GRASS SEEDS UP TO 10' OF PERIMETER.
- PROVIDING THE APPROPRIATE ELECTRICAL AND /OR GAS CONNECTIONS FOR RANGE AS PER APPICANT'S REQUEST AND ACCORDING TO APPLICABLE PLUMBING/ELECTRICAL CODE.
- PROVIDE PHONE JACKS & CABLE CONNECTIONS IN EVERY BDRM & LIVING SPACE. KITCHEN PHONE IF REQUESTED.
- PROVIDE TERMITE PRE-TREATMENT TO ENTIRE FOUNDATION PAD.
- OBTAINING, DISPLAYING, AND SUBMITTING ALL PROPER PERMTIS & INSPECTIONS.
- ALL CONTRACTORS WILL BE RESPONSIBLE FOR ANY ADDITIONAL PLANS, SPECIFICATIONS AND/OR DETAILS THAT ARE REQUIRED BY CITIES OR COUNTY AT THE TIME OF ATTAINING PERMITS.
- MINIMUM 12x-25 CONC. DRIVEWAY WITH CONNECTING SIDEWALK TO RAMP FOR HANDICAP APPLICANTS.
- ALL THE GENERAL INFORMATION CONTAINED WITHIN SECTION 23. GENERAL NOTES OF THE CONTRACTOR'S GENERAL SPECIFICATIONS MANUAL.
- PROVIDE AND INSTALL PROJECTS SIGNS AT EACH CONSTRUCTION SITE PRIOR TO THE START OF CONSTRUCTION. FINES WILL BE ENFORCED.
- CONTRACTOR IS RESPONSIBLE FOR SUPPLYING PORT A POTTY TRHOUGHOUT CONSTRUCTION PROCESS (demo to final inspection) FINES WILL BE ENFORCED.
- SHOWER ENTRANCES TO BE 36" WIDE.
- ALL UCP HOMES MUST COMPLY WITH TEXAS GOVERNMENT CODE §2306.514

THE HOMEOWNER SHALL BE RESPONSIBLE FOR

- REMOVE AND DISPOSE OF ALL DEBRIS ON SITE BEFORE THE BEGINNING OFCONSTRUCTION, INCLUDING BUT NOT LIMITED TO TIRES, ABANDONEDVEHICLES, OLD LUMBER, ETC.
- MAKING NECESSARY DEPOSITS FOR ANY UTILITIES TO BE CONNECTED TO THE NEW DWELLING.

SPECIFICATIONS

ALL *SPECIFICATIONS* SHALL ASSUME THE USE OF *CONTRACTOR'S MINIMUM GENERAL SPECIFICATIONS MANUAL*

OWNER (S) JUANITA MEDINA CASE NO.: # 3044 DATE: 2/6/17 ADDRESS: 107 PALMVIEW DRIVE ALAMO, TX PHONE: 956-477-1701 BY: ROBERT CAVAZOS

I HAVE READ AND FULLY AGREE WITH THE WRITE-UP AND PLANS AS PRESENTED TO ME.

Juanita Medina

NAME OF APPLICANT

NAME OF CO-APPLICANT

TIME TABLE

ACTIVITY	DATE(S)
Contract Signing	March 7, 2017
Demolition	March 16, 2017
Construction Start	March 17, 2017
Anticipated Draws	After 50% construction completion After 100% construction completion 30 days after construction completion
End Construction	June 5, 2017

BUDGET

	Total Cost
Pre-Development	$ 0.00
Acquisition	$ 0.00
Demolition/Construction	$59,999.99
Other Costs:	$ 0.00
TOTAL PROJECT COSTS	$59,999.99

EXHIBIT "C"
SPECIAL CONDITIONS

None.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/13/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

EDDIE VILLARREAL INSURANCE AGENCY
2167 S. MCCOLL RD
EDINBURG, TEXAS 78539
(956)381-0951

CONTACT NAME: VIOLA ALLEN
PHONE (A/C, NO, EXT): (956)381-0951 **FAX (A/C, NO):** (956)318-0237
E-MAIL ADDRESS: viola.evillarreal@farmersagency.com

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	ESSEX INSURANCE COMPANY	39020
INSURER B:	TEXAS COUNTY MUTUAL	24392
INSURER C:	TEXAS MUTUAL INSURANCE CO.	22945
INSURER D:		
INSURER E:		
INSURER F:		

INSURED

R G ENTERPRISES, LLC
DBA G & G CONTRACTORS
711 E. WISCONSIN RD
EDINBURG, TEXAS 78539

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAME ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDTL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PROJECT [ ] LOC [ ] OTHER:			3ED8689	03/16/17	03/16/18	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea Occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000. $ 100,00. $ 5,000. $ 1,000,000. $ 2,000,000. $ 2,000,000.
B	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] OWNED AUTOS ONLY [X] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY			604891354	03/14/17	03/14/18	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000. $ $ $
	[ ] UMBRELLA LIAB [ ] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/ EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [ ] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		SBP-0001221990	03/15/17	03/15/18	[ ] PER STATUTE [X] OTHER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ 1,000,000. $ 1,000,000. $ 1,000,000.

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

GENERAL CONSTRUCTION

URBAN COUNTY HOUSING PROJECTS

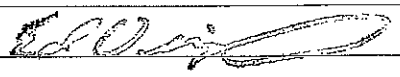
CERTIFICATE HOLDER

HIDALGO COUNTY URBAN COUNTY PROGRAM
427 DURANTE AVE., SUITE 107
ALAMO, TEXAS 78516

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



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AI-59017 **Urban County** **17. G.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Olga Lerma, URBAN COUNTY

Submitted By: Olga Lerma, URBAN COUNTY

Department: URBAN COUNTY

Information

CAPTION

Subject to HB 1295 Compliance, requesting consideration and action to award and enter into a construction contract with Texas Cordia Construction, LLC in the amount of $337,177.000 UCP Year 24-28 (2011-2015) City of Peñitas Street Improvement funds will be utilized.

BACKGROUND

The bid opening was held on March 15, 2017 and the lowest responsible bidder meeting all specifications and/or requirements was Texas Cordia Construction, LLC. Project consists of the reconstruction of streets. Please see attached letter of recommendation by the project engineer and contractor's general liability insurance. Project engineering firm is South Texas Infrastructure Group.

Contractor: Texas Cordia Construction LLC

Contract Amount: $337,177.00

Available Funds: $ 3,353.40 2011 Street Improvements
$ 11,105.92 2012 Street Improvements
$ 67,678.12 2013 Street Improvements
$235,050.45 2014 Street Improvements
$254,964.74 2015 Street Improvements
$571,852.63 Total Funds

Fiscal Impact

Attachments

Texas Cordia Insurance & Form 1295
Texas Cordia Contract & Bid Tabulation

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 09:30 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Olga Lerma Started On: 03/17/2017 09:07 AM

Final Approval Date: 03/17/2017

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number: 2017-179418

Date Filed: 03/16/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Texas Cordia Construction, LLC
Edinburg, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

501415600311500060000UPCGVG
City of Peñitas - Street Improvements

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Corbitt, Yara	Edinburg, TX United States	X	
Heredia, Isaac	Edinburg, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

NOTARY PUBLIC STATE OF TEXAS
DENISE SOLIS
Notary ID # 130885121
My Commission Expires
November 1, 2020

AFFIX NOTARY STAMP / SEAL ABOVE

Signature of authorized agent of contracting business entity

Sworn to and subscribed before me, by the said Yara M. Corbitt, P.E., CEO, this the 16th day of March, 2017, to certify which, witness my hand and seal of office.

Signature of officer administering oath	Printed name of officer administering oath	Title of officer administering oath
	Denise Solis	Administrative Assistant

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-179418

Date Filed:
03/16/2017

Date Acknowledged:
03/17/2017

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Texas Cordia Construction, LLC
Edinburg, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
501415600311500060000UPCGVG
City of Peñitas - Street Improvements

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Corbitt, Yara	Edinburg, TX United States	X	
Heredia, Isaac	Edinburg, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/16/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Brown & Brown Lone Star Insurance Services Inc 1717 North Sam Houston Pkwy #115 Houston TX 77038	PHONE (A/C, No, Ext): 281-260-2000	FAX (A/C, No):
	E-MAIL ADDRESS:	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Hartford Fire Insurance Co	19682
INSURER B : Trumbull Insurance Company	27120
INSURER C : Travelers Prop Cas. Co of Amer	25674
INSURER D : Hartford Underwriters Ins Co	30104
INSURER E :	
INSURER F :	

INSURED: TEXAS25
Texas Cordia Construction, LLC
Cordia Sue, LLC
3149 A Center Pointe Dr
Edinburg TX 78539

COVERAGES **CERTIFICATE NUMBER:** 485592448 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	Y	Y	61UEAQI0294	8/1/2016	8/1/2017	EACH OCCURRENCE	$1,000,000
	[X] COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$300,000
	[ ] CLAIMS-MADE [X] OCCUR						MED EXP (Any one person)	$excluded
							PERSONAL & ADV INJURY	$1,000,000
							GENERAL AGGREGATE	$2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$2,000,000
	[ ] POLICY [X] PRO-JECT [ ] LOC							$
B	AUTOMOBILE LIABILITY	Y	Y	61UEAQI0294	8/1/2016	8/1/2017	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	[X] ANY AUTO						BODILY INJURY (Per person)	$
	[ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	[X] HIRED AUTOS [X] NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
C	[X] UMBRELLA LIAB [X] OCCUR	Y	Y	ZUP51M3866016NF	8/1/2016	8/1/2017	EACH OCCURRENCE	$5,000,000
	[ ] EXCESS LIAB [ ] CLAIMS-MADE						AGGREGATE	$
	[ ] DED [X] RETENTION $10,000							$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		Y	61WEAQI0295	8/1/2016	8/1/2017	[X] WC STATU-TORY LIMITS [ ] OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [N] (Mandatory In NH)	N/A					E.L. EACH ACCIDENT	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$1,000,000
							E.L. DISEASE - POLICY LIMIT	$1,000,000
A	Equipment Leased or Rented			61MSZP9263	8/1/2016	8/1/2017	Limit Per Item Limit Per Occurrence	$100,000 $500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, If more space is required)

Auto & General Liability - The policies include a blanket automatic additional insured endorsement that provides additional insured status to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status.

Auto, General Liability & WC - The policies include a blanket waiver of subrogation endorsement that waives the underwriters rights of subrogation to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status.
See Attached...

CERTIFICATE HOLDER

Hidalgo County Urban County Program
427 E Duranta Ave #107
Alamo TX 78516

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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CONSTRUCTION CONTRACT

This Agreement entered into this **21ST day of March 2017** by and between Hidalgo County acting by and through Hidalgo County Urban County Program, hereinafter called the "OWNER", acting herein through its County Judge and **Texas Cordia Construction LLC (a Texas Limited Liability Company)** of **Edinburg,,** State of Texas, hereinafter called "CONTRACTOR".

WITNESSETH

That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

PROJECT NAME:	**2014 & 2015 Peñitas Street Improvements**
PROJECT NO.:	**5014/15-60-0311-5000-6000-UCP-GVG**
PROJECT DESCRIPTION:	**Street Improvements to La Joya Avenue, Pile Avenue and Mezquite Avenue.**

heinafter called the project, for the sum of **($337,177.00) – Three Hundred Thirty-Seven Thousand, One Hundred Seventy –Seven Dollars and Zero Cents** and all extra work in connection therewith, under the terms as stated in the General and Special Conditions of the Contract; and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, the General Conditions, Supplemental General Conditions and Special Conditions of the contract, the plans, which include all maps, plats, blue prints, and other drawings and printed or written explanatory matter thereof, the specifications and contract documents therefore as prepared by **South Texas Infrastructure Group** and as enumerated in Paragraph 1 of the Supplemental General Conditions, all of which are made a part hereof and collectively evidence and constitute the contract.

The CONTRACTOR hereby agrees to commence work under this contract on or after a date to be specified in a written "Notice to Proceed" of the OWNER and to fully complete the project within **(90) Ninety** consecutive calendar days thereafter. The CONTRACTOR further agrees to pay, as liquidated damages, the sum of **($250.00) Two Hundred and Fifty Dollars and Zero Cents**-for each consecutive calendar day thereafter as hereinafter provided in Paragraph 19 of the General Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the contract, subject to additions and deductions, as provided in the General Conditions of the contract, and to make payments on account thereof as provided in Paragraph 25, "Payments to Contractor", of the General Conditions.

IN WITNESS WHEREOF, the parties to these presents have executed this contract in four (4) counterparts, each of which shall be deemed an original, in year and day first above mentioned.

_____

Yara M. Corbit, P.E. /CEO

Name of Firm: Texas Cordia Construction, LLC
Address: 3149 A. Center Point Drive
Edinburg, Texas 78539

Federal I.D./S.S.: 45-2590990

STATE OF TEXAS

COUNTY OF HIDALGO

This instrument was acknowledged before me on this the _____ day of _____, 2017,

by **Tara M. Corbit, P.E. CEO** of and on behalf of **Texas Cordia Construction, LLC**
(name) (title) (a limited liability corporation) (a partnership) (an individual)

_____

Notary Public - Signature

WITNESS:

URBAN COUNTY PROGRAM

_____

_____

Diana R. Serna, Director
Urban County Program

APPROVED AS TO FORM
Atlas, Hall & Rodriguez
By: Stephen L. Crain
Date: 4/28/2016

SOUTH TEXAS INFRASTRUCTURE GROUP

March 16, 2017

Diana Serna, Director
Hidalgo County Urban County
427 E. Duranta Ave.
Suite 107
Alamo, TX 78516

Dear Ms. Serna:

The lowest bidder for **"City of Peñitas – Street Improvements"** Bid No. 5014/15-60-0311-5000-6000-UCP-GVG is **Texas Cordia Construction, LLC.** Please see attached bid tabulation for the above mentioned project. Our recommendation based on the verified breakdown is to go with the lowest bidder with a Base Bid Price of **$337,177.00** (Texas Cordia Construction). Please advise on how to proceed.

Sincerely,

Julio Cerda, P.E.
President
South Texas Infrastructure Group, LLC

SOUTH TEXAS INFRASTRUCTURE GROUP

Peñitas Street Improvements BID NO: 5014/15-60-0311-5000-6000-UCP-GVG March 16, 2017	
Company	**Base Bid Price**
Texas Cordia Construction	**$337,177.00**
RDH Site and Concrete	$378,819.60
Earthworks Enterprise	$421,902.51
Castle Enterprises	$456,999.54
RG Enterprises	$539,531.04
Granchelli Construction	$497,220.47
MJA Construction	$471,152.58
Foremost Paving, Inc.	$489,481.25
Filegonia Site Contractors	$377,872.10
ICE	$480,181.50
GNH Company	$385,273.50
Jimmy Closner and Sons	$489,526.90
AM Utilities Construction	$596,144.99

South Texas Infrastructure Group, LLC.
TBPE Reg. # F-15000

900 S. Stewart Rd. Suite 13 -- Mission, TX 78572
PH 956.424.3335 -- FX 956.583.7116

Pelitas Street Improvements

Base Bid

		Unit	Est. Qty.	Texas Cordia Construction		RDH Site and Concrete		Earthworks Enterprise		Castle Enterprises		RG Enterprises		Granchelli Construction		MIA Construction		Foremost Paving		Fitzgerald Site Contractors		ICE		GNH Company		Jimmy Cloaner & Sons		AM Utilities & Const.	
				Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
1	Remove and dispose existing asphalt pavement and base (Approximately 8"-10"), as per the Plans and Specifications	SY	4772	$ 3.00	$ 14,316.00	$ 12.00	$ 57,264.00	$ 9.30	$ 44,379.60	$ 7.20	$ 34,358.40	$ 4.60	$ 21,951.20	$ 5.39	$ 25,721.08	$ 9.00	$ 42,948.00	$ 6.00	$ 28,632.00	$ 2.55	$ 12,168.60	$ 3.50	$ 16,246.00	$ 3.00	$ 14,316.00	$ 7.00	$ 33,404.00	$ 5.22	$ 24,909.84
2	Relocation of Existing Mailboxes, as per the Plans and Specifications	EA	10	$ 326.00	$ 3,260.00	$ 280.00	$ 2,800.00	$ 75.00	$ 750.00	$ 120.00	$ 1,200.00	$ 345.00	$ 3,450.00	$ 200.00	$ 2,000.00	$ 100.00	$ 1,000.00	$ 323.00	$ 3,230.00	$ 332.75	$ 3,327.50	$ 250.00	$ 2,500.00	$ 80.00	$ 800.00	$ 80.00	$ 800.00	$ 65.55	$ 655.50
3	Excavation & Grading, as per the Plans and Specifications	SY	8316	$ 2.00	$ 16,632.00	$ 2.00	$ 16,632.00	$ 1.75	$ 14,553.00	$ 4.80	$ 39,916.80	$ 6.90	$ 57,380.40	$ 6.60	$ 54,885.60	$ 9.00	$ 74,844.00	$ 6.00	$ 49,896.00	$ 2.05	$ 17,047.80	$ 3.50	$ 29,106.00	$ 4.00	$ 33,264.00	$ 4.00	$ 33,264.00	$ 6.50	$ 54,054.00
4	3-inch HMAC, all complete in place, as per the Plans and Specifications	SY	7177	$ 11.00	$ 78,947.00	$ 8.80	$ 63,157.60	$ 13.75	$ 98,683.75	$ 14.40	$ 103,348.80	$ 14.37	$ 103,133.49	$ 18.37	$ 131,841.49	$ 12.60	$ 90,430.20	$ 12.50	$ 89,712.50	$ 11.55	$ 82,894.35	$ 12.03	$ 86,324.00	$ 11.00	$ 78,947.00	$ 11.50	$ 82,535.50	$ 14.86	$ 106,650.22
5	8-inch Flexible Base, all complete in place, as per the Plans and Specifications	SY	8316	$ 6.00	$ 49,896.00	$ 7.00	$ 58,212.00	$ 7.35	$ 61,122.60	$ 10.94	$ 90,977.04	$ 10.35	$ 86,070.60	$ 8.69	$ 72,266.04	$ 7.25	$ 60,291.00	$ 8.50	$ 70,686.00	$ 5.35	$ 44,490.60	$ 8.00	$ 66,528.00	$ 7.00	$ 58,212.00	$ 8.50	$ 70,686.00	$ 10.78	$ 89,646.48
6	6-inch subgrade, lime treated with 3% (by weight), all complete in place, as per the Plans and Specifications	SY	8316	$ 3.00	$ 24,948.00	$ 4.50	$ 37,422.00	$ 4.80	$ 39,916.80	$ 3.90	$ 32,432.40	$ 5.17	$ 42,993.72	$ 5.77	$ 47,983.32	$ 5.25	$ 43,659.00	$ 4.50	$ 37,422.00	$ 3.25	$ 27,027.00	$ 5.00	$ 41,580.00	$ 4.00	$ 33,264.00	$ 6.40	$ 53,222.40	$ 6.82	$ 56,715.12
7	4-inch Reinforced Concrete Pavement Driveways, all complete in place, as per the Plans and Specifications (including removal of existing driveways)	SY	403	$ 29.00	$ 11,832.00	$ 45.00	$ 18,360.00	$ 57.51	$ 23,464.08	$ 54.00	$ 22,032.00	$ 52.09	$ 21,256.00	$ 29.86	$ 12,182.88	$ 58.50	$ 23,868.00	$ 60.00	$ 24,480.00	$ 45.90	$ 18,727.20	$ 60.00	$ 24,480.00	$ 57.00	$ 23,256.00	$ 60.00	$ 24,480.00	$ 43.21	$ 17,629.68
8	18" Curb & Gutter, all complete in place, as per the Plans and Specifications	LF	4116	$ 11.00	$ 46,046.00	$ 9.00	$ 37,674.00	$ 7.50	$ 31,395.00	$ 12.00	$ 50,232.00	$ 10.35	$ 43,325.10	$ 8.91	$ 37,297.26	$ 9.00	$ 37,674.00	$ 10.00	$ 41,860.00	$ 12.75	$ 53,371.50	$ 14.00	$ 58,604.00	$ 12.00	$ 50,232.00	$ 8.50	$ 35,581.00	$ 8.50	$ 35,581.00
9	36" Valley Gutter, all complete in place, as per the Plans and Specifications	LF	186	$ 24.00	$ 4,464.00	$ 15.00	$ 2,790.00	$ 12.00	$ 2,232.00	$ 21.60	$ 4,017.60	$ 51.75	$ 9,625.50	$ 29.92	$ 5,565.12	$ 18.00	$ 3,348.00	$ 50.00	$ 9,300.00	$ 21.10	$ 3,924.60	$ 60.00	$ 11,160.00	$ 25.00	$ 4,650.00	$ 14.00	$ 2,604.00	$ 15.40	$ 2,864.40
10	Concrete Sidewalk (4"), all complete in place, as per the Plans and Specifications	SF	14065	$ 3.00	$ 42,195.00	$ 3.50	$ 49,332.50	$ 4.95	$ 69,770.25	$ 3.30	$ 46,513.50	$ 4.60	$ 64,837.00	$ 4.40	$ 62,018.00	$ 3.50	$ 49,332.50	$ 5.75	$ 81,046.25	$ 4.75	$ 66,951.25	$ 5.50	$ 77,522.50	$ 3.50	$ 49,332.50	$ 7.00	$ 98,665.00	$ 5.86	$ 82,596.70
11	Remove and dispose existing concrete Sidewalk (Approximately 4"), as per plans and especifications	SF	267.5	$ 4.00	$ 1,070.00	$ 2.00	$ 535.00	$ 4.10	$ 1,096.75	$ 2.40	$ 642.00	$ 6.90	$ 1,845.75	$ 6.32	$ 1,690.60	$ 1.25	$ 334.38	$ 5.00	$ 1,337.50	$ 0.90	$ 240.75	$ 3.00	$ 802.50	$ 4.00	$ 1,070.00	$ 10.00	$ 2,675.00	$ 7.14	$ 1,909.95
12	Safety and treatment, all complete in place, as per TxDOT especifications (TY II, 24 IV, 6:1)	EA	2	$ 1,350.00	$ 2,700.00	$ 700.00	$ 1,400.00	$ 1,965.00	$ 3,930.00	$ 960.00	$ 1,920.00	$ 977.50	$ 1,955.00	$ 1,474.00	$ 2,948.00	$ 1,500.00	$ 3,000.00	$ 1,300.00	$ 2,600.00	$ 1,448.00	$ 2,896.00	$ 950.00	$ 1,900.00	$ 1,200.00	$ 2,400.00	$ 850.00	$ 1,700.00	$ 2,299.95	$ 4,599.90
13	Safety and treatment, all complete in place, as per TxDOT especifications (TY II, 18 IV, 6:1)	EA	2	$ 990.00	$ 1,980.00	$ 700.00	$ 1,400.00	$ 1,310.00	$ 2,620.00	$ 900.00	$ 1,800.00	$ 862.50	$ 1,725.00	$ 1,474.00	$ 2,948.00	$ 900.00	$ 1,800.00	$ 1,100.00	$ 2,200.00	$ 1,017.50	$ 2,035.00	$ 850.00	$ 1,700.00	$ 1,200.00	$ 2,400.00	$ 800.00	$ 1,600.00	$ 2,299.95	$ 4,599.90
14	Wheelchair ramps, all complete in place, as per the Plans and Specifications	EA	12	$ 1,000.00	$ 12,000.00	$ 800.00	$ 9,600.00	$ 400.00	$ 4,800.00	$ 360.00	$ 4,320.00	$ 3,680.00	$ 44,160.00	$ 458.34	$ 5,500.08	$ 1,200.00	$ 14,400.00	$ 915.00	$ 11,100.00	$ 875.00	$ 10,500.00	$ 1,250.00	$ 15,000.00	$ 250.00	$ 3,000.00	$ 1,100.00	$ 13,200.00	$ 3,153.71	$ 38,324.52
15	Remove and replace fence (Chainlink), all complete in place as per the Plans and Specifications	LF	253.5	$ 23.00	$ 5,870.00	$ 3.00	$ 760.50	$ 13.03	$ 3,303.15	$ 12.00	$ 3,042.00	$ 18.40	$ 4,664.40	$ 16.50	$ 4,182.75	$ 9.00	$ 2,281.50	$ 2.00	$ 507.00	$ 23.50	$ 5,957.25	$ 26.00	$ 6,591.00	$ 25.00	$ 6,337.50	$ 40.00	$ 10,140.00	$ 133.23	$ 48,933.81
16	Signage, all complete in place, as per the Plans and Specifications	EA	7	$ 500.00	$ 3,500.00	$ 290.00	$ 2,030.00	$ 380.00	$ 2,660.00	$ 420.00	$ 2,940.00	$ 1,725.00	$ 12,075.00	$ 522.50	$ 3,657.50	$ 200.00	$ 1,400.00	$ 1,200.00	$ 8,400.00	$ 668.25	$ 4,677.75	$ 750.00	$ 5,250.00	$ 200.00	$ 1,400.00	$ 230.00	$ 1,610.00	$ 220.00	$ 1,540.00
17	Sanitary Sewer Manhole Adjustment, as per the Plans and Specifications	EA	3	$ 700.00	$ 2,100.00	$ 200.00	$ 600.00	$ 210.00	$ 630.00	$ 180.00	$ 540.00	$ 767.50	$ 2,302.50	$ 852.50	$ 2,557.50	$ 1,800.00	$ 5,400.00	$ 900.00	$ 2,700.00	$ 1,960.00	$ 4,660.00	$ 1,250.00	$ 3,750.00	$ 3,500.00	$ 10,500.00	$ 450.00	$ 1,350.00	$ 2,100.00	$ 6,300.00
18	Cleanout Adjustments, all complete in place, as per the Plans and Specifications	EA	9	$ 580.00	$ 5,220.00	$ 250.00	$ 2,250.00	$ 70.00	$ 630.00	$ 360.00	$ 3,240.00	$ 287.50	$ 2,587.50	$ 275.00	$ 2,475.00	$ 300.00	$ 2,700.00	$ 900.00	$ 8,100.00	$ 345.00	$ 3,105.00	$ 450.00	$ 4,050.00	$ 200.00	$ 1,800.00	$ 350.00	$ 3,150.00	$ 831.63	$ 7,484.67
19	New Storm Inlet (Type "A"), all complete in place, as per plans and Specifications	EA	1	$ 1,815.00	$ 1,815.00	$ 3,500.00	$ 3,500.00	$ 2,675.00	$ 2,675.00	$ 3,600.00	$ 3,600.00	$ 4,137.50	$ 4,137.50	$ 6,360.00	$ 6,360.00	$ 2,200.00	$ 2,200.00	$ 3,200.00	$ 3,200.00	$ 2,450.00	$ 2,450.00	$ 6,000.00	$ 6,000.00	$ 3,000.00	$ 3,000.00	$ 4,500.00	$ 4,500.00	$ 4,470.51	$ 4,470.51
20	New 24" RCP Storm Line (CL III) (Rubber Gasket), all complete in place, as per plans and Specifications (Connection to existing Manhole should be incidental to the bid price of 24" RCP storm line)	LF	151.5	$ 48.00	$ 7,272.00	$ 80.00	$ 12,120.00	$ 77.00	$ 11,665.50	$ 56.40	$ 8,544.60	$ 56.93	$ 8,623.33	$ 71.50	$ 10,832.25	$ 60.00	$ 9,090.00	$ 72.00	$ 10,908.00	$ 73.30	$ 11,107.95	$ 65.00	$ 9,847.50	$ 39.00	$ 5,908.50	$ 80.00	$ 12,120.00	$ 37.46	$ 5,675.19
21	New 15" RCP Storm Line (CL IV (Rubber Gasket), all complete in place, as per plans and Specifications	LF	32	$ 57.00	$ 1,824.00	$ 40.00	$ 1,280.00	$ 50.00	$ 1,600.00	$ 43.20	$ 1,382.40	$ 46.09	$ 1,472.00	$ 71.50	$ 2,288.00	$ 36.00	$ 1,152.00	$ 67.00	$ 2,144.00	$ 56.00	$ 1,792.00	$ 45.00	$ 1,440.00	$ 37.00	$ 1,184.00	$ 70.00	$ 2,240.00	$ 29.80	$ 953.60
	Total Base Bid Price				$337,177.00		$378,819.60		$421,502.51		$456,939.54		$539,531.04		$497,220.47		$471,152.58		$489,481.25		$377,872.10		$480,181.50		$385,273.50		$489,526.90		$596,144.59

HIDALGO COUNTY PURCHASING DEPARTMENT
BID TABULATION SHEET

DEPARTMENT NAME: HIDALGO COUNTY – URBAN COUNTY PROGRAM

BID OPENING DATE: March 15, 2017 | **BID OPENING TIME: 9:30 A.M.**

DESCRIPTION OF BID: "City of Peñitas – Street Improvements

BID NO.: 5014/15-60-0311-5000-6000-UCP-GVG | **PROCURMENT SPECIALIST:**

ADDENDUM #1 REQUIRED

BID # RFB#	NAME OF COMPANY	ADDENDUM #1	TOTAL PRICE	BID BOND OR CHECK INCLUDED
#1	Texas Cordia Construction, LLC	Acknowledged	$337,177.00	Bid Bond Included
#2	2GS, LLC dba Earthworks Enterprise	Acknowledged	$421,902.51	Bid Bond Included
#3	Filegonio Site Contractors, LLC	Acknowledged	$377,872.10	Bid Bond Included
#4	MJA Construction, LLC	Acknowledged	$471,152.57	Bid Bond Included
#5	RG Enterprises, LLC dba G & G Contractors	Acknowledged	$539,609.25	Bid Bond Included
#6	Granchelli Construction, LLC	Acknowledged	$499,259.05	Cashier's Check Included
#7	Castle Enterprises, LLC	Acknowledged	$456,999.54	Bid Bond Included
#8	Jimenez Engineering Solutions dba International Consulting Engineers	Acknowledged	$480,181.50	Bid Bond Included
#9	RDH Site and Concrete, LLC	Acknowledged	$378,819.60	Bid Bond Included
#10	Foremost Paving, Inc.	Acknowledged	$489,481.25	Bid Bond Included
#11	GNH Company, LLC	Acknowledged	$385,273.50	Bid Bond Included
#12	Jimmy Closner & Sons Construction Co., Inc.	Acknowledged	$489,526.90	Bid Bond Included
#13	AM Utilities & Construction, LLC	Acknowledged	$596,144.98	Bid Bond Included

***TYPED AS READ AT BID OPENING, AMOUNTS NOT VERIFIED/CALCULATED**

AI-59082 **Elections Administration** **18. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

Discussion, consideration and action but not limited to Election updates.

BACKGROUND

Fiscal Impact

Attachments

backup

Form Review

Form Started By: Monica Badillo Started On: 03/21/2017 05:16 PM

Final Approval Date: 03/21/2017

Hidalgo County Elections Department

Elections for May 6, 2017

Lease Election Services

1. City of McAllen; Mayor, Place 2

Full Election Services

1. City of Mercedes; Mayor, Place 1 and 3
2. City of Pharr; Place 2, 3, 4
3. City of San Juan; Mayor, Place 2 & 3
4. City of Sullivan; Mayor, Place 1&3
5. McAllen ISD; Places 3, 6, and 7
6. Sharyland ISD; Place 1
7. City of Elsa; Referendum Election

Canceled Elections

1. City of Alton
2. City of Penitas
3. City of Progreso Lakes
4. Progreso ISD

Hidalgo County Elections Department

Hart Verity

- Delivery of equipment consisted of a total 15 truckloads.
- Receiving shipment began February 15, 2017 to March 13, 2017.
- A total of 20 days to receive all items.
- There were a total of 22 employees working at the warehouse.
- Total Machines: 1,294 Machines
    - 854 Verity Touch
    - 220 Verity Touch w/ Access
    - 220 Controllers

May 6, 2017 - Uniform Election Date

Authority conducting elections	**Local political subdivisions and counties**
Deadline to post notice of candidate filing deadline [1]	Monday, December 19, 2016 for local political subdivisions that have a first day to file for their candidates [1]
First Day to Apply for Ballot by Mail	Sunday, January 1, 2017* **First day to file does not move because of New Year's Day holiday. An "Annual ABBM" or FPCA for a January or February 2017 election may be filed earlier, but not earlier than the 60th day before the date of the January or February election.*
First Day to File for Place on General Election Ballot [1]	Wednesday, January 18, 2017
Last Day to File for Place on Ballot, Local General Election [1]	Friday, February 17, 2017 at 5:00 p.m. See note below relating to four-year terms [3]
Last Day to Order General Election or Election on a Measure	Friday, February 17, 2017
Last Day to Register to Vote	Thursday, April 6, 2017
First Day of Early Voting By Personal Appearance	Monday, April 24, 2017
Last Day to Apply for Ballot by Mail (**Received**, not Postmarked)	Tuesday, April 25, 2017
Last Day of Early Voting By Personal Appearance	Tuesday, May 2, 2017
Last day to Receive Ballot by Mail	Saturday, May 6, 2017 (election day) at 7:00 p.m. (unless overseas deadline applies)

AI-58989 **Elections Administration** **18. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Yvonne Ramon, ELECTIONS DEPT.

Submitted By: Carlos Nieto, ELECTIONS DEPT.

Department: ELECTIONS DEPT.

Information

CAPTION

Discussion, consideration and approval to maintain and apply the current election services billing rate to the Hart Verity System utilized only during the November 2017 election billing cycle.

BACKGROUND

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Discussion item only; no fiscal impact.

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/16/2017 02:17 PM
Ivan Cantu	Ivan Cantu	03/17/2017 09:32 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Carlos Nieto		Started On: 03/16/2017 12:21 PM
Final Approval Date: 03/17/2017		

AI-58930 **Elections Administration** **18. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Carlos Nieto,
ELECTIONS DEPT.

Department: ELECTIONS DEPT.

Information

CAPTION

1. Approval of 2017 Lease Contract for Election Services between Hidalgo County and the City of McAllen for their election to be held on May 6, 2017.
2. Approval of 2017 Full Contract for Election Services between Hidalgo County and the City of Pharr for their election to be held on May 6, 2017.
3. Approval of 2017 Full Contract for Election Services between Hidalgo County and the City of San Juan for their election to be held on May 6, 2017.
4. Approval of 2017 Full Contract for Election Services between Hidalgo County and the McAllen Independent School District for their election to be held on May 6, 2017.

BACKGROUND

Fiscal Impact

Attachments

City of McAllen
McAllen ISD
City of San Juan
City of Pharr
City of Pharr

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/13/2017 11:14 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Carlos Nieto		Started On: 03/13/2017 09:15 AM
Final Approval Date: 03/17/2017		

THE STATE OF TEXAS §
§ CONTRACT FOR LEASE ELECTION SERVICES
COUNTY OF HIDALGO §

This Contract is entered into by and between the HIDALGO COUNTY ELECTIONS ADMINISTRATOR, Yvonne Ramón, hereinafter referred to as "ADMINISTRATOR", on behalf of Hidalgo County, a political subdivision of the State of Texas, and the **CITY OF MCALLEN**, hereinafter referred to as the "ENTITY", pursuant to Texas Election Code Section 31.092.

RECITALS

WHEREAS, the ENTITY, by appropriate action of its governing body acting in accordance with all applicable laws, has called an election to be held on **May 6, 2017**.

WHEREAS, pursuant to Section 31.091(1) of the Texas Election Code, the County Election Officer means the Elections Administrator for Hidalgo County; and

WHEREAS, the ENTITY and the COUNTY, through the ADMINISTRATOR, desire to enter into a contract setting out respective responsibilities of the parties; and

WHEREAS, ADMINISTRATOR has provided costs for election services to be rendered by ADMINISTRATOR'S office pursuant to the terms of this Contract, which costs are set out in Article VI hereof; and

NOW, THEREFORE, the COUNTY, through the ADMINISTRATOR, and the ENTITY for good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, do hereby agree to hold contract, covenant and agree as follows:

ARTICLE I
PURPOSE

1.01. The parties hereto have entered into this Contract for election services described in Article II to be provided to the ENTITY for its election to be held on **May 6, 2017**, and any Runoff, if applicable.

ARTICLE II
SERVICES

2.01. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the following:

(A) Procure, provide, prepare, code and distribute Direct Recording Electronic (DREs) voting systems and necessary election equipment, as well as an ADA voting system, and transport equipment to and from the polling locations, including early voting substations, for the ENTITY;

(B) Provide Voter Registration List(s) in CD Format to be used for mail-in-ballots, as provided by Hidalgo County Voter Registration pursuant to the request by the ENTITY; and

(C) Prepare and provide Logic and Accuracy testing on ENTITY's election ballot for every iVotronic voting machine to be utilized by ENTITY during early voting and election day;

(D) Prepare and provide Direct Recording Electronic device training for election workers

(E) Procure, provide, prepare and code Electronic Poll Book(s) per Early Voting polling location with the Voter Registration Database. To include laptop(s), training for poll book, insurance and delivery fee as well as supplies such as but not limited to labels and printer

(F) Provide information for election officers;

(G) Review the eligibility of each provisional voter within 7 days of receiving voted provisional ballots from the ENTITY;

(H) COUNTY will keep provisional ballots for up to 6 days after Election Day to allow for a provisional voter to "cure" their ballot for lack of proper identification as allowed by Texas Election Code Section 65.0541 and in compliance with procedures established by the Texas Secretary of State.

2.02. The Entity shall be responsible for performing the following:

(A) Confirm and/or correct the boundaries of the political subdivision holding the election on a map provided by the County. Once confirmed and/or corrected, Entity certifies the veracity of the boundaries and geographical area that represents the Entity and the area subject to the election.

(B) Deliver in person all voted provisional ballots to the COUNTY for the purpose of the Voter Registrar to review a provisional voter's eligibility no later than the following business day after the final day of Early Voting.

(C) Deliver in person all voted provisional ballots to the COUNTY for the purpose of the Voter Registrar to review a provisional voter's eligibility no later than the following business day after Election Day.

(D) ENTITY will notify COUNTY prior to scheduling their canvassing so as to allow all deadlines to be met per the requirements of Texas Election Code Section(s) 86.07 and 65.0451, and to allow for the ballot board to convene its final meeting.

ARTICLE III
SCHEDULE FOR PERFORMANCE OF SERVICES

3.01. Specific services to be provided related to the general services identified in Article II shall be performed in accordance with the time requirements set out in the Texas Election Code.

ARTICLE IV
SERVICES NOT PROVIDED BY COUNTY

4.01. ADMINISTRATOR shall have no responsibility for insuring the passage of the appropriate Election Order by the ENTITY, publishing and (or) posting the Election Order as required by the Texas Election Code Section 4.003, printing or providing election day poll book(s), any recounts and/or election contests associated with the election, or canvassing election results. ADMINISTRATOR shall have no responsibility as custodian of the ENTITY's election records as per Texas Election Code Section 31.096.

ARTICLE V
TERM

5.01. Except as hereinafter set out, the term of this Contract shall be from the time of execution until all items with respect to this Contract and the election held hereunder have been completed.

ARTICLE VI
COST OF SERVICE AND BILLING

In consideration for the services provided hereunder by ADMINISTRATOR, the ENTITY agrees to pay ADMINISTRATOR for the following costs of services:

6.01 iVotronic Voting Machines:

A. One base charge of $150.00 for Coding iVotronic ballot for voting machines, a $25 additional charge per additional ballot styles and a minimum of a $10 charge for Request Changes on Coded Ballot;
B. Base charge for Audio Setup of $300 for English/Spanish;
C. A $10.00 recording fee for Audio Files for each Contest and/or Office;
D. A $10.00 recording fee for Audio Files for each Proposition/Amendment/Charter/Instructions;
E. A $10.00 recording fee for Audio Files for each Candidate and/or Responses;
F. Cost of creating election media, such as, but not limited to Personal Electronic Ballot cartridges (PEB), compact flash cards, labels, bags, keys, etc.;
G. The amount of $150.00 leasing fee for each iVotronic and $150.00 leasing fee for each ADA iVotronic;
H. Cost of delivery and pick-up of iVotronics for Early Voting and Election Day to include fuel charge and mileage at COUNTY's cost;
I. Fee for Voter Registration List(s) in CD format;
J. The above described fees for each machine and programming fee shall be additionally charged for any Runoff Election.

6.02 Electronic Poll Book for Early Voting:

A. Database access at $100.00 per day;

B. To include but not limited to the Early Voting and Election Day Check-In Kits, insurance at $150.00 per location;

C. Printer label fee of $.03 per label (price subject to change);

D. Creation of separate Username and password for each polling location at $20.00 per location;

6.03 Provide iVotronic scheduled training for Judges and/or clerks or a representative from the Political Subdivision at no cost to the ENTITY;

6.04 Billing:

A. The form of the invoice to be used in the billing by the County, including a good faith estimate of costs, is attached hereto as Exhibit A. The ENTITY shall submit to the County, an administrative fee of ten percent (10%) of the entire estimated cost of the Election, as shown in Exhibit A referenced above. This fee shall be submitted to the County with this signed contract. The parties agree that time is of the essence on this payment obligation. The ten percent (10%) administrative fee is prescribed by Section 31.100(d) of the Election Code.

B. After the Election and as soon as practicable, upon receiving final invoiced from 3rd party vendors, the ADMINISTRATOR shall prepare and send an itemized invoice with the actual costs of the Election to the ENTITY.

C. Full payment of the remaining balance, if any, shall be made by the ENTITY within thirty (30) days of receipt of the invoice.

D. Payment shall be made by check payable to the Hidalgo County Elections Department

E. Notice. Except as may be otherwise specifically provided in this contract, all notices, demands, requests or communication required or permitted hereunder shall be in writing and shall either be (i)personally delivered against a written receipt, or (ii) sent by registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

Yvonne Ramón
Elections Administrator
Hidalgo County Elections Department
PO Box 659
Edinburg, Texas 78540

Perla Lara
City Secretary
City of McAllen
PO Box 220
McAllen, Texas 78505

F. Any balances, if any remain after the payment of all costs of election bills, shall be the property of the ENTITY and returned to it.

ARTICLE VII

7.01 IF ANY OF THE ELECTION EQUIPMENT IS LOST, STOLEN, DESTROYED, OR DAMAGED, THE CITY, SCHOOL DISTRICT OR ENTITY WHO LEASED THE EQUIPMENT IS LIABLE FOR THE DAMAGE AND AGREES TO PAY THE ADMINISTRATOR THE COST OF THE REPLACEMENT OR REPAIR OF THE ELECTION EQUIPMENT SO LOST, STOLEN, DESTROYED OR DAMAGED.

ARTICLE VIII
GENERAL PROVISIONS

8.01. This Contract shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Hidalgo County, Texas.

8.02. In case any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision thereof, and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

8.03. This Contract constitutes the sole and only agreement of the parties hereto and supersedes any prior understanding or written or oral agreement between the parties respecting the written subject matter.

8.04. No amendment, modification, or alteration of the term hereof shall be binding unless the same be in writing, dated subsequent to the date hereof and duly executed by the parties hereto.

SIGNED this _____ day of _____, 2017

APPROVAL COUNTY OF HIDALGO:

BY:_____
RAMON GARCIA
COUNTY JUDGE

ATTEST:

BY:_____
ARTURO GUAJARDO, JR.
COUNTY CLERK

CITY OF MCALLEN
ENTITY

BY: _____

PRINT: JIM DARLING

TITLE: MAYOR

CITY OF McALLEN
McALLEN, TEXAS

ATTEST

BY: _____

PRINT: PERLA LARA

TITLE: CITY SECRETARY

ELECTIONS ADMINISTRATOR

BY: _____
YVONNE RAMÓN

APPROVED AS TO FORM:

OFFICE OF CRIMINAL DISTRICT ATTORNEY
RICARDO RODRIGUEZ, JR.

BY: _____
JOSEPHINE RAMIREZ SOLIS
Assistant District Attorney

2017 Hidalgo County Elections
Leasing Estimate Calculator

EXHIBIT A

PLEASE NOTE THAT THIS TOOL IS FOR ESTIMATION PURPOSES ONLY.
PRICES ARE SUBJECT TO CHANGE AS DETERMINED BY FINAL INVOICE.

ELECTION: City of McAllen Mayor, Dist. 1, 2 & 3, MPUB Place A and MPUB Place D	DATE: May 6, 2017

	Programming Services for iVotronic	Price	Quantity	Total
6.01 A	Base Charge: Ballot Programming	$150.00	1	$150.00
A	Additional Ballot Style(s)	$25.00	3	$75.00
A	Request Change on Programmed Ballot	$10.00	0	$0.00
B	Audio Files Set up Charge English/ Spanish	$300.00	1	$300.00
C	Audio Files (Per Contests/ Office)	$10.00	6	$60.00
D	Audio Files (Per Propositions/ Amendments/ Charters/ Instructions)	$10.00	0	$0.00
E	Audio Files (Per Candidates/ Answer)	$10.00	24	$240.00
F	Election Media per Polling Location(s)	$100.00	9	$900.00
G	iVotronic Voting Machine(s)	$150.00	21	$3,150.00
G	ADA iVotronic Voting Machine(s)	$150.00	9	$1,350.00
H	Delivery/Pick-up Fee (includes Mileage)	$600.00	1	$600.00
I	Voter Registration List(s) (CD Format) for Mail-In-Ballot(s) Request	$17.50	1	$17.50
			Total iVotronic Programming Charges	$6,842.50

6.02	Early Voting Electronic Poll Book (VoteSafe)	Price	Quantity	Total
	Voter Registration Database (per day)	$100.00	9	$900.00
	Laptop Rental	$150.00	9	$1,350.00
	Brother Printer Rental (per day)	$4.35	30	$130.50
	Printer Labels (65,953 per vote)	$0.03	131,906	$3,957.18
	Username/Password - Per Polling Location	$20.00	9	$180.00
			Total Electronic Poll Book Charges	$6,517.68

6.03	Training	Price	Quantity	Total
	iVotronic and Votesafe scheduled training	$0.00	1	$0.00
			Total Training Charges	$0.00

6.04		
	Subtotal	$13,360.18
	Administrative Fees (10%)	$1,336.02
	ESTIMATE GRAND TOTAL	$14,696.20

THE STATE OF TEXAS §
§ CONTRACT FOR ELECTION SERVICES
COUNTY OF HIDALGO §

This Contract is entered into by and between the HIDALGO COUNTY ELECTIONS ADMINISTRATOR, Yvonne Ramón, hereinafter referred to as "ADMINISTRATOR", on behalf of Hidalgo County, a political subdivision of the State of Texas, and the **MCALLEN INDEPENDENT SCHOOL DISTRICT** hereinafter referred to as the "ENTITY", pursuant to Texas Election Code Section 31.092.

RECITALS

WHEREAS, the ENTITY, by appropriate action of its governing body acting in accordance with all applicable laws, has called an election to be held on **May 06, 2017**.

WHEREAS, pursuant to Section 31.092(a) of the Texas Election Code, the County Election Officer may contract with the governing body of a political subdivision situated wholly or partly in the county served by the officer to perform election services in any one or more elections ordered by an authority of the political subdivision; and

WHEREAS, pursuant to Section 31.091(1) of the Texas Election Code, the County Election Officer means the Elections Administrator for Hidalgo County; and

WHEREAS, the ENTITY is a political subdivision in Hidalgo County that desires the County to conduct and supervise the **May 06, 2017**, election of the ENTITY (the "Election"); and

WHEREAS, the ENTITY and the COUNTY, through the ADMINISTRATOR, desire to enter into a contract setting out the respective responsibilities of the parties; and

WHEREAS, the COUNTY agrees to perform election services for the ENTITY; and

WHEREAS, ADMINISTRATOR has provided costs for election services to be rendered by ADMINISTRATOR'S office pursuant to the terms of this Contract, which costs are set out in Article VI hereof; and

NOW, THEREFORE, the COUNTY, through the ADMINISTRATOR, and the ENTITY for good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, do hereby agree to hold contract, covenant and agree as follows:

ARTICLE I
PURPOSE

1.01. The parties hereto have entered into this Contract for election services described in Article II to be provided to the ENTITY for its election to be held on **May 06, 2017**, and any Runoff, if applicable.

ARTICLE II
SERVICES

2.01. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the following:

(A) Procure, provide, prepare, program and distribute Direct Recording Electronic (DREs) voting systems and necessary election equipment, as well as an ADA voting system, and transport equipment to and from the polling locations, including early voting substations, for the ENTITY;

(B) Prepare and provide Direct Recording Electronic device training for election workers;

(C) Prepare and provide Logic and Accuracy testing on ENTITY's election ballot for every iVotronic voting machine to be utilized by ENTITY during early voting and election day;

(D) Procure, provide, prepare and program Electronic Poll Book(s) per polling location with the Voter Registration Database. To include laptop(s), insurance, and delivery fee, as well as supplies such as, but not limited to labels and printer;

(E) Provide and prepare all mail-in ballot supplies, including applications, paper ballots, envelopes and postage;

(F) Provide training for Judges/Clerks;

(G) Procure, provide, prepare, and distribute all necessary election supplies, including:

1) Ballots (preparation and distribution only);

2) Election kits and election paperwork;

3) Ballot boxes and voting booths

(H) Provide cages and covers, cage kit, to include, but not limited to surge protectors, tape, printer, headphones and scanner as well as supplies such as bags, aprons, clipboards, pens, pencils, rulers, magnifiers, inkpads, screen cloths, sanitizers and badges;

(I) Provide signage to be placed at each polling location that shows Texas Penal Code Section 46.03(a)(2) as it relates to the prohibition of firearms on the premises of a polling place;

(J) Procure early voting polling places and Election Day polling places, as ordered;

(K) Prepare Writ of Election to election officers and notice of appointment to Presiding and Alternate judges, as required by law;

(L) Prepare, distribute, and publicize notice of election (Texas Election Code Section 4.003(a)(1) and early voting and election day schedules in newspaper;

(M)Notify the election judges of the date, time and place of the election;

(N) Procure and pay election judges and clerks for early voting and Election Day voting;

(O) Provide the general overall supervision of the Election and provide the advisory services in connection with the decisions to be made and the actions to be taken by the ENTITY;

(P) Procure and pay Ballot Board members;

(Q) Provide information for election officers;

(R) Provide such incidental related services as may be necessary to conduct the election;

(S) Serve as the Early Voting Clerk;

(T) Establish a Central Counting Station for the purpose of tabulating ballots; and

(U) Tabulate election results in preparation for ENTITY's canvassing.

(V) Preserve locked ballot boxes containing voted ballots securely in a locked room for 60 days as required by Texas Election Code Section 66.058, and in an election involving a federal office, preserve for the remainder of the preservation period for 22 months after Election Day in accordance with federal law.

(W) The ADMINISTRATOR shall be the agent of the ENTITY for the purposes of contracting with third parties with respect to the election expenses within the scope of the County Elections Administrator's duties;

(X) The COUNTY shall file copies of this Contract with the County Treasurer and the County Auditor; and

(Y) In accordance with Section 31.100(b) of the Texas Election Code, only actual expenses directly attributable to this Contract may be paid. The ADMINISTRATOR shall submit the actual costs for items contracted pursuant to the Contract with the ENTITY as soon as all invoices from third party vendors are received;

(Z) If applicable, the COUNTY agrees to provide the election services described herein for a Runoff election.

i. The County may combine polling locations in accordance with section 42.0051 of the Election Code, in order to properly supervise and conduct a Runoff election.

ii. If a Runoff election is required, the ENTITY hereby agrees to the combining of polling locations, in accordance with section 42.0051 of the Election Code.

iii. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the costs for any Runoff election services to be rendered by the ADMINISTRATOR'S office pursuant to the terms of this Contract as soon as practicable, once a Runoff is determined necessary.

iv. In accordance with Section 31.100(b) of the Texas Election Code, only actual expenses directly attributable to this Contract may be paid. The ADMINISTRATOR shall submit the actual costs for items contracted pursuant to the Contract with the ENTITY as soon as all invoices from third party vendors are received regarding the Runoff

2.02 The ENTITY shall be responsible for performing the following:

(A) Payment of all necessary election supplies as required by the COUNTY, including but not limited to ballots, election kits, mail-in ballot supplies, laptop rental, labels and combination forms;

(B) Pay a proportionate share of the cost of judges and election workers for hourly pay submitted by the County Elections Administrator at the rate of $12.00 per hour for Election Judges and $10.10 per hour for Alternate Judges and Early Voting Clerks for both Early Voting and General Election and pay the cost for training of Judges and Clerks at the rate of $7.00 per hour per person.

(C) Reimburse the COUNTY for a proportionate share of the cost for liability insurance coverage for election workers employed for both Early Voting and General Election;

(D) Canvass the Election Results for the ENTITY'S governing body;

(E) Prepare and submit to the Secretary of State the Precinct by Precinct reports;

(F) As stated in Section 31.096 of the Texas Election Code, this Contract may not change:

(1) the authority with whom applications of candidates for a place on a ballot are filed; (2) the authority with whom documents are filed under Title 15; or (3) the authority to serve as custodian of voted ballots or other election records, except that the contract may provide that the County Election Officer will be the custodian of voted ballots. Under this Contract, the Hidalgo County Elections Administrator shall be the custodian of voted ballots.

(G) Reimburse the COUNTY for any and all costs associated with recounts and/or election contests associated with the election;

(H) Confirm and/or correct the boundaries of the political subdivision holding the election on a map provided by the County. Once confirmed and/or corrected, Entity certifies the veracity of the boundaries and geographical area that represents the Entity and the area subject to the election.

(I) If applicable, in consideration for the services provided for a Runoff Election by the COUNTY, the ENTITY agrees to pay ADMINISTRATOR for the costs of services for a Runoff election.

ARTICLE III
SCHEDULE FOR PERFORMANCE OF SERVICES

3.01. Specific services to be provided related to the general services identified in Article II shall be performed in accordance with the time requirements set out in the Texas Election Code.

ARTICLE IV
SERVICES NOT PROVIDED BY COUNTY

4.01. ADMINISTRATOR shall have no responsibility for insuring the passage of the appropriate Election Order by the ENTITY, publishing and (or) posting the Election Order as required by the Texas Election Code section 3.004(3), or Texas Election Code 67.002(2) which is canvassing election results.

ARTICLE V
TERM

5.01. Except as hereinafter set out, the term of this Contract shall be from the time of execution until all items with respect to this Contract and the election held hereunder have been completed.

ARTICLE VI
COST OF SERVICE AND BILLING

In consideration for the services provided hereunder by ADMINISTRATOR, the ENTITY agrees to pay ADMINISTRATOR for the following costs of services:

6.01 iVotronic Voting Machines:

A. One base charge of $150.00 for Programming iVotronic ballot for voting machines, a $25 additional charge per additional ballot styles and a minimum of a $10 charge for Request Changes on Programmed Ballot;

B. Base charge for Audio Setup of $300 for English/Spanish;

C. A $10.00 recording fee for Audio Files for each Contest and/or Office;

D. A $10.00 recording fee for Audio Files for each Proposition/Amendment/Charter/Instructions;

E. A $10.00 recording fee for Audio Files for each Candidate and/or Responses;

F. Cost of creating election media, such as, but not limited to Personal Electronic Ballot cartridges (PEB), compact flash cards, labels, bags, keys, etc.;

G. The amount of $150.00 leasing fee for <u>each</u> iVotronic and $150.00 leasing fee for each ADA iVotronic;

H. Cost of delivery and pick-up of iVotronics for Early Voting and Election Day to include fuel charge and mileage at COUNTY's cost;

I. The above described fees for each machine and programming fee shall be additionally charged for any Runoff Election.

6.02 Electronic Poll Book:

A. Database access at $100.00 per day;

B. To include but not limited to the Early Voting and Election Day Check-In Kits, insurance at $150.00 per location;

C. Printer label fee of $.03 per label (price subject to change);

D. Creation of separate Username and password for each polling location at $20.00 per location;

6.03 Fee for Early Voting and General Election Combination forms, maps and election kits. One-hundred sample ballots at no charge with additional sample ballots at twenty cents per copy; No charge for provisional bags, table tops if necessary, ballot box(es), custom signs and flags;

6.04 Reimbursement of ballot supplies, including applications, paper ballots, correspondence, envelopes and postage at COUNTY's cost;

6.05 Reimbursement fee for publications of all notices and newspaper advertisements,(if applicable)

6.06 Reimbursement rental fees incurred for early voting polling places and election day polling places, as ordered;

6.07 Cost of judges and election workers for time worked to be submitted to the ENTITY by the ADMINISTRATOR. The ENTITY shall reimburse the COUNTY for a proportionate share of the cost of payroll for election workers at $12.00 per hour for Election Judge, $10.10 per hour for Alternate Judge and Clerk(s); includes cost of payroll for training of Election Judge, Alternate Judge and Clerk(s) at $7.00 per hour per person;

6.08 Pay for the proportionate share of the cost of the Ballot Board judge at $12.00 per hour and Ballot Board clerks at $10.10 per hour;

6.09 One copy of canvass report provided to ENTITY at no charge; each additional canvass report requested to be reimbursed by the ENTITY at COUNTY's cost;

6.10 Reimbursement to the COUNTY for a proportionate share of the cost of liability insurance coverage as set by the County for all election workers employed for the elections;

6.11 Reimbursement to the COUNTY for the cost of the use of wireless cell phones at polling locations with the rate set by the wireless vendor at the time of usage which includes an additional per minute fee as charged by the vendor, a service charge of $10.00 per phone line and a vendor base fee of $3.99 per phone line;

6.12 Billing:

A. The form of the invoice to be used in the final billing by the COUNTY, includes a good faith estimate of costs and is attached hereto as Exhibit A.

B. After the election and as soon as practicable, upon receiving final invoice from 3rd party vendors, the ADMINISTRATOR shall prepare and will send to the ENTITY, a final itemized invoice with the actual costs of the Election and will include the 10% Administrative Fee of the actual costs as set forth by Texas Election Code Sec. 31.100 (d).

C. Full payment of the remaining balance, if any, shall be made by the ENTITY within thirty (30) days of receipt of the invoice.

D. Payment shall be made by check payable to the Hidalgo County Elections.

E. Notice. Except as may be otherwise specifically provided in this contract, all notices, demands, requests or communication required or permitted hereunder shall be in writing and shall either be (i)personally delivered against a written receipt, or (ii) sent by registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

Yvonne Ramón
Elections Administrator
Hidalgo County Elections Administrator
PO Box 659
Edinburg, Texas 78540

Dr. Mike Barrera
Assistant Superintendent for District Operations
McAllen ISD
2000 N. 23rd Street
McAllen, Texas 78501

F. Any balances, if any remain after the payment of all costs of election bills, shall be the property of the ENTITY and returned to it.

ARTICLE VII

7.01 IF ANY OF THE ELECTION EQUIPMENT IS LOST, STOLEN, DESTROYED, OR DAMAGED, THE CITY, SCHOOL DISTRICT OR ENTITY WHO LEASED THE EQUIPMENT IS LIABLE FOR THE DAMAGE AND AGREES TO PAY THE ADMINISTRATOR THE COST OF THE REPLACEMENT OR REPAIR OF THE ELECTION EQUIPMENT SO LOST, STOLEN, DESTROYED OR DAMAGED.

ARTICLE VIII
GENERAL PROVISIONS

8.01. This Contract shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Hidalgo County, Texas.

8.02. In case any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision thereof, and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

8.03. This Contract constitutes the sole and only agreement of the parties hereto and supersedes any prior understanding or written or oral agreement between the parties respecting the written subject matter.

8.04. No amendment, modification, or alteration of the term hereof shall be binding unless the same be in writing, dated subsequent to the date hereof and duly executed by the parties hereto.

SIGNED this _____ day of _____, 2017

APPROVAL COUNTY OF HIDALGO:

BY:_____
RAMON GARCIA
COUNTY JUDGE

ATTEST:

BY:_____
ARTURO GUAJARDO, JR.
COUNTY CLERK

ELECTIONS ADMINISTRATOR

BY: _____
YVONNE RAMÓN

APPROVED AS TO LEGAL FORM:

OFFICE OF CRIMINAL DISTRICT ATTORNEY
RICARDO RODRIGUEZ, JR.

BY: _____
JOSEPHINE RAMIREZ SOLIS
Assistant District Attorney

MCALLEN INDEPENDENT SCHOOL DISTRICT

BY: _____

PRINT: SAM SALDIVAR JR
TITLE: MCALLEN ISD BOARD PRESIDENT

ATTEST

BY: _____

PRINT: Tony Forina

TITLE: Board Secretary

APPROVED AS TO FORM:
Atlas, Hall & Rodriguez, LLP

BY: _____
Stephen L. Crain

2017 Hidalgo County Elections
Contract Estimate Calculator

EXHIBIT A

PLEASE NOTE THAT THIS TOOL IS FOR ESTIMATION PURPOSES ONLY.
PRICES ARE SUBJECT TO CHANGE AS DETERMINED BY FINAL INVOICE.

	ELECTION: McAllen ISD School Board Place 3, 6 & 7	DATE: May 6, 2017		
6.01	**Coding Services for iVotronic**	**Price**	**Quantity**	**Total**
A	Base Charge: Ballot Coding	$150.00	1	$150.00
A	Additional Ballot Style(s)	$25.00	0	$0.00
A	Request Change on Coding Ballot	$10.00	0	$0.00
B	Audio Files Set up Charge English/ Spanish	$300.00	1	$300.00
C	Audio Files (Per Contest/Office)	$10.00	3	$30.00
D	Audio Files (Per Propositions/ Amendments/ Charters/ Instructions)	$10.00	0	$0.00
E	Audio Files (Per Candidate/ Responses)	$10.00	12	$120.00
F	Election Media per Polling Location(s)	$100.00	9	$900.00
G	iVotronic Voting Machine(s)	$150.00	30	$4,500.00
G	ADA iVotronic Voting Machine(s)	$150.00	9	$1,350.00
H	Delivery/ Pick-up Fee (includes Mileage)	$650.00	1	$650.00
			Total iVotronic Coding Charges	**$8,000.00**
6.02	**Electronic Poll Book (VoteSafe)**	**Price**	**Quantity**	**Total**
A	Voter Registration Database Access (Per Day)	$100.00	9	$900.00
B	Check In Kit(s) (includes Bar Code Scanner/ Brother Printer)	$150.00	9	$1,350.00
C	Printer Labels (59,454 per vote)	$0.03	118,908	$3,567.24
D	Username/Password - Per Polling Location	$20.00	9	$180.00
			Total Electronic Poll Book Charges	**$5,997.24**
6.03	**Supplies**	**Price**	**Quantity**	**Total**
	Early Voting Combination Forms	$0.55	1250	$687.50
	Election Day Combination Forms	$0.55	1250	$687.50
	Election Judge Kit for Early Voting	$35.00	3	$105.00
	Election Judge Kit for Election Day	$35.00	6	$210.00
	Polling Location Map(s)	$17.00	9	$153.00
	100 Sample ballots provided. Additional Copies of Sample Ballots @ $0.20 each.	$0.20	500	$100.00
			Total Supplies Charges	**$1,943.00**
6.04	**Mail & Ballot Service**	**Price**	**Quantity**	**Total**
	Mail-in-Ballot Applications	$0.25	900	$225.00
	Paper Ballots for Mail-in-Ballots and Provisionals	$0.40	1950	$780.00
	Mail-in-Ballots Kit(s) per request	$2.00	900	$1,800.00
	Postage Mail-in-Ballots (per request)	$0.61	900	$549.00
	Correspondence Postage	$0.49	6	2.94
			Total Mail & Ballot Service Charges	**$3,356.94**
6.05	**Advertisements/Notices**	**Price**	**Quantity**	**Total**
	The Monitor newspaper	$1,800.00	1	$1,800.00
	Local newspaper		0	$0.00
			Total Advertisement/Notice Charges	**$1,800.00**
6.06	**Polling Location Rental Fees**	**Price**	**Quantity**	**Total**
			0	$0.00
			Total Polling Location Rental Charges	**$0.00**
6.07	**Payroll for Training and Election Poll Workers**	**Price**		**Total**
	Payroll for Early Voting Employees	$16,387.50		$16,387.50
	Payroll for Election Day Employees	$4,866.00		$4,866.00
			Total Payroll Charges	**$21,253.50**
6.08	**Payroll for Ballot Board**	**Price**	**Quantity**	**Total**
	Ballot Board	$250.00	1	$250.00
			Total Ballot Board Charges	**$250.00**
6.09	**Canvass Reports**	**Price**	**Quantity**	**Total**
	Canvass Report (One Certified Copy Included)	$0.00	1	$0.00
			Total Canvass Report Charges	**$0.00**
6.10	**Insurance**	**Hourly rate**	**Workers**	**Hours wrk**	**Total**
	Liability insurance for Early Voting Supervisors	$ 12.00	3	261	$18.79
	(hourly rate X workers X hrs worked X 0.002)				
	Liability insurance for Early Voting Clerks	$ 10.10	15	1305	$395.42
	(hourly rate X workers X hrs worked X 0.002)				
	Liability insurance for Election Day Presiding Judges	$ 12.00	6	90	$12.96
	(hourly rate X workers X hrs worked X 0.002)				
	Liability insurance for Election Day Alternate/Clerks	$ 10.10	24	360	$174.53
	(hourly rate X workers X hrs worked X 0.002)				
				Total Insurance Charges	**$601.70**
6.11	**Cell Phones**		**Price**	**Quantity**	**Total**
	Verizon Wireless phone (subject to change with out notice)		$45.00	1	$45.00
				Total Cell Phone Charges	**$45.00**
6.12				**Subtotal**	**$43,247.38**
				Administrative Fees (10%)	**$4,324.74**
				ESTIMATED GRAND TOTAL	**$47,572.11**

THE STATE OF TEXAS §
§ CONTRACT FOR ELECTION SERVICES
COUNTY OF HIDALGO §

This Contract is entered into by and between the HIDALGO COUNTY ELECTIONS ADMINISTRATOR, Yvonne Ramón, hereinafter referred to as "ADMINISTRATOR", on behalf of Hidalgo County, a political subdivision of the State of Texas, and the **CITY OF SAN JUAN**, hereinafter referred to as the "ENTITY", pursuant to Texas Election Code Section 31.092.

RECITALS

WHEREAS, the ENTITY, by appropriate action of its governing body acting in accordance with all applicable laws, has called an election to be held on **May 06, 2017**.

WHEREAS, pursuant to Section 31.092(a) of the Texas Election Code, the County Election Officer may contract with the governing body of a political subdivision situated wholly or partly in the county served by the officer to perform election services in any one or more elections ordered by an authority of the political subdivision; and

WHEREAS, pursuant to Section 31.091(1) of the Texas Election Code, the County Election Officer means the Elections Administrator for Hidalgo County; and

WHEREAS, the ENTITY is a political subdivision in Hidalgo County that desires the County to conduct and supervise the **May 06, 2017**, election of the ENTITY (the "Election"); and

WHEREAS, the ENTITY and the COUNTY, through the ADMINISTRATOR, desire to enter into a contract setting out the respective responsibilities of the parties; and

WHEREAS, the COUNTY agrees to perform election services for the ENTITY; and

WHEREAS, ADMINISTRATOR has provided costs for election services to be rendered by ADMINISTRATOR'S office pursuant to the terms of this Contract, which costs are set out in Article VI hereof; and

NOW, THEREFORE, the COUNTY, through the ADMINISTRATOR, and the ENTITY for good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, do hereby agree to hold contract, covenant and agree as follows:

ARTICLE I
PURPOSE

1.01. The parties hereto have entered into this Contract for election services described in Article II to be provided to the ENTITY for its election to be held on **May 06, 2017**, and any Runoff, if applicable.

ARTICLE II
SERVICES

2.01. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the following:

(A) Procure, provide, prepare, program and distribute Direct Recording Electronic (DREs) voting systems and necessary election equipment, as well as an ADA voting system, and transport equipment to and from the polling locations, including early voting substations, for the ENTITY;

(B) Prepare and provide Direct Recording Electronic device training for election workers;

(C) Prepare and provide Logic and Accuracy testing on ENTITY's election ballot for every iVotronic voting machine to be utilized by ENTITY during early voting and election day;

(D) Procure, provide, prepare and program Electronic Poll Book(s) per polling location with the Voter Registration Database. To include laptop(s), insurance, and delivery fee, as well as supplies such as, but not limited to labels and printer;

(E) Provide and prepare all mail-in ballot supplies, including applications, paper ballots, envelopes and postage;

(F) Provide training for Judges/Clerks;

(G) Procure, provide, prepare, and distribute all necessary election supplies, including:

1) Ballots (preparation and distribution only);

2) Election kits and election paperwork;

3) Ballot boxes and voting booths

(H) Provide cages and covers, cage kit, to include, but not limited to surge protectors, tape, printer, headphones and scanner as well as supplies such as bags, aprons, clipboards, pens, pencils, rulers, magnifiers, inkpads, screen cloths, sanitizers and badges;

(I) Provide signage to be placed at each polling location that shows Texas Penal Code Section 46.03(a)(2) as it relates to the prohibition of firearms on the premises of a polling place;

(J) Procure early voting polling places and Election Day polling places, as ordered;

(K) Prepare Writ of Election to election officers and notice of appointment to Presiding and Alternate judges, as required by law;

(L) Prepare, distribute, and publicize notice of election (Texas Election Code Section 4.003(a)(1) and early voting and election day schedules in newspaper;

(M)Notify the election judges of the date, time and place of the election;

(N) Procure and pay election judges and clerks for early voting and Election Day voting;

(O) Provide the general overall supervision of the Election and provide the advisory services in connection with the decisions to be made and the actions to be taken by the ENTITY;

(P) Procure and pay Ballot Board members;

(Q) Provide information for election officers;

(R) Provide such incidental related services as may be necessary to conduct the election;

(S) Serve as the Early Voting Clerk;

(T) Establish a Central Counting Station for the purpose of tabulating ballots; and

(U) Tabulate election results in preparation for ENTITY's canvassing.

(V) Preserve locked ballot boxes containing voted ballots securely in a locked room for 60 days as required by Texas Election Code Section 66.058, and in an election involving a federal office, preserve for the remainder of the preservation period for 22 months after Election Day in accordance with federal law.

(W) The ADMINISTRATOR shall be the agent of the ENTITY for the purposes of contracting with third parties with respect to the election expenses within the scope of the County Elections Administrator's duties;

(X) The COUNTY shall file copies of this Contract with the County Treasurer and the County Auditor; and

(Y) In accordance with Section 31.100(b) of the Texas Election Code, only actual expenses directly attributable to this Contract may be paid. The ADMINISTRATOR shall submit the actual costs for items contracted pursuant to the Contract with the ENTITY as soon as all invoices from third party vendors are received;

(Z) If applicable, the COUNTY agrees to provide the election services described herein for a Runoff election.

i. The County may combine polling locations in accordance with section 42.0051 of the Election Code, in order to properly supervise and conduct a Runoff election.

ii. If a Runoff election is required, the ENTITY hereby agrees to the combining of polling locations, in accordance with section 42.0051 of the Election Code.

iii. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the costs for any Runoff election services to be rendered by the ADMINISTRATOR'S office pursuant to the terms of this Contract as soon as practicable, once a Runoff is determined necessary.

iv. In accordance with Section 31.100(b) of the Texas Election Code, only actual expenses directly attributable to this Contract may be paid. The ADMINISTRATOR shall submit the actual costs for items contracted pursuant to the Contract with the ENTITY as soon as all invoices from third party vendors are received regarding the Runoff

2.02 The ENTITY shall be responsible for performing the following:

(A) Payment of all necessary election supplies as required by the COUNTY, including but not limited to ballots, election kits, mail-in ballot supplies, laptop rental, labels and combination forms;

(B) Pay a proportionate share of the cost of judges and election workers for hourly pay submitted by the County Elections Administrator at the rate of $12.00 per hour for Election Judges and $10.10 per hour for Alternate Judges and Early Voting Clerks for both Early Voting and General Election and pay the cost for training of Judges and Clerks at the rate of $7.00 per hour per person.

(C) Reimburse the COUNTY for a proportionate share of the cost for liability insurance coverage for election workers employed for both Early Voting and General Election;

(D) Canvass the Election Results for the ENTITY'S governing body;

(E) Prepare and submit to the Secretary of State the Precinct by Precinct reports;

(F) As stated in Section 31.096 of the Texas Election Code, this Contract may not change:

(1) the authority with whom applications of candidates for a place on a ballot are filed; (2) the authority with whom documents are filed under Title 15; or (3) the authority to serve as custodian of voted ballots or other election records, except that the contract may provide that the County Election Officer will be the custodian of voted ballots. Under this Contract, the Hidalgo County Elections Administrator shall be the custodian of voted ballots.

(G) Reimburse the COUNTY for any and all costs associated with recounts and/or election contests associated with the election;

(H) Confirm and/or correct the boundaries of the political subdivision holding the election on a map provided by the County. Once confirmed and/or corrected, Entity certifies the veracity of the boundaries and geographical area that represents the Entity and the area subject to the election.

(I) If applicable, in consideration for the services provided for a Runoff Election by the COUNTY, the ENTITY agrees to pay ADMINISTRATOR for the costs of services for a Runoff election.

ARTICLE III
SCHEDULE FOR PERFORMANCE OF SERVICES

3.01. Specific services to be provided related to the general services identified in Article II shall be performed in accordance with the time requirements set out in the Texas Election Code.

ARTICLE IV
SERVICES NOT PROVIDED BY COUNTY

4.01. ADMINISTRATOR shall have no responsibility for insuring the passage of the appropriate Election Order by the ENTITY, publishing and (or) posting the Election Order as required by the Texas Election Code section 3.004(3), or Texas Election Code 67.002(2) which is canvassing election results.

ARTICLE V
TERM

5.01. Except as hereinafter set out, the term of this Contract shall be from the time of execution until all items with respect to this Contract and the election held hereunder have been completed.

ARTICLE VI
COST OF SERVICE AND BILLING

In consideration for the services provided hereunder by ADMINISTRATOR, the ENTITY agrees to pay ADMINISTRATOR for the following costs of services:

6.01 iVotronic Voting Machines:

A. One base charge of $150.00 for Programming iVotronic ballot for voting machines, a $25 additional charge per additional ballot styles and a minimum of a $10 charge for Request Changes on Programmed Ballot;

B. Base charge for Audio Setup of $300 for English/Spanish;

C. A $10.00 recording fee for Audio Files for each Contest and/or Office;

D. A $10.00 recording fee for Audio Files for each Proposition/Amendment/Charter/Instructions;

E. A $10.00 recording fee for Audio Files for each Candidate and/or Responses;

F. Cost of creating election media, such as, but not limited to Personal Electronic Ballot cartridges (PEB), compact flash cards, labels, bags, keys, etc.;

G. The amount of $150.00 leasing fee for each iVotronic and $150.00 leasing fee for each ADA iVotronic;

H. Cost of delivery and pick-up of iVotronics for Early Voting and Election Day to include fuel charge and mileage at COUNTY's cost;

I. The above described fees for each machine and programming fee shall be additionally charged for any Runoff Election.

6.02 Electronic Poll Book:

A. Database access at $100.00 per day;

B. To include but not limited to the Early Voting and Election Day Check-In Kits, insurance at $150.00 per location;

C. Printer label fee of $.03 per label (price subject to change);

D. Creation of separate Username and password for each polling location at $20.00 per location;

6.03 Fee for Early Voting and General Election Combination forms, maps and election kits. One-hundred sample ballots at no charge with additional sample ballots at twenty cents per copy; No charge for provisional bags, table tops if necessary, ballot box(es), custom signs and flags;

6.04 Reimbursement of ballot supplies, including applications, paper ballots, correspondence, envelopes and postage at COUNTY's cost;

6.05 Reimbursement fee for publications of all notices and newspaper advertisements,(if applicable)

6.06 Reimbursement rental fees incurred for early voting polling places and election day polling places, as ordered;

6.07 Cost of judges and election workers for time worked to be submitted to the ENTITY by the ADMINISTRATOR. The ENTITY shall reimburse the COUNTY for a proportionate share of the cost of payroll for election workers at $12.00 per hour for Election Judge, $10.10 per hour for Alternate Judge and Clerk(s); includes cost of payroll for training of Election Judge, Alternate Judge and Clerk(s) at $7.00 per hour per person;

6.08 Pay for the proportionate share of the cost of the Ballot Board judge at $12.00 per hour and Ballot Board clerks at $10.10 per hour;

6.09 One copy of canvass report provided to ENTITY at no charge; each additional canvass report requested to be reimbursed by the ENTITY at COUNTY's cost;

6.10 Reimbursement to the COUNTY for a proportionate share of the cost of liability insurance coverage as set by the County for all election workers employed for the elections;

6.11 Reimbursement to the COUNTY for the cost of the use of wireless cell phones at polling locations with the rate set by the wireless vendor at the time of usage which includes an additional per minute fee as charged by the vendor, a service charge of $10.00 per phone line and a vendor base fee of $3.99 per phone line;

6.12 Billing:

A. The form of the invoice to be used in the final billing by the COUNTY, includes a good faith estimate of costs and is attached hereto as Exhibit A.

B. After the election and as soon as practicable, upon receiving final invoice from 3rd party vendors, the ADMINISTRATOR shall prepare and will send to the ENTITY, a final itemized invoice with the actual costs of the Election and will include the 10% Administrative Fee of the actual costs as set forth by Texas Election Code Sec. 31.100 (d).

C. Full payment of the remaining balance, if any, shall be made by the ENTITY within thirty (30) days of receipt of the invoice.

D. Payment shall be made by check payable to the Hidalgo County Elections.

E. Notice. Except as may be otherwise specifically provided in this contract, all notices, demands, requests or communication required or permitted hereunder shall be in writing and shall either be (i)personally delivered against a written receipt, or (ii) sent by registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

Yvonne Ramón
Elections Administrator
Hidalgo County Elections Department
PO Box 659
Edinburg, Texas 78540

Palmira Cepeda
Interim City Secretary
City of San Juan
709 S Nebraska Ave
San Juan, Texas 78589

F. Any balances, if any remain after the payment of all costs of election bills, shall be the property of the ENTITY and returned to it.

ARTICLE VII

7.01 IF ANY OF THE ELECTION EQUIPMENT IS LOST, STOLEN, DESTROYED, OR DAMAGED, THE CITY, SCHOOL DISTRICT OR ENTITY WHO LEASED THE EQUIPMENT IS LIABLE FOR THE DAMAGE AND AGREES TO PAY THE ADMINISTRATOR THE COST OF THE REPLACEMENT OR REPAIR OF THE ELECTION EQUIPMENT SO LOST, STOLEN, DESTROYED OR DAMAGED.

ARTICLE VIII
GENERAL PROVISIONS

8.01. This Contract shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Hidalgo County, Texas.

8.02. In case any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision thereof, and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

8.03. This Contract constitutes the sole and only agreement of the parties hereto and supersedes any prior understanding or written or oral agreement between the parties respecting the written subject matter.

8.04. No amendment, modification, or alteration of the term hereof shall be binding unless the same be in writing, dated subsequent to the date hereof and duly executed by the parties hereto.

SIGNED this 8th day of March, 2017

APPROVAL COUNTY OF HIDALGO:

BY: _____
RAMON GARCIA
COUNTY JUDGE

ATTEST:

BY: _____
ARTURO GUAJARDO, JR.
COUNTY CLERK

ELECTIONS ADMINISTRATOR

BY: _____
YVONNE RAMÓN

APPROVED AS TO LEGAL FORM:

OFFICE OF CRIMINAL DISTRICT ATTORNEY
RICARDO RODRIGUEZ, JR.

BY: _____
JOSEPHINE RAMIREZ SOLIS
Assistant District Attorney

CITY OF SAN JUAN

BY: _____

PRINT: BENJAMIN ARJONA
TITLE: CITY MANAGER

ATTEST

BY: Palmira Cepeda

PRINT: Palmira Cepeda

TITLE: Interim City Secretary

2017 Hidalgo County Elections
Contract Estimate Calculator

EXHIBIT A

PLEASE NOTE THAT THIS TOOL IS FOR ESTIMATION PURPOSES ONLY.
PRICES ARE SUBJECT TO CHANGE AS DETERMINED BY FINAL INVOICE.

ELECTION: City of San Juan
Mayor, Commissioner Pl. 2 & Commissioner Pl. 3

DATE: May 6, 2017

6.01	**Coding Services for iVotronic**		**Price**	**Quantity**	**Total**
A	Base Charge: Ballot Coding		$150.00	1	$150.00
A	Additional Ballot Style(s)		$25.00	0	$0.00
A	Request Change on Coding Ballot		$10.00	0	$0.00
B	Audio Files Set up Charge English/ Spanish		$300.00	1	$300.00
C	Audio Files (Per Contest/Office)		$10.00	3	$30.00
D	Audio Files (Per Propositions/ Amendments/ Charters/ Instructions)		$10.00	0	$0.00
E	Audio Files (Per Candidate/ Responses)		$10.00	12	$120.00
F	Election Media per Polling Location(s)		$100.00	3	$300.00
G	*iVotronic Voting Machine(s)		$150.00	9	$1,350.00
G	*ADA iVotronic Voting Machine(s)		$150.00	3	$450.00
H	Delivery/ Pick-up Fee (includes Mileage)		$650.00	1	$650.00
				Total iVotronic Coding Charges	**$3,350.00**
6.02	**Electronic Poll Book (VoteSafe)**		**Price**	**Quantity**	**Total**
A	*Voter Registration Database Access (Per Day)		$100.00	9	$900.00
B	*Check In Kit(s) (includes Bar Code Scanner/ Brother Printer)		$150.00	3	$450.00
C	Printer Labels (15, 428 per vote)		$0.03	30,856	$925.68
D	Username/Password - Per Polling Location		$20.00	3	$60.00
				Total Electronic Poll Book Charges	**$2,335.68**
6.03	**Supplies**		**Price**	**Quantity**	**Total**
	Early Voting Combination Forms		$0.55	325	$178.75
	*Election Day Combination Forms		$0.55	325	$178.75
	*Election Judge Kit for Early Voting		$35.00	1	$35.00
	Election Judge Kit for Election Day		$35.00	2	$70.00
	Polling Location Map(s)		$17.00	3	$51.00
	100 Sample ballots provided. Additional Copies of Sample Ballots @ $0.20 each.		$0.20	200	$40.00
				Total Supplies Charges	**$553.50**
6.04	**Mail & Ballot Service**		**Price**	**Quantity**	**Total**
	Mail-in-Ballot Applications		$0.25	600	$150.00
	Paper Ballots for Mail-in-Ballots and Provisionals		$0.40	675	$270.00
	Mail-in-Ballots Kit(s) per request		$2.00	600	$1,200.00
	Postage Mail-in-Ballots (per request)		$0.61	600	$366.00
	Correspondence Postage		$0.49	2	0.98
				Total Mail & Ballot Service Charges	**$1,986.98**
6.05	**Advertisements/Notices**		**Price**	**Quantity**	**Total**
	The Monitor newspaper		$1,800.00	1	$1,800.00
	Local newspaper			0	$0.00
				Total Advertisement/Notice Charges	**$1,800.00**
6.06	**Polling Location Rental Fees**		**Price**	**Quantity**	**Total**
				0	$0.00
				Total Polling Location Rental Charges	**$0.00**
6.07	***Payroll for Training and Election Poll Workers**		**Price**		**Total**
	Payroll for Early Voting Employees		$5,462.50		$5,462.50
	Payroll for Election Day Employees		$1,925.00		$1,925.00
				Total Payroll Charges	**$7,387.50**
6.08	**Payroll for Ballot Board**		**Price**	**Quantity**	**Total**
	Ballot Board		$250.00	1	$250.00
				Total Ballot Board Charges	**$250.00**
6.09	**Canvass Reports**		**Price**	**Quantity**	**Total**
	Canvass Report (One Certified Copy Included)		$0.00	1	$0.00
				Total Canvass Report Charges	**$0.00**
6.10	**Insurance**	**Hourly rate**	**Workers**	**Hours wrk**	**Total**
	Liability insurance for Early Voting Supervisors	$ 12.00	1	87	$2.09
	(hourly rate X workers X hrs worked X 0.002)				
	Liability insurance for Early Voting Clerks	$ 10.10	5	435	$43.94
	(hourly rate X workers X hrs worked X 0.002)				
	Liability insurance for Election Day Presiding Judges	$ 12.00	2	30	$1.44
	(hourly rate X workers X hrs worked X 0.002)				
	Liability insurance for Election Day Alternate/Clerks	$ 10.10	10	75	$15.15
	(hourly rate X workers X hrs worked X 0.002)				
				Total Insurance Charges	**$62.61**
6.11	**Cell Phones**		**Price**	**Quantity**	**Total**
	Verizon Wireless phone (subject to change with out notice)		$45.00	2	$90.00
				Total Cell Phone Charges	**$90.00**
6.12				**Subtotal**	**$17,816.27**
				Administrative Fees (10%)	**$1,781.63**
				ESTIMATED GRAND TOTAL	**$19,597.90**

THE STATE OF TEXAS §
§ CONTRACT FOR ELECTION SERVICES
COUNTY OF HIDALGO §

This Contract is entered into by and between the HIDALGO COUNTY ELECTIONS ADMINISTRATOR, Yvonne Ramón, hereinafter referred to as "ADMINISTRATOR", on behalf of Hidalgo County, a political subdivision of the State of Texas, and the **CITY OF PHARR**, hereinafter referred to as the "ENTITY", pursuant to Texas Election Code Section 31.092.

RECITALS

WHEREAS, the ENTITY, by appropriate action of its governing body acting in accordance with all applicable laws, has called an election to be held on **May 06, 2017**.

WHEREAS, pursuant to Section 31.092(a) of the Texas Election Code, the County Election Officer may contract with the governing body of a political subdivision situated wholly or partly in the county served by the officer to perform election services in any one or more elections ordered by an authority of the political subdivision; and

WHEREAS, pursuant to Section 31.091(1) of the Texas Election Code, the County Election Officer means the Elections Administrator for Hidalgo County; and

WHEREAS, the ENTITY is a political subdivision in Hidalgo County that desires the County to conduct and supervise the **May 06, 2017**, election of the ENTITY (the "Election"); and

WHEREAS, the ENTITY and the COUNTY, through the ADMINISTRATOR, desire to enter into a contract setting out the respective responsibilities of the parties; and

WHEREAS, the COUNTY agrees to perform election services for the ENTITY; and

WHEREAS, ADMINISTRATOR has provided costs for election services to be rendered by ADMINISTRATOR'S office pursuant to the terms of this Contract, which costs are set out in Article VI hereof; and

NOW, THEREFORE, the COUNTY, through the ADMINISTRATOR, and the ENTITY for good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, do hereby agree to hold contract, covenant and agree as follows:

ARTICLE I
PURPOSE

1.01. The parties hereto have entered into this Contract for election services described in Article II to be provided to the ENTITY for its election to be held on **May 06, 2017**, and any Runoff, if applicable.

ARTICLE II
SERVICES

2.01. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the following:

(A) Procure, provide, prepare, program and distribute Direct Recording Electronic (DREs) voting systems and necessary election equipment, as well as an ADA voting system, and transport equipment to and from the polling locations, including early voting substations, for the ENTITY;

(B) Prepare and provide Direct Recording Electronic device training for election workers;

(C) Prepare and provide Logic and Accuracy testing on ENTITY's election ballot for every iVotronic voting machine to be utilized by ENTITY during early voting and election day;

(D) Procure, provide, prepare and program Electronic Poll Book(s) per polling location with the Voter Registration Database. To include laptop(s), insurance, and delivery fee, as well as supplies such as, but not limited to labels and printer;

(E) Provide and prepare all mail-in ballot supplies, including applications, paper ballots, envelopes and postage;

(F) Provide training for Judges/Clerks;

(G) Procure, provide, prepare, and distribute all necessary election supplies, including:

1) Ballots (preparation and distribution only);

2) Election kits and election paperwork;

3) Ballot boxes and voting booths

(H) Provide cages and covers, cage kit, to include, but not limited to surge protectors, tape, printer, headphones and scanner as well as supplies such as bags, aprons, clipboards, pens, pencils, rulers, magnifiers, inkpads, screen cloths, sanitizers and badges;

(I) Provide signage to be placed at each polling location that shows Texas Penal Code Section 46.03(a)(2) as it relates to the prohibition of firearms on the premises of a polling place;

(J) Procure early voting polling places and Election Day polling places, as ordered;

(K) Prepare Writ of Election to election officers and notice of appointment to Presiding and Alternate judges, as required by law;

(L) Prepare, distribute, and publicize notice of election (Texas Election Code Section 4.003(a)(1) and early voting and election day schedules in newspaper;

(M)Notify the election judges of the date, time and place of the election;

(N) Procure and pay election judges and clerks for early voting and Election Day voting;

(O) Provide the general overall supervision of the Election and provide the advisory services in connection with the decisions to be made and the actions to be taken by the ENTITY;

(P) Procure and pay Ballot Board members;

(Q) Provide information for election officers;

(R) Provide such incidental related services as may be necessary to conduct the election;

(S) Serve as the Early Voting Clerk;

(T) Establish a Central Counting Station for the purpose of tabulating ballots; and

(U) Tabulate election results in preparation for ENTITY's canvassing.

(V) Preserve locked ballot boxes containing voted ballots securely in a locked room for 60 days as required by Texas Election Code Section 66.058, and in an election involving a federal office, preserve for the remainder of the preservation period for 22 months after Election Day in accordance with federal law.

(W) The ADMINISTRATOR shall be the agent of the ENTITY for the purposes of contracting with third parties with respect to the election expenses within the scope of the County Elections Administrator's duties;

(X) The COUNTY shall file copies of this Contract with the County Treasurer and the County Auditor; and

(Y) In accordance with Section 31.100(b) of the Texas Election Code, only actual expenses directly attributable to this Contract may be paid. The ADMINISTRATOR shall submit the actual costs for items contracted pursuant to the Contract with the ENTITY as soon as all invoices from third party vendors are received;

(Z) If applicable, the COUNTY agrees to provide the election services described herein for a Runoff election.

i. The County may combine polling locations in accordance with section 42.0051 of the Election Code, in order to properly supervise and conduct a Runoff election.

ii. If a Runoff election is required, the ENTITY hereby agrees to the combining of polling locations, in accordance with section 42.0051 of the Election Code.

iii. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the costs for any Runoff election services to be rendered by the ADMINISTRATOR'S office pursuant to the terms of this Contract as soon as practicable, once a Runoff is determined necessary.

iv. In accordance with Section 31.100(b) of the Texas Election Code, only actual expenses directly attributable to this Contract may be paid. The ADMINISTRATOR shall submit the actual costs for items contracted pursuant to the Contract with the ENTITY as soon as all invoices from third party vendors are received regarding the Runoff

2.02 The ENTITY shall be responsible for performing the following:

(A) Payment of all necessary election supplies as required by the COUNTY, including but not limited to ballots, election kits, mail-in ballot supplies, laptop rental, labels and combination forms;

(B) Pay a proportionate share of the cost of judges and election workers for hourly pay submitted by the County Elections Administrator at the rate of $12.00 per hour for Election Judges and $10.10 per hour for Alternate Judges and Early Voting Clerks for both Early Voting and General Election and pay the cost for training of Judges and Clerks at the rate of $7.00 per hour per person.

(C) Reimburse the COUNTY for a proportionate share of the cost for liability insurance coverage for election workers employed for both Early Voting and General Election;

(D) Canvass the Election Results for the ENTITY'S governing body;

(E) Prepare and submit to the Secretary of State the Precinct by Precinct reports;

(F) As stated in Section 31.096 of the Texas Election Code, this Contract may not change:

(1) the authority with whom applications of candidates for a place on a ballot are filed; (2) the authority with whom documents are filed under Title 15; or (3) the authority to serve as custodian of voted ballots or other election records, except that the contract may provide that the County Election Officer will be the custodian of voted ballots. Under this Contract, the Hidalgo County Elections Administrator shall be the custodian of voted ballots.

(G) Reimburse the COUNTY for any and all costs associated with recounts and/or election contests associated with the election;

(H) Confirm and/or correct the boundaries of the political subdivision holding the election on a map provided by the County. Once confirmed and/or corrected, Entity certifies the veracity of the boundaries and geographical area that represents the Entity and the area subject to the election.

(I) If applicable, in consideration for the services provided for a Runoff Election by the COUNTY, the ENTITY agrees to pay ADMINISTRATOR for the costs of services for a Runoff election.

ARTICLE III
SCHEDULE FOR PERFORMANCE OF SERVICES

3.01. Specific services to be provided related to the general services identified in Article II shall be performed in accordance with the time requirements set out in the Texas Election Code.

ARTICLE IV
SERVICES NOT PROVIDED BY COUNTY

4.01. ADMINISTRATOR shall have no responsibility for insuring the passage of the appropriate Election Order by the ENTITY, publishing and (or) posting the Election Order as required by the Texas Election Code section 3.004(3), or Texas Election Code 67.002(2) which is canvassing election results.

ARTICLE V
TERM

5.01. Except as hereinafter set out, the term of this Contract shall be from the time of execution until all items with respect to this Contract and the election held hereunder have been completed.

ARTICLE VI
COST OF SERVICE AND BILLING

In consideration for the services provided hereunder by ADMINISTRATOR, the ENTITY agrees to pay ADMINISTRATOR for the following costs of services:

6.01 iVotronic Voting Machines:

A. One base charge of $150.00 for Programming iVotronic ballot for voting machines, a $25 additional charge per additional ballot styles and a minimum of a $10 charge for Request Changes on Programmed Ballot;

B. Base charge for Audio Setup of $300 for English/Spanish;

C. A $10.00 recording fee for Audio Files for each Contest and/or Office;

D. A $10.00 recording fee for Audio Files for each Proposition/Amendment/Charter/Instructions;

E. A $10.00 recording fee for Audio Files for each Candidate and/or Responses;

F. Cost of creating election media, such as, but not limited to Personal Electronic Ballot cartridges (PEB), compact flash cards, labels, bags, keys, etc.;

G. The amount of $150.00 leasing fee for each iVotronic and $150.00 leasing fee for each ADA iVotronic;

H. Cost of delivery and pick-up of iVotronics for Early Voting and Election Day to include fuel charge and mileage at COUNTY's cost;

I. The above described fees for each machine and programming fee shall be additionally charged for any Runoff Election.

6.02 Electronic Poll Book:

A. Database access at $100.00 per day;

B. To include but not limited to the Early Voting and Election Day Check-In Kits, insurance at $150.00 per location;

C. Printer label fee of $.03 per label (price subject to change);

D. Creation of separate Username and password for each polling location at $20.00 per location;

6.03 Fee for Early Voting and General Election Combination forms, maps and election kits. One-hundred sample ballots at no charge with additional sample ballots at twenty cents per copy; No charge for provisional bags, table tops if necessary, ballot box(es), custom signs and flags;

6.04 Reimbursement of ballot supplies, including applications, paper ballots, correspondence, envelopes and postage at COUNTY's cost;

6.05 Reimbursement fee for publications of all notices and newspaper advertisements,(if applicable)

6.06 Reimbursement rental fees incurred for early voting polling places and election day polling places, as ordered;

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6.08 Pay for the proportionate share of the cost of the Ballot Board judge at $12.00 per hour and Ballot Board clerks at $10.10 per hour;

6.09 One copy of canvass report provided to ENTITY at no charge; each additional canvass report requested to be reimbursed by the ENTITY at COUNTY's cost;

6.10 Reimbursement to the COUNTY for a proportionate share of the cost of liability insurance coverage as set by the County for all election workers employed for the elections;

6.11 Reimbursement to the COUNTY for the cost of the use of wireless cell phones at polling locations with the rate set by the wireless vendor at the time of usage which includes an additional per minute fee as charged by the vendor, a service charge of $10.00 per phone line and a vendor base fee of $3.99 per phone line;

6.12 Billing:

A. The form of the invoice to be used in the final billing by the COUNTY, includes a good faith estimate of costs and is attached hereto as Exhibit A.

B. After the election and as soon as practicable, upon receiving final invoice from 3rd party vendors, the ADMINISTRATOR shall prepare and will send to the ENTITY, a final itemized invoice with the actual costs of the Election and will include the 10% Administrative Fee of the actual costs as set forth by Texas Election Code Sec. 31.100 (d).

C. Full payment of the remaining balance, if any, shall be made by the ENTITY within thirty (30) days of receipt of the invoice.

D. Payment shall be made by check payable to the Hidalgo County Elections.

E. Notice. Except as may be otherwise specifically provided in this contract, all notices, demands, requests or communication required or permitted hereunder shall be in writing and shall either be (i)personally delivered against a written receipt, or (ii) sent by registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

Yvonne Ramón
Elections Administrator
Hidalgo County Elections Department
PO Box 659
Edinburg, Texas 78540

Hilda Pedraza
City Secretary
City of Pharr
PO Box 1729
Pharr, Texas 78577

F. Any balances, if any remain after the payment of all costs of election bills, shall be the property of the ENTITY and returned to it.

ARTICLE VII

7.01 IF ANY OF THE ELECTION EQUIPMENT IS LOST, STOLEN, DESTROYED, OR DAMAGED, THE CITY, SCHOOL DISTRICT OR ENTITY WHO LEASED THE EQUIPMENT IS LIABLE FOR THE DAMAGE AND AGREES TO PAY THE ADMINISTRATOR THE COST OF THE REPLACEMENT OR REPAIR OF THE ELECTION EQUIPMENT SO LOST, STOLEN, DESTROYED OR DAMAGED.

ARTICLE VIII
GENERAL PROVISIONS

8.01. This Contract shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Hidalgo County, Texas.

8.02. In case any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision thereof, and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

8.03. This Contract constitutes the sole and only agreement of the parties hereto and supersedes any prior understanding or written or oral agreement between the parties respecting the written subject matter.

8.04. No amendment, modification, or alteration of the term hereof shall be binding unless the same be in

writing, dated subsequent to the date hereof and duly executed by the parties hereto.

SIGNED this _____ day of _____, 2017

APPROVAL COUNTY OF HIDALGO:

BY: _____
RAMON GARCIA
COUNTY JUDGE

ATTEST:

BY: _____
ARTURO GUAJARDO, JR.
COUNTY CLERK

ELECTIONS ADMINISTRATOR

BY: _____
YVONNE RAMÓN

APPROVED AS TO LEGAL FORM:

OFFICE OF CRIMINAL DISTRICT ATTORNEY
RICARDO RODRIGUEZ, JR.

BY: _____
JOSEPHINE RAMIREZ SOLIS
Assistant District Attorney

CITY OF PHARR

BY: _____

PRINT: AMBROSIO "AMOS" HERNANDEZ

TITLE: MAYOR

ATTEST

BY: _____

PRINT: HILDA PEDRAZA

TITLE: CITY CLERK

APPROVED BY
CITY COMMISSION
ON: 03-06-17

CITY OF PHARR
CONTRACT
NO C1617-01-510-0026

2017 Hidalgo County Elections
Contract Estimate Calculator

EXHIBIT A

PLEASE NOTE THAT THIS TOOL IS FOR ESTIMATION PURPOSES ONLY.
PRICES ARE SUBJECT TO CHANGE AS DETERMINED BY FINAL INVOICE.

	ELECTION: City of Pharr Commissioner Place 2, 3 & 4	DATE: May 6, 2017		
6.01	**Coding Services for iVotronic**	**Price**	**Quantity**	**Total**
A	Base Charge: Ballot Coding	**$150.00**	1	$150.00
A	Additional Ballot Style(s)	**$25.00**	0	$0.00
A	Request Change on Coding Ballot	**$10.00**	0	$0.00
B	Audio Files Set up Charge English/ Spanish	**$300.00**	1	$300.00
C	Audio Files (Per Contest/Office)	**$10.00**	3	$30.00
D	Audio Files (Per Propositions/ Amendments/ Charters/ Instructions)	**$10.00**	0	$0.00
E	Audio Files (Per Candidate/ Responses)	**$10.00**	12	$120.00
F	Election Media per Polling Location(s)	**$100.00**	7	$700.00
G	*iVotronic Voting Machine(s)	**$150.00**	16	$2,400.00
G	*ADA iVotronic Voting Machine(s)	**$150.00**	7	$1,050.00
H	Delivery/ Pick-up Fee (includes Mileage)	**$650.00**	1	$650.00
			Total iVotronic Coding Charges	**$5,400.00**
6.02	**Electronic Poll Book (VoteSafe)**	**Price**	**Quantity**	**Total**
A	*Voter Registration Database Access (Per Day)	**$100.00**	9	$900.00
B	*Check In Kit(s) (includes Bar Code Scanner/ Brother Printer)	**$150.00**	7	$1,050.00
C	Printer Labels (30, 360 per vote)	**$0.03**	60,720	$1,821.60
D	Username/Password - Per Polling Location	**$20.00**	7	$140.00
			Total Electronic Poll Book Charges	**$3,911.60**
6.03	**Supplies**	**Price**	**Quantity**	**Total**
	Early Voting Combination Forms	**$0.55**	640	$352.00
	*Election Day Combination Forms	**$0.55**	640	$352.00
	*Election Judge Kit for Early Voting	**$35.00**	2	$70.00
	Election Judge Kit for Election Day	**$35.00**	5	$175.00
	Polling Location Map(s)	**$17.00**	7	$119.00
	100 Sample ballots provided. Additional Copies of Sample Ballots @ $0.20 each.	**$0.20**	500	$100.00
			Total Supplies Charges	**$1,168.00**
6.04	**Mail & Ballot Service**	**Price**	**Quantity**	**Total**
	Mail-in-Ballot Applications	**$0.25**	600	$150.00
	Paper Ballots for Mail-in-Ballots and Provisionals	**$0.40**	750	$300.00
	Mail-in-Ballots Kit(s) per request	**$2.00**	600	$1,200.00
	Postage Mail-in-Ballots (per request)	**$0.61**	600	$366.00
	Correspondence Postage	**$0.49**	5	2.45
			Total Mail & Ballot Service Charges	**$2,018.45**
6.05	**Advertisements/Notices**	**Price**	**Quantity**	**Total**
	The Monitor newspaper	**$1,800.00**	1	$1,800.00
	Local newspaper		0	$0.00
			Total Advertisement/Notice Charges	**$1,800.00**
6.06	**Polling Location Rental Fees**	**Price**	**Quantity**	**Total**
			0	$0.00
			Total Polling Location Rental Charges	**$0.00**
6.07	***Payroll for Training and Election Poll Workers**	**Price**		**Total**
	Payroll for Early Voting Employees		**$10,925.00**	$10,925.00
	Payroll for Election Day Employees		**$4,812.50**	$4,812.50
			Total Payroll Charges	**$15,737.50**
6.08	**Payroll for Ballot Board**	**Price**	**Quantity**	**Total**
	Ballot Board	**$250.00**	1	$250.00
			Total Ballot Board Charges	**$250.00**
6.09	**Canvass Reports**	**Price**	**Quantity**	**Total**
	Canvass Report (One Certified Copy Included)	**$0.00**	1	$0.00
			Total Canvass Report Charges	**$0.00**
6.10	**Insurance**	**Hourly rate**	**Workers**	**Hours wrk**	**Total**
	Liability insurance for Early Voting Supervisors	**$ 12.00**	2	174	$8.35
	(hourly rate X workers X hrs worked X 0.002)				
	Liability insurance for Early Voting Clerks	**$ 10.10**	10	870	$175.74
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	Liability insurance for Election Day Alternate/Clerks	**$ 10.10**	25	375	$189.38
	(hourly rate X workers X hrs worked X 0.002)				
				Total Insurance Charges	**$382.47**
6.11	**Cell Phones**	**Price**	**Quantity**	**Total**
	Verizon Wireless phone (subject to change with out notice)	**$45.00**	5	$225.00
			Total Cell Phone Charges	**$225.00**
6.12			**Subtotal**	**$30,893.02**
			Administrative Fees (10%)	**$3,089.30**
			ESTIMATED GRAND TOTAL	**$33,982.32**

THE STATE OF TEXAS §
§ CONTRACT FOR ELECTION SERVICES
COUNTY OF HIDALGO §

This Contract is entered into by and between the HIDALGO COUNTY ELECTIONS ADMINISTRATOR, Yvonne Ramón, hereinafter referred to as "ADMINISTRATOR", on behalf of Hidalgo County, a political subdivision of the State of Texas, and the **CITY OF PHARR**, hereinafter referred to as the "ENTITY", pursuant to Texas Election Code Section 31.092.

RECITALS

WHEREAS, the ENTITY, by appropriate action of its governing body acting in accordance with all applicable laws, has called an election to be held on **May 06, 2017**.

WHEREAS, pursuant to Section 31.092(a) of the Texas Election Code, the County Election Officer may contract with the governing body of a political subdivision situated wholly or partly in the county served by the officer to perform election services in any one or more elections ordered by an authority of the political subdivision; and

WHEREAS, pursuant to Section 31.091(1) of the Texas Election Code, the County Election Officer means the Elections Administrator for Hidalgo County; and

WHEREAS, the ENTITY is a political subdivision in Hidalgo County that desires the County to conduct and supervise the **May 06, 2017**, election of the ENTITY (the "Election"); and

WHEREAS, the ENTITY and the COUNTY, through the ADMINISTRATOR, desire to enter into a contract setting out the respective responsibilities of the parties; and

WHEREAS, the COUNTY agrees to perform election services for the ENTITY; and

WHEREAS, ADMINISTRATOR has provided costs for election services to be rendered by ADMINISTRATOR'S office pursuant to the terms of this Contract, which costs are set out in Article VI hereof; and

NOW, THEREFORE, the COUNTY, through the ADMINISTRATOR, and the ENTITY for good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, do hereby agree to hold contract, covenant and agree as follows:

ARTICLE I
PURPOSE

1.01. The parties hereto have entered into this Contract for election services described in Article II to be provided to the ENTITY for its election to be held on **May 06, 2017**, and any Runoff, if applicable.

ARTICLE II
SERVICES

2.01. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the following:

(A) Procure, provide, prepare, program and distribute Direct Recording Electronic (DREs) voting systems and necessary election equipment, as well as an ADA voting system, and transport equipment to and from the polling locations, including early voting substations, for the ENTITY;

(B) Prepare and provide Direct Recording Electronic device training for election workers;

(C) Prepare and provide Logic and Accuracy testing on ENTITY's election ballot for every iVotronic voting machine to be utilized by ENTITY during early voting and election day;

(D) Procure, provide, prepare and program Electronic Poll Book(s) per polling location with the Voter Registration Database. To include laptop(s), insurance, and delivery fee, as well as supplies such as, but not limited to labels and printer;

(E) Provide and prepare all mail-in ballot supplies, including applications, paper ballots, envelopes and postage;

(F) Provide training for Judges/Clerks;

(G) Procure, provide, prepare, and distribute all necessary election supplies, including:

1) Ballots (preparation and distribution only);

2) Election kits and election paperwork;

3) Ballot boxes and voting booths

(H) Provide cages and covers, cage kit, to include, but not limited to surge protectors, tape, printer, headphones and scanner as well as supplies such as bags, aprons, clipboards, pens, pencils, rulers, magnifiers, inkpads, screen cloths, sanitizers and badges;

(I) Provide signage to be placed at each polling location that shows Texas Penal Code Section 46.03(a)(2) as it relates to the prohibition of firearms on the premises of a polling place;

(J) Procure early voting polling places and Election Day polling places, as ordered;

(K) Prepare Writ of Election to election officers and notice of appointment to Presiding and Alternate judges, as required by law;

(L) Prepare, distribute, and publicize notice of election (Texas Election Code Section 4.003(a)(1) and early voting and election day schedules in newspaper;

(M)Notify the election judges of the date, time and place of the election;

(N) Procure and pay election judges and clerks for early voting and Election Day voting;

(O) Provide the general overall supervision of the Election and provide the advisory services in connection with the decisions to be made and the actions to be taken by the ENTITY;

(P) Procure and pay Ballot Board members;

(Q) Provide information for election officers;

(R) Provide such incidental related services as may be necessary to conduct the election;

(S) Serve as the Early Voting Clerk;

(T) Establish a Central Counting Station for the purpose of tabulating ballots; and

(U) Tabulate election results in preparation for ENTITY's canvassing.

(V) Preserve locked ballot boxes containing voted ballots securely in a locked room for 60 days as required by Texas Election Code Section 66.058, and in an election involving a federal office, preserve for the remainder of the preservation period for 22 months after Election Day in accordance with federal law.

(W) The ADMINISTRATOR shall be the agent of the ENTITY for the purposes of contracting with third parties with respect to the election expenses within the scope of the County Elections Administrator's duties;

(X) The COUNTY shall file copies of this Contract with the County Treasurer and the County Auditor; and

(Y) In accordance with Section 31.100(b) of the Texas Election Code, only actual expenses directly attributable to this Contract may be paid. The ADMINISTRATOR shall submit the actual costs for items contracted pursuant to the Contract with the ENTITY as soon as all invoices from third party vendors are received;

(Z) If applicable, the COUNTY agrees to provide the election services described herein for a Runoff election.

i. The County may combine polling locations in accordance with section 42.0051 of the Election Code, in order to properly supervise and conduct a Runoff election.

ii. If a Runoff election is required, the ENTITY hereby agrees to the combining of polling locations, in accordance with section 42.0051 of the Election Code.

iii. The COUNTY, through the ADMINISTRATOR, agrees to provide to the ENTITY the costs for any Runoff election services to be rendered by the ADMINISTRATOR'S office pursuant to the terms of this Contract as soon as practicable, once a Runoff is determined necessary.

iv. In accordance with Section 31.100(b) of the Texas Election Code, only actual expenses directly attributable to this Contract may be paid. The ADMINISTRATOR shall submit the actual costs for items contracted pursuant to the Contract with the ENTITY as soon as all invoices from third party vendors are received regarding the Runoff

2.02 The ENTITY shall be responsible for performing the following:

(A) Payment of all necessary election supplies as required by the COUNTY, including but not limited to ballots, election kits, mail-in ballot supplies, laptop rental, labels and combination forms;

(B) Pay a proportionate share of the cost of judges and election workers for hourly pay submitted by the County Elections Administrator at the rate of $12.00 per hour for Election Judges and $10.10 per hour for Alternate Judges and Early Voting Clerks for both Early Voting and General Election and pay the cost for training of Judges and Clerks at the rate of $7.00 per hour per person.

(C) Reimburse the COUNTY for a proportionate share of the cost for liability insurance coverage for election workers employed for both Early Voting and General Election;

(D) Canvass the Election Results for the ENTITY'S governing body;

(E) Prepare and submit to the Secretary of State the Precinct by Precinct reports;

(F) As stated in Section 31.096 of the Texas Election Code, this Contract may not change:

(1) the authority with whom applications of candidates for a place on a ballot are filed; (2) the authority with whom documents are filed under Title 15; or (3) the authority to serve as custodian of voted ballots or other election records, except that the contract may provide that the County Election Officer will be the custodian of voted ballots. Under this Contract, the Hidalgo County Elections Administrator shall be the custodian of voted ballots.

(G) Reimburse the COUNTY for any and all costs associated with recounts and/or election contests associated with the election;

(H) Confirm and/or correct the boundaries of the political subdivision holding the election on a map provided by the County. Once confirmed and/or corrected, Entity certifies the veracity of the boundaries and geographical area that represents the Entity and the area subject to the election.

(I) If applicable, in consideration for the services provided for a Runoff Election by the COUNTY, the ENTITY agrees to pay ADMINISTRATOR for the costs of services for a Runoff election.

ARTICLE III
SCHEDULE FOR PERFORMANCE OF SERVICES

3.01. Specific services to be provided related to the general services identified in Article II shall be performed in accordance with the time requirements set out in the Texas Election Code.

ARTICLE IV
SERVICES NOT PROVIDED BY COUNTY

4.01. ADMINISTRATOR shall have no responsibility for insuring the passage of the appropriate Election Order by the ENTITY, publishing and (or) posting the Election Order as required by the Texas Election Code section 3.004(3), or Texas Election Code 67.002(2) which is canvassing election results.

ARTICLE V
TERM

5.01. Except as hereinafter set out, the term of this Contract shall be from the time of execution until all items with respect to this Contract and the election held hereunder have been completed.

ARTICLE VI
COST OF SERVICE AND BILLING

In consideration for the services provided hereunder by ADMINISTRATOR, the ENTITY agrees to pay ADMINISTRATOR for the following costs of services:

6.01 iVotronic Voting Machines:

A. One base charge of $150.00 for Programming iVotronic ballot for voting machines, a $25 additional charge per additional ballot styles and a minimum of a $10 charge for Request Changes on Programmed Ballot;

B. Base charge for Audio Setup of $300 for English/Spanish;

C. A $10.00 recording fee for Audio Files for each Contest and/or Office;

D. A $10.00 recording fee for Audio Files for each Proposition/Amendment/Charter/Instructions;

E. A $10.00 recording fee for Audio Files for each Candidate and/or Responses;

F. Cost of creating election media, such as, but not limited to Personal Electronic Ballot cartridges (PEB), compact flash cards, labels, bags, keys, etc.;

G. The amount of $150.00 leasing fee for each iVotronic and $150.00 leasing fee for each ADA iVotronic;

H. Cost of delivery and pick-up of iVotronics for Early Voting and Election Day to include fuel charge and mileage at COUNTY's cost;

I. The above described fees for each machine and programming fee shall be additionally charged for any Runoff Election.

6.02 Electronic Poll Book:

A. Database access at $100.00 per day;

B. To include but not limited to the Early Voting and Election Day Check-In Kits, insurance at $150.00 per location;

C. Printer label fee of $.03 per label (price subject to change);

D. Creation of separate Username and password for each polling location at $20.00 per location;

6.03 Fee for Early Voting and General Election Combination forms, maps and election kits. One-hundred sample ballots at no charge with additional sample ballots at twenty cents per copy; No charge for provisional bags, table tops if necessary, ballot box(es), custom signs and flags;

6.04 Reimbursement of ballot supplies, including applications, paper ballots, correspondence, envelopes and postage at COUNTY's cost;

6.05 Reimbursement fee for publications of all notices and newspaper advertisements,(if applicable)

6.06 Reimbursement rental fees incurred for early voting polling places and election day polling places, as ordered;

6.07 Cost of judges and election workers for time worked to be submitted to the ENTITY by the ADMINISTRATOR. The ENTITY shall reimburse the COUNTY for a proportionate share of the cost of payroll for election workers at $12.00 per hour for Election Judge, $10.10 per hour for Alternate Judge and Clerk(s); includes cost of payroll for training of Election Judge, Alternate Judge and Clerk(s) at $7.00 per hour per person;

6.08 Pay for the proportionate share of the cost of the Ballot Board judge at $12.00 per hour and Ballot Board clerks at $10.10 per hour;

6.09 One copy of canvass report provided to ENTITY at no charge; each additional canvass report requested to be reimbursed by the ENTITY at COUNTY's cost;

6.10 Reimbursement to the COUNTY for a proportionate share of the cost of liability insurance coverage as set by the County for all election workers employed for the elections;

6.11 Reimbursement to the COUNTY for the cost of the use of wireless cell phones at polling locations with the rate set by the wireless vendor at the time of usage which includes an additional per minute fee as charged by the vendor, a service charge of $10.00 per phone line and a vendor base fee of $3.99 per phone line;

6.12 Billing:

A. The form of the invoice to be used in the final billing by the COUNTY, includes a good faith estimate of costs and is attached hereto as Exhibit A.

B. After the election and as soon as practicable, upon receiving final invoice from 3rd party vendors, the ADMINISTRATOR shall prepare and will send to the ENTITY, a final itemized invoice with the actual costs of the Election and will include the 10% Administrative Fee of the actual costs as set forth by Texas Election Code Sec. 31.100 (d).

C. Full payment of the remaining balance, if any, shall be made by the ENTITY within thirty (30) days of receipt of the invoice.

D. Payment shall be made by check payable to the Hidalgo County Elections.

E. Notice. Except as may be otherwise specifically provided in this contract, all notices, demands, requests or communication required or permitted hereunder shall be in writing and shall either be (i)personally delivered against a written receipt, or (ii) sent by registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

Yvonne Ramón
Elections Administrator
Hidalgo County Elections Department
PO Box 659
Edinburg, Texas 78540

Hilda Pedraza
City Secretary
City of Pharr
PO Box 1729
Pharr, Texas 78577

F. Any balances, if any remain after the payment of all costs of election bills, shall be the property of the ENTITY and returned to it.

ARTICLE VII

7.01 IF ANY OF THE ELECTION EQUIPMENT IS LOST, STOLEN, DESTROYED, OR DAMAGED, THE CITY, SCHOOL DISTRICT OR ENTITY WHO LEASED THE EQUIPMENT IS LIABLE FOR THE DAMAGE AND AGREES TO PAY THE ADMINISTRATOR THE COST OF THE REPLACEMENT OR REPAIR OF THE ELECTION EQUIPMENT SO LOST, STOLEN, DESTROYED OR DAMAGED.

ARTICLE VIII
GENERAL PROVISIONS

8.01. This Contract shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Hidalgo County, Texas.

8.02. In case any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision thereof, and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

8.03. This Contract constitutes the sole and only agreement of the parties hereto and supersedes any prior understanding or written or oral agreement between the parties respecting the written subject matter.

8.04. No amendment, modification, or alteration of the term hereof shall be binding unless the same be in

writing, dated subsequent to the date hereof and duly executed by the parties hereto.

SIGNED this _____ day of _____, 2017

APPROVAL COUNTY OF HIDALGO:

BY: _____
RAMON GARCIA
COUNTY JUDGE

ATTEST:

BY: _____
ARTURO GUAJARDO, JR.
COUNTY CLERK

ELECTIONS ADMINISTRATOR

BY: _____
YVONNE RAMÓN

APPROVED AS TO LEGAL FORM:

OFFICE OF CRIMINAL DISTRICT ATTORNEY
RICARDO RODRIGUEZ, JR.

BY: _____
JOSEPHINE RAMIREZ SOLIS
Assistant District Attorney

CITY OF PHARR

BY: _____

PRINT: AMBROSIO "AMOS" HERNANDEZ

TITLE: MAYOR

ATTEST

BY: _____

PRINT: HILDA PEDRAZA

TITLE: CITY CLERK

APPROVED BY
CITY COMMISSION
ON: 03-06-17

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AI-58921 **Texas Agri-Life Extension Serv.** **19. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Nora Linda Cruz, TX. AGRILIFE EXT. SERVICES

Submitted By: Nora Linda Cruz, TX. AGRILIFE EXT. SERVICES

Department: TX. AGRILIFE EXT. SERVICES

Information

CAPTION

Presentation of 2016 Making A Difference Annual Report by Andrea Valdez, County Extension Agent-Family & Consumer Sciences/County Coordinator

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** XXX

FUNDS AVAILABLE Y/N?: XXX **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

No Budgetary Impact

Attachments

MAD Report

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/10/2017 02:58 PM
Linda Flores	Linda Flores	03/13/2017 08:12 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

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TEXAS A&M AGRILIFE EXTENSION

PRAIRIE VIEW A&M UNIVERSITY
COLLEGE OF AGRICULTURE AND HUMAN SCIENCES
Cooperative Extension Program



Extension Education in Hidalgo County

Making a Difference

2016

The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife.

EXTENDING KNOWLEDGE
Providing Solutions

The Texas A&M AgriLife Extension Service and its partners have long been dedicated to educating Texans. Extension education evolved nationwide under the 1914 federal Smith-Lever Act, which sought to extend university knowledge and agricultural research findings directly to the people. Ever since, Extension programs have addressed the emerging issues of the day, reaching diverse rural and urban populations.

In Texas, all 254 counties are served by a well-organized network of professional Extension educators and some 100,000 trained volunteers. Extension expertise and educational outreach pertain to the food and fiber industry, natural resources, family and consumer sciences, nutrition and health, and community economic development. Among those served are hundreds of thousands of young people who benefit annually from Extension's 4-H and youth development programs.

Texans turn to Extension education for solutions. Extension agents and specialists respond not only with answers, but also with resources and services that result in significant returns on the public's investment. Extension programs are custom-designed for each region of the state, with residents providing input and help with program delivery. Here are just a few highlights of Extension impacts on this county and its people.

Hidalgo County – Summary of 2016 Educational Contacts

Total Contacts: 277, 264
Total Educational Events: 93,504
Total Contact Hours at Educational Events: 165,144
4-H Clubs: 25
4-H Member Enrollment: 647
4-H Adult Leaders: 107
Master Volunteers: 171
Total Volunteers: 414
Web Page Views: 91,329

Rio Grande Valley Beef Development Program

Developed by Brad Cowan, County Extension Agent- Agriculture, Hidalgo County; Dr Enrique Perez, County Extension Agent- Agriculture, Cameron County ; Omar Montemayor, County Agriculture Extension Agent- Agriculture, Starr County; Matthew Rodriguez, County Agriculture Extension Agent- Agriculture, Willacy County; Vidal Saenz, Extension Agent- CEP and Ronnie Zamora, Extension Agent, Community and Economic Development.

Relevance

Beef producers can improve their herd or the herds of their customers through more rigid sire selection. Replacement heifers will perform to higher levels when in optimum body condition. Beef producers want to increase the value of bulls by collecting feedlot performance data and carcass characteristics. The Rio Grande Valley Beef Improvement Association identified the need to conduct a bull gain test and heifer development program in 1998 to support the beef cattle industry and it has been conducted each year since.

Response

Texas A&M Agrilife Extension conducted an official 112 day bull gain test and a 126 day heifer development program. Numerous data are collected on all animals including: initial and final weights, average daily gain, body condition score, scrotal circumference, sheath score, reproductive tract score, pelvic area measurements, hip height and ultra-sound measurement of backfat thickness and ribeye area. All data is provided to consignors and to the public.

Results

A total of 8 group methods were conducted. A bull gain test and heifer development program has been conducted each year from 1998 through 2016. Participants indicate a positive economic benefit to their beef cattle operations as a result of their participation.

A total of 1348 bulls, 1029 heifers and 142 steers have been entered in the 19 years the program has been conducted. In the current program, 25 consignors have entered 101 bulls and 33 heifers. Cattlemen from 10 different counties from throughout south and central Texas are participating is the current program.

Recognition events are conducted during the Rio Grande Valley Livestock Show in order to recognize the award winners in front of their beef cattle producer peers and the public. The Santa Gertrudis, Simbrah, Beefmaster, Simmental, and Brahman awards were each presented during the open show for their particular breed. A feeder pen of steers is also offered and adds a different dimension to the program.

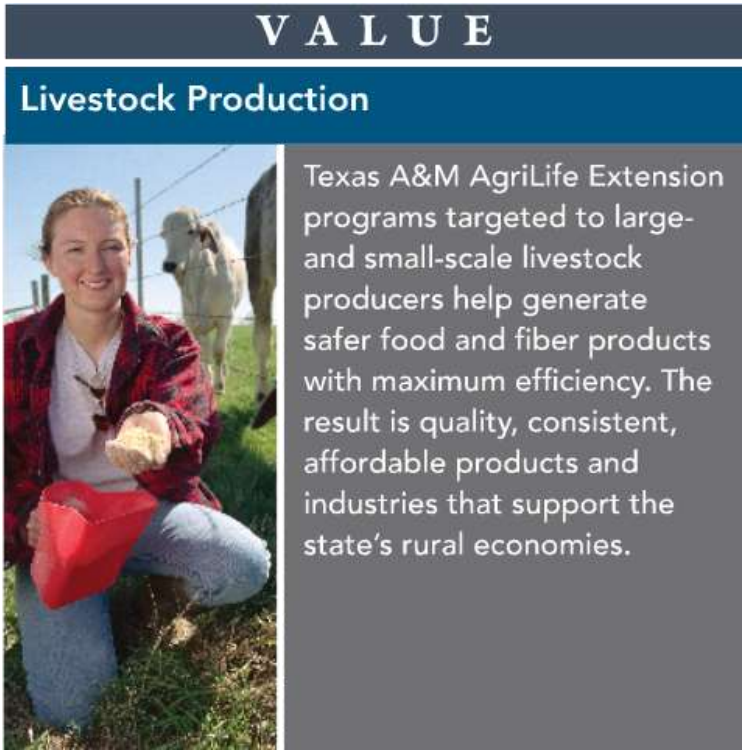
Bull Gain Test and Heifer Development Program participants were surveyed to measure program effectiveness. Final survey results are pending but a preliminary look at responses provided the following: What respondents liked best about the program included updated information, small breeder needs bull data, used data to compare sire and dam groups, gives more emphasis to other traits rather than just rate of gain, economical, good data, like the way the animals look at the end, like to be kept posted, economical to participate in, use the data in selection decisions. A total 50% of

the respondents said that as a result of their participation in the program they financially benefitted in the range of $1000-5000 annually, 16% reported more and 33% reported less.

Important collaborators were: Dr. Joe Paschal, Extension Livestock Specialist, Rio Beef Feed Yard management and personnel, Rio Grande Valley Livestock Show officials & volunteers and the members of the Rio Grande Valley Beef Improvement Association. New energy was provided during the planning process this year by the Rio Grande Valley Beefmasters Association. They see the value that performance tested bulls can bring to their bull sale. A number of their members consigned bulls to the program this year for the first time. County agricultural agents from 5 counties are conducting the program with assistance from the above collaborators.

Future Plans

In cooperation with the Rio Grande Valley Beef Improvement Association, plans are to continue the program and perhaps consider marketing alternatives for participants. Another future possibility will be to offer an artificial insemination program for heifers.
The Rio Grande Valley Beef 706 program is being planned for 2017. It is a three-part series of hands-on sessions focusing on beef quality management. This beef checkoff-funded program is designed to help producers maximize profits and have a better understanding of the production process after their cattle enter the feedyard.



Hidalgo, Cameron, Willacy County Crop Production Program

Developed by Brad Cowan, County Extension Agent- Agriculture, Hidalgo County; Dr. Enrique Perez, County Extension Agent- Agriculture, Cameron County and Matthew Rodriguez, County Extension Agent- Agriculture, Willacy County

Relevance

Each year approximately 400,000 acres of grain sorghum are grown in the Rio Grande Valley. The Sugarcane Aphid, a potentially damaging insect was identified for the first time in 2013. The Hidalgo County Crops Committee determined that educational efforts should be initiated to address this damaging insect. The Cotton & Grain Producers Association of the Lower Rio Grande Valley supported continued educational efforts going into 2015 to insure that growers would be ready to save their crop from severe damage if insect populations threatened to cause economic damage. These efforts continue to be very important.

Nutrient management is an important economic and environmental issue that affects water quality, soil quality and crop productivity. The Arroyo Colorado Watershed Partnership and The Texas Water Resources Institute determined a continued need to stress soil testing as a best management practice.

Producers continue to need locally produced information on the performance of crop varieties. Also, new and underutilized crops need to continue to be investigated such as soybeans and sesame. The Cotton & Grain Producers Association of the Lower Rio Grande Valley continue to support the need for crops result demonstrations.

As a result of forecasts for continued weak commodity prices, the Crops Committee and others identified the need for producers have the latest marketing information that they can use to manage risk.

Response

A total of 12 group methods resulted in a total of 2886 contact hours of education. Ag producers were educated on the sugarcane aphid, fertility management, variety performance data and a host of other timely topics. Educational events included the Cotton & Grain Pre-Plant Conference, field days, Sugarcane Aphid Meeting and Spring Crop Options Meeting. Other tools utilized included: publications, use of print and broadcast media, information posted to the County Extension Office web site, close communications with crops committee members, input from members of the board of directors of the Cotton & Grain Producers Association of the Lower Rio Grande Valley and involvement of Extension Specialists.

A three county soil testing program was conducted for the 16th consecutive year in 2016. This year, a total of 217 soil samples representing 7725 acres of agriculture production fields were submitted to the soil testing laboratory in College Station for analysis. Fertilizer recommendations were then provided to the growers for the specific crop to be grown. Over the past 16 years, 6681 samples have been submitted by local producers from a total of 227,129 acres.

Research demonstrations conducted on producer farms were used to produce an unbiased source of performance data that are used by growers to help determine the most profitable varieties to select for this area. Ongoing efforts to increase producer profits also included rating grain sorghum

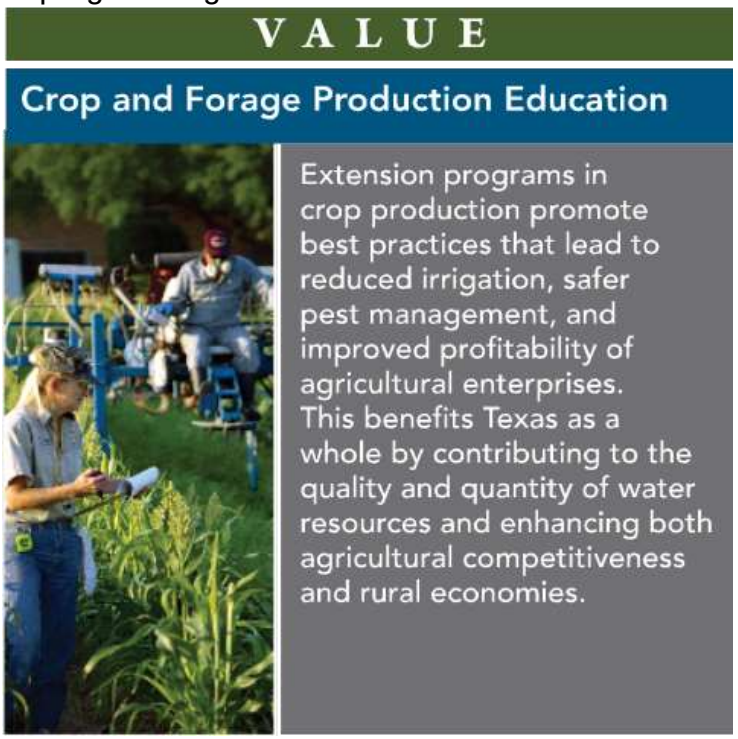
variety trials for differences among varieties in their tolerance to the sugarcane aphid and it's damage.

A two day cotton and grain marketing workshop was planned and conducted. Although not as intense as the famous Master Marketer Program that has educated Texas producers since 1996, this two day workshop introduced many of the concepts and tools available to producers that will enable them to minimize risk and sharpen their marketing skills, skill that are proven to provide an economic return to participants' farm operations.

Results

Educational efforts by Texas A&M AgriLife Extension to battle the sugarcane aphid were credited with a net savings to grain sorghum producers of $66 million in 2014. Although the aphid did not cause widespread damage in 2016, producers were ready due to ongoing educational outreach by Extension.

The economic impact of the RGV Nutrient Management Education Program was measured in terms of potential fertilizer savings that have resulted from increased adoption of soil testing. Reduction in fertilizer application rates translates into an average cost savings of $25 per acre, depending on crop and management history. This is a potential savings of $193,125 in 2016. The total potential economic benefit to producers since the program began in 2001 is estimated to be $5.7 million. This analysis does not include the value of environmental benefits. Local water bodies, including the Arroyo Colorado benefit from producer efforts to match the application of fertilizers to crop fertility requirements through scientific soil testing. This year's survey of participants documented that 97 percent of participants were satisfied with the sample response time, 80 percent of participants plan to follow the recommended fertilizer rates and 93 percent of participants felt that the test results were accurate.



Performance data from three result demonstrations conducted to evaluate grain sorghum and cotton variety performance under local commercial conditions were shared with producers to assist them in making more economical choices for their next crop season. Of special significance again this season was the county grain sorghum trials as the search is on for varieties that show tolerance to sugarcane aphids. This is being studied closely by many involved in the production of grain sorghum including growers, seed companies, Extension specialists, marketing companies and buyers. The IPM agent collected in-season data from the county result demonstrations.

Important collaborators included: Dr. Gaylon Morgan, Dr. Calvin Trostle, Dr. Tom Isakeit, Dr. John Robinson, Dr. Mark Welch, Dr. Luis Ribera, Dr. James Grichar, Danielle Sekula, Victor Gutierrez, Dr. Samuel Zapata, Dr. Femi Alabi, Rio Farms, Inc., Lower Rio Grande Valley Cotton and Grain Producers Association, Texas Farm Bureau, Farm Service Agency, Natural Resources

Conservation Service, Texas Grain Sorghum Association, National Cotton Council, Texas Water Resources Institute, Texas Department of Agriculture, the Texas Boll Weevil Eradication Foundation and numerous local ag industry company representatives.

The two-day marketing workshop included a pre and post-test evaluation. This evaluation included pre and post expectations of grain and cotton prices, as well as pre and post acreage intentions. This data will be used to eventually estimate dollar impacts from the program's influence on acreage allocation following the conclusion of the 2017 crop season. In the meantime, over a range of nine pre/post questions testing knowledge of hedging concepts, a 15% gain in knowledge was measured, as reflected by the percent of previously incorrect responses that shifted to the correct response.

Future Plans

Continue to keep producers up-to-date with new information on the sugarcane aphid and its management. Continue the soil testing campaign contingent upon funding. Continue important hybrid trails for the major crops in cooperation with local producers, seed companies and Extension Specialists. The Crops Committee will determine the need to repeat the marketing workshop. Agents and volunteer committee members will continue monitoring the local agriculture scene for emerging issues Extension is qualified to address.



Hidalgo County Sheriff's Department personnel presenting a program on prevention of fruit theft at the annual citrus growers meeting under the direction of Deputy Aaron Moreno. This became the "hot topic" of the meeting, resulting in lots of positive discussion and interaction between local growers and Sheriff's Department personnel.



A two day workshop was held where ag producers received intensive training on cotton and grain marketing.



Local ag leaders receive a tour of a refurbished grain handling facility at the Port of Brownsville. This facility may play an important role in exporting locally produced ag commodities.

Hidalgo & Cameron County Pesticide Safety Program

Developed by Brad Cowan, County Extension Agent- Agriculture, Hidalgo County and Dr. Enrique Perez, County Extension Agent- Agriculture, Cameron County

Relevance

Agriculture producers have a statutory requirement to obtain and maintain a pesticide license issued by Texas Department of Agriculture in order to use some crop protection chemicals. These are important tools for agricultural producers and Extension is relied upon to provide the education needed in this process. In addition, many school district, city, county, state and federal employees need to have a pesticide license for their work. Local training is provided for those needing to obtain a pesticide license and continuing education is provided to local license holders in order for them to be knowledgeable in the safe and efficient use of crop protection chemicals and to be able to meet the requirements to renew their license. The Hidalgo County Crops Committee continues to affirm that these efforts are important.

Response

Educational training events were planned and conducted to meet statutory requirements for producers to be able to obtain a license. Continuing education units were also provided to all participants at educational events conducted which contained applicable subject matter. A listing of continuing education opportunities was kept on the Extension Office web page as a tool for local producers to learn of these meetings. Also, an extensive email list of local license holders is maintained to use as a primary communication tool to inform license holders of continuing education opportunities. In addition, this agent generated and maintains an extensive list of cell phone numbers of license holders which is used to send text messages to remind license holders of upcoming meetings.

Results

656 persons attended 24 group methods which resulted in a total of 1845 hours of continuing education contact hours. The economic value of the CEU's earned is estimated to be over $48,000. In addition, four Pesticide Safety Training meetings were conducted in 2016. A total of 58 persons attended the five hour course which is required in order to obtain a private pesticide license issued by Texas Department of Agriculture. This resulted in a total of 290 contact hours of classroom instruction.

Aerial applicators have specific requirements for continuing education and those needs were met by conducting an educational training meeting specifically for them. This allowed them to obtain their required training without traveling outside of the local area. The aerial applicators are very appreciative of being able to obtain the training from Extension.

The 24 group method events were each reported to TDA by submitting the required documents to the state regulators.

Important collaborators were: members of the Crops Committee, board members of the Cotton & Grain Producers Association of the Lower Rio Grande Valley, Dr. Don Renchie and Dr. Mark Matocha, Agricultural & Environmental Safety Specialists and state & local personnel with Texas Department of Agriculture.

Future Plans

This effort will continue in the future to meet the needs of local agricultural producers and others needing a pesticide license.

Hidalgo and Cameron County Small Acreage Production

Developed by Ashley Gregory, County Extension Agent-Horticulture, and Jennifer Herrera, County Extension Agent-Horticulture, Cameron County, Dr. Samuel Zapata, Assistant Professor and Extension Specialist - Agricultural Economics

Relevance

The Lower Rio Grande Valley (LRGV) leads the nation in terms of the percentage of population living in poverty and number of persons without educational degrees at all levels. As a result, most small producers have limited formal education on sustainable and profitable production practices. In order to build a sustainable agricultural future and maximize the LRGV's diverse agricultural production, it is essential to train its socially disadvantaged farmers and ranchers on better farming techniques. USDA Census of Agriculture reports that 22% of Cameron County and 25% of Hidalgo County farms are less than 9 acres.

Agricultural profitability, economic development, food security and sustainable food systems were all identified as critical issues during the 2015 Cameron and Hidalgo Counties Futures Forums. In the last three years there has been a rapid development of farmers markets throughout the LRGV. There are 6 established markets and 5 markets that are in the developing stages.

Response

Advisory boards from both Cameron and Hidalgo Counties met to develop the Small Acreage Production Workshop series. Workshops were conducted by a multidisciplinary team of Texas A&M AgriLife Extension specialists, County Extension Agents, and local experts and growers. The major programmatic goal was to train socially disadvantaged, beginning, young, veteran, small farmers and ranchers in marketing and business planning, crop production, irrigation and water management.

- Backyard Hens, 3/24/16, 77 participants
- Grape Growing 101/Home Wine Making, 6/24/16, 25 participants
- Marketing Resources and Tools for Local Growers, 6/30/16, 21 participants
- Production Resources and Tools for Local Growers, 7/22/16, 10 participants
- Vegetable Production for Local Growers, 8/25/16, 42 participants
- MarketReady Training: Selling to Local Restaurants, 9/23/16, 26 participants
- Organic Production for Local Growers, 10/26/16, 29 participants
- Aquaponics for Local Growers, 10/27/16, 45 participants

Evaluation Strategy

A retrospective post survey was administered to all participants at the end of the each small acreage production training.

Results

Over 250 farmers attended the workshop series. On average, evaluation results indicated that there was a 50% increase in knowledge gained as a direct result of the workshops. Additionally 70% of respondents anticipated a positive economic benefit averaging $331 per participant.

Table 1. Percent of participants reporting "Good" or "Excellent" knowledge level before and after the workshops

Workshop Topics	Before	After
Home Egg Production (n=57)	27	92
Vegetable Production (n=33)	42.5	66.7
Selling to Restaurants (n=14)	21	92
Organic Production (n=17)	35	77
Aquaponics Production (n=31)	6.5	77

Table 2. Percent of participants that anticipate an economic benefit from the workshops

Workshop Topics	Yes
Home Egg Production (n=57)	44
Vegetable Production (n=26)	88
Selling to Restaurants (n=10)	80
Organic Production (n=17)	59
Aquaponics Production (n=26)	50

Table 3. Percent of participants that plan to either mostly or completely adopt practices from workshops

Workshop Topics	Yes	Not Sure
Home Egg Production (n=57)	23*	30
Vegetable Production (n=34)	50	38
Selling to Restaurants (n=14)	50	36
Organic Production (n=17)	35	47
Aquaponics Production (n=31)	36	36

*28% had already adopted

Future Plans

Based on suggestions from the evaluations the 2017 Small Acreage Production series will include workshops on Good Handling Practices, Tropical/Subtropical fruit trees, Integrated Pest Management, and soil. Cooperative Extension Program (CEP) Agents from Hidalgo and Willacy Counties will be joining the planning group to add expertise in the areas of community development and small farm outreach and technical assistance. Advisory boards have already scheduled the first planning meeting for January 2017.

Growing and Nourishing Healthy Communities Program

Developed by Ashley Gregory, County Extension Agent – Horticulture and Dr. Jenna Anding, Professor and Extension Specialist, Ricardo Carranza, Grant Program Assistant, Roy Custodio, Grant Program Assistant and Andrea Torres Barragan, Grant Program Assistant

Relevance

In Hidalgo County, an estimated 251,554 individuals receive benefits from the Supplemental Nutrition Assistance Program (SNAP), historically known as food stamps. Studies have shown individuals who live in poverty (including SNAP recipients) have dietary intakes that are not in agreement with current recommendations especially when it comes to consuming vegetables and fruits. In addition, low-income families often live in neighborhoods with limited access to healthy foods (i.e. food deserts), compounding the challenge of eating a healthy diet.

Response

The Growing and Nourishing Healthy Communities (GNHC) program is a cooperative endeavor among Texas A&M AgriLife Extension Service, Texas Health and Human Services Commission (HHSC), and the Food and Nutrition Services (FNS) of USDA. A component of the Supplemental Nutrition Assistance Program (SNAP), GNHC works with local partners to establish community gardens in communities identified as a food desert. Targeted towards SNAP recipients (and those eligible for benefits), the program's goal is to improve availability and accessibility of vegetables and fruit in the home by teaching participants (1) how to build gardens and (2) the skills needed to successfully grow and harvest fresh produce. The community gardens also serve as an outdoor classroom for participants who want to apply their knowledge at home (i.e. backyard garden). The program also includes nutrition education from Extension Better Living for Texans (BLT) educators to help participants learn how to incorporate their fresh produce in healthy and budget-friendly recipes.

Evaluation Strategy

The program is evaluated by assessing the amount of produce harvested and participant feedback via retrospective post evaluations. During 2016, 242 Hidalgo County adults completed the GNHC program; 29 participants completed the retrospective post surveys.

Results

Participant Characteristics

Participants were primarily female (79%) and Hispanic (93%). More than 15% of the participants (n=5) had not completed high school; 24% (n=8) had completed high school and 58% (n=19) had completed some college or a college degree. Average household size of the participants was 3.4 and the average age of participants was 45. 13 of the 29 participants (45%) received SNAP benefits while 7 (24%) reported having children living in the household who received free or reduced price meals at school. More than 37% (n=11) reported they had grown vegetables or fruits before and more than 83% of the participants (n=24) identified the GNHC program as the first Extension program they had attended.

Gardens

A total of 8 community gardens have been established in Hidalgo County through the GNHC program yielding more than 1,730 pounds in 2016. Broccoli, Swiss chard, tomatoes and spinach were the vegetables grown most often.

Impact of the Gardens on Availability and Accessibility of Vegetables and Fruits in the Home

Compared to when the program ended, there was statistical increase in the frequency of serving fruit as a dessert and having vegetables as a snack in the home. (Table 1). There was also a statistical trend in having more vegetables served as meals and having them cut-up and available in the refrigerator, suggesting that availability and accessibility of vegetables and fruits in the home were improved.

Table 1. Availability and Accessibility of Vegetables and Fruits in the Home

Question	Average Response* Pre	Average Response Post	Significance
We have fruits and vegetables in my home.	2.89	3.44	.001
In my home vegetables are served at meals.	2.59	3.41	.001
In my home, fruit is served for dessert.	2.27	3.00	.001
In my home, there are vegetables available to have as a snack.	2.46	3.36	.001
In my home, there is fruit available to have as a snack.	2.43	2.46	.001
In my home, there are cut-up vegetables in the fridge for me and my family to eat.	2.29	3.07	.001
In my home, there is fresh fruit on the counter, table or somewhere else where I and my family can easily get them.	2.54	3.43	.001

*Based on a 4-part Likert scale: 1=hardly ever; 2=sometimes; 3=often; 4=almost always. **NS means no change from a statistical standpoint although an upward trend is always encouraging.

Summary

These results suggest that the GNHC program is playing an important role in improving the availability and accessibility of fresh produce (particularly vegetables) in the home of the GNHC participants. Although not shown, participants who reported a significant increase in self-perceived knowledge/skills related to gardening. Overall, more than 89% of the participants (n=26) rating their gardening knowledge and skills as either “good” or “excellent” at the end of the program.

Master Gardener Intern Training Program

Developed by Ashley Gregory, Hidalgo County Extension Agent – Horticulture

Relevance

Horticulture related issues such as vegetable gardening, native landscaping and water conservation reach across a large audience from homeowners to city and county parks and recreation departments. There is a consistent demand for horticultural information and resources. According to the U.S.D.A. Census of Agriculture, Hidalgo County is ranked 1st in the state for fruit and vegetable production, and 17th for nursery and greenhouse production. Combined these commodities represent a market value of $233 million. Critical issues identified for Hidalgo County during our Texas Community Futures Forum (TCFF) included water conservation, food security and sustainable food systems, both of which are covered in the Master Gardener Training program.

Response

Each year the Master Gardener Training Program (MGTP) educates and trains a select group of volunteers in the area of horticulture. Hidalgo and Cameron County Master Gardener Planning committees collaborated to plan the 2016 MGTP as a multicounty effort to increase collaboration between the groups to better serve our region. Four of the eight classes were held together to highlight experts and geographical features unique to each county.

In 2016, eight interns were selected to participate in the program. Program interns received 50 hours of instruction over 8 weeks, focusing on localized information and practical knowledge in areas such as: Plant Growth and Development, Soils and Composting, Fruit Trees and Herbs, EarthKind Principles, Native Plants, Tree Care and Pruning, Vegetable Gardening, Pest and Disease, and Container Gardening. The Master Gardener planning committee put together a diverse group of presenters, tours and demonstrations that included Texas A&M AgriLife Specialists and Researchers, TAMUK Professors, City Foresters, local experts and business owners, and Master Gardener Specialists. They also planned tours of a local fruit tree nursery, the National Butterfly Center, and a city composting facility. Hands on activities included grafting, air layering, tree pruning and using a microscope to identify various pest and pathogens.

Educating volunteers in local horticultural topics and training them to teach the community allows us to increase the number of people we educate. Working with the Hidalgo County Horticulture Agent, Master Gardeners hosted 36 workshops reaching over 750 people in 2016. They volunteered a total of 3,277 hours equating to $77,206 saved by the county.

Evaluation Strategy

Interns were given a retrospective post evaluation to access their overall satisfaction with the program as well as their change in knowledge and willingness to adopt new practices.

Results

Responses from the retrospective post evaluation showed that all interns increased their knowledge or level of understanding in key horticultural topics covered in the program, as illustrated in Table 1. Comments from the evaluations indicated that all participants felt they learned from the program and would recommend it to others.

Table 1: Percent reporting "Good" or "Excellent" knowledge level before and after the program (N=8)

Horticultural Topics	Before	After
Knowledge on Tree Care and Management in the Landscape	25	100
Understanding of Soils and Soil Fertility	12.5	100
Knowledge of Plant Growth and Development	25	87.5
Knowledge of Plant Disease	12.5	87.5
Understanding of Insects in the Garden	12.5	87.5
Knowledge on Herb Gardening	25	87.5
Knowledge on Native Plant Species/ Butterfly Species	12.5	87.5
Knowledge on Tropical Plants and Fruit Trees	25	100
Knowledge on Vegetable Gardening	12.5	100

Future Plans

The Master Gardener Training Program will continue to be held annually. The planning committee will be implementing a continued education plan for interns where each week a different veteran Master Gardener would offer a 30 minute educational presentation at the garden. Plans for 2017 include a specialized MGTP for Winter Texans to be held in early Spring 2017.

Financial, Marketing and Production Management
Cooperative Extension Program (CEP) Prairie View A&M University

Developed by Vidal H. Saenz, Extension Agent-CEP (Farm Advisor)
Serving Hidalgo, Cameron, Willacy and Starr Counties

Relevance

The Rio Grande Valley, which is composed of Hidalgo, Cameron, Willacy and Starr counties have gone through major agricultural disasters in the last few years. Many socially disadvantaged and limited-resource agricultural producers and rural youth face numerous challenges in obtaining financial resources through commercial lending institutions because of the risk involved in farming and ranching and the local banks unwillingness to lend during these times of economic uncertainty. Many of these producers qualify for financing through USDA-Farm Service Agency, but are not aware of their programs or are overwhelmed by the paperwork involved in USDA's loan applications. Knowing that loan funds are available through USDA-Farm Service Agency, it is important that Extension offer support in financial planning and management to fill out the necessary paperwork correctly and remove all of the obstacles that impede agricultural producers from applying for these loans.

Response

The purpose of our program is to enhance the business management and marketing skills of agricultural producers who utilize our services. Targeted clientele will learn how to keep and improve production and financial records and generate personal and farm financial statements for their use in financial resource acquisition. This plan will address a wide range of activities such as livestock production, crop production, and financial management, marketing and applying for assistance under USDA programs.
The Cooperative Extension Program's Small Farm Outreach Training and Technical Assistance Program in Hidalgo County developed the following activities to address this relevant issue:

- Co- hosted an event called, Soil Health & Irrigation Conservation Workshop. This program was held in Weslaco, Texas at the District 12 Texas Agrilife Extension headquarters on August 24, 2016. The program's primary focus was to look at weather-based tools for irrigation management, soil health for maximum productivity, nutrient management and outreach of USDA Programs. Over 60 ag producers were in attendance at this Program.
- Co-hosted a Market Ready Training: Selling to Restaurants for Local Growers. Dr. Marco Palma spoke about opportunities for the local growers in selling their produce directly to local restaurants. Ms. Nelda Barrera from the Texas Department of Agriculture spoke about the Go Texan program and about trade and business development. I provide outreach on USDA-Farm Service Agency's loan programs and answered questions from producers. 80% of the program participants indicated that they anticipate a positive economic benefit as a direct result of the Program.
- The Small Farm Advisory Committee advised me to provide outreach on our program and programming efforts through the local media, educational events and one-on-one farm visits with prospective producers. I provided several articles in the Valley Morning Star, The

Monitor, Starr County Herald and Willacy County Chronicle that served as outlets of outreach for our program. As a result of this, survey showed that 25% of the program participants learned about our program through these newspapers. Other means of outreach included: a commodity report for the members of the Starr County Farm Bureau at their annual membership drive dinner in Rio Grande City, Texas. The commodities included cattle, cotton and grains. The event took place on September 21, 2016.

I provided outreach on USDA-Farm Service Agency loan programs at many Extension events, workshops and field days throughout the Rio Grande Valley in 2016. I also collaborated with the Rio Grande Valley Agricultural Extension Agents and Ag Science Instructors to provide outreach on USDA's Youth Loan Program to 4-H and FFA members and parents.

- Collaborated with the County Agricultural Agents in Starr, Hidalgo, Cameron and Willacy counties by providing educational programs focused on sustainable agriculture. These programs ranged from best management practices to control brush, nutritional practices for beef cattle and performance testing on bulls and heifers.
- Sixty eight, six-hour, one-on-one financial planning and management sessions were provided for producers and youth seeking agricultural loans from USDA-Farm Service Agency.

Evaluation Methods/Results

A two-page retrospective post evaluation form was administered to a cross section of the program participants. The survey was used to determine the level of clientele knowledge gained by the educational programming that was provided.

Collaborators

Texas Farm Credit, Elsa State Bank, Ry Livestock Sales, Inc., Hidalgo & Starr Counties Farm Bureau, Texas-Mexico Border Coalition, USDA-Natural Resources Conservation Service & USDA-Farm Service Agency.

Results

The following results were shared from the program evaluations to indicate the achievements of the Program:

- 96% of the program participants gain knowledge of USDA-Farm Service Agency's Direct and Guaranteed Loan Programs.
- 94% of the program participants gained the knowledge to develop a farm operating budget for their operation in 2016.
- 90% of the program participants said that they gained the knowledge necessary to keep production and financial records for securing financing for their farming and ranching operations.
- 100% of the program participants found out what their net worth (owner's equity) was at the end of the Program.
- 75% of the program participants said that they gained the ability to fill out a USDA-Farm Service Agency loan application properly, without any assistance needed, but would continue to use the program's services if still available.

Summary

All of the program participants that were able to submit a complete direct loan application to USDA-Farm Service Agency because all of the obstacles that impeded their full participation in the program were removed. They were able to save a 2% fee on their loan requests by not utilizing the services of a private loan consultant. The total money requested for 2016 amounted to $6,341,680. This amount multiplied by 2%, totals $126,833.60, which is the amount that an independent loan consultant would have charged. This was an average savings of $1,865.20 for each of the sixty eight participants.

Livestock and Forage Plan

Developed by Vidal H. Saenz, Extension Agent-CEP (Farm Advisor)
Serving Hidalgo, Starr, Cameron and Willacy Counties

Relevance

Agricultural producers from the Rio Grande Valley have been in a tough economic situation for many years due to weather -related events such as extended drought. Because of this, they have endured large production and financial losses. Small-scale agricultural producers from the Rio Grande Valley have long been underserved. Many are not aware of the programs and services that are available from USDA and other Agricultural agencies, such as: USDA-Farm Service Agency loans, USDA-Farm Service Agency commodity programs,USDA- Natural Resource Conservation Service Programs and USDA-Rural Development programs. Many ag producers do not know that the Texas Agrilife Extension Service and Cooperative Extension Program at Prairie View A&M University have Specialists that can help them with their ag production needs. The majority of the small-scale ag producers in the Rio Grande Valley are Hispanic.

Response

The Cooperative Extension Program hosted a series of educational events to address new and existing risk management products and services that increased knowledge and skills of ag producers by making them aware of the different types of programs available from USDA and the Extension Service. We also helped provide outreach on the programs and removed the obstacles that impeded them from utilizing these services. The targeted clientele were able to utilize: low interest farm loans, cost-sharing programs, housing programs and knowledge from Specialists in their line of production.

The following educational activities were organized, with the input and assistance of the Hidalgo County Small Farm Advisory Committee.

- Hosted a South Texas Beef Production & Brush Control Workshop in San Isidro, Texas on June 2, 2016. At this meeting, the program provided education on proper forage management techniques for rangeland, cattle marketing, genetic improvement in cattle and chemical brush control. Over 140 program participants were in attendance. As a result of program, 85% of participants gained knowledge in the above listed topics.

- Provided outreach on USDA-Risk Management Agency's Pasture, Range and Forage Program to Starr County ranchers who attended the 2016 Starr County Farm Bureau Annual Meeting. I presented information to over 100 members who were in attendance. Information provided included sign-up dates, pasture and hayland insurance policies and it's benefits. Other information included commodity updates for livestock, corn, sorghum, soybeans and cotton.

- Utilized local crop insurance agents from the Rio Grande Valley to provide outreach on USDA-Risk Management Agency's Pasture, Range and Forage Insurance Program.

- Provided outreach on the sign-up deadlines for the Pasture, Range and Forage crop insurance program at various producer meetings held throughout the county.

- Utilized USDA-Farm Service Agency staff to provide updates on government disaster assistance programs and cost-sharing programs.

- Co-hosted a Starr County Ranchers Program on October 27, 2016 in La Grulla, Texas. The program offered information on the following: property tax valuations and ag exemptions, ranch diversification, chronic wasting disease in Texas deer populations, drone technology and outreach of USDA-Farm Service Agency loan programs. There were 60 producers in attendance.

- Agent shared the results of this plan with local County Commissioners Court and Leadership Advisory Board and other stakeholders.

Evaluation Method

A one-page retrospective post test evaluation form was administered to each participant. The survey was used to determine the level of clientele knowledge change required by the educational programming.

Collaborators – The following businesses assisted with resources to make this program possible:

- USDA-Farm Service Agency
- USDA-Risk Management Agency
- RY Livestock Sales, Inc.
- Starr Soil and Water Conservation District
- Texas-Mexico Border Coalition
- Starr County Farm Bureau

Results

The following results are shared from the program evaluation to indicate the achievements of the project:

- 91% of participants gained knowledge of USDA cost-sharing programs.
- 91% of participants gained knowledge of beef cattle management practices.
- 77.3% of participants gained knowledge of range management tools to maximize forage production.
- 91% of participants gained knowledge of culling strategies in their cow/calf operations.
- 87% of participants gained knowledge of drone technology in modern ranching.
- 90% of participants gained knowledge of USDA-RMA Pasture, Range and Forage Insurance Program (Rainfall Index)
- 81.8% of participants gained knowledge of USDA-FSA programs and services

Summary

This program appeared to build knowledge and change perceptions concerning risk management and ranching practices. Producer responses indicate that they have a better appreciation for USDA-Risk Management Agency, USDA-Farm Service Agency and USDA-Natural Resources Conservation programs. This program will continue, addressing new government programs as they become available. Due to responses on the surveys, I will be working with the Small Farm Advisory Committee to concentrate on more programming towards Cameron and Willacy counties. I have seen an interest from producers in these counties that need more educational programming to assist them in their livestock operations.

V A L U E

Livestock Production



Texas A&M AgriLife Extension programs targeted to large- and small-scale livestock producers help generate safer food and fiber products with maximum efficiency. The result is quality, consistent, affordable products and industries that support the state's rural economies.

Food Protection Management

Developed by Andrea Valdez, County Extension Agent-Family & Consumer Sciences

Relevance

Each year, an estimated 1 in 6 people become ill from the food they eat. Common symptoms of foodborne illness include nausea, vomiting, diarrhea, abdominal cramping, fever and headache. While some people may view this as a mere case of "food poisoning" foodborne illness has serious health and economic consequences. In fact, foodborne illness from five pathogens alone (Campylobacter, Salmonella, Listeria monocytogenes, E.coli O157:H7, and E. coli non-O157:H7 STEC) cost more than $6.9 billion in medical expenses, lost productivity, and even death. All of us are at risk for foodborne illness, but older adults, pregnant women, young children, individuals with chronic disease, and those with a compromised immune system are at an increased risk. Because nearly half of our food dollars are spent of foods eaten away from home, it is imperative that employees who work in retail food service handle food safely. This program addresses previously identified Texas Communities Futures Forum (TCFF) issues and FCS committee priorities.

Response

To meet the need for quality food safety education in Texas retail food establishments, the Food Protection Management (FPM) program was developed. Our two-day certified food manager program prepares food service workers to sit for the state Certified Food Manager exam. Our two-hour food handler program, which is accredited by the Department of State Health Services, trains front line food service workers on the basic principles of food safety. Both programs are conducted at the county level by Extension Agents. In 2016, 12 Food Handler classes were conducted with 172 participants and 9 classes were surveyed and analyzed (127 participants).

Results

Demographics for Food Handlers Program

- 77% Female
- 93% Hispanic
- 36% had a high school diploma or less
- 64% had not worked in food service previously
- 59% had never had any food safety training

Evaluation Results			
Question	**% Correct Pre-Survey**	**% Correct Post-Survey**	**Difference**
The removal of dirt, soil, food or grease is cleaning	47%	69%	+22%
The Temperature Danger zone is 41 to 135 degree Fahrenheit	30%	76%	+46%
A person who changes his apron when it gets dirty is the best example of maintaining personal hygiene	63%	89%	+26%
A foodborne outbreak involves 2 people	32%	87%	+55%

Mean score pre-test- 69
Mean score post- 86

There was a statistically significant increase in test scores suggesting a 23% increase in knowledge regarding food safety.

VALUE

Food Safety Education



Both those who work in food-service establishments and those who simply cook in their own kitchens benefit from Texas A&M AgriLife Extension's food-safety education programs. The resulting improvement in safe food handling benefits consumers by helping prevent food-borne illnesses and the public health care costs they cause.

Working on Wellness (WOW) Project

Developed by Andrea Valdez, County Extension Agent-Family & Consumer Sciences and Illeana Garcia, WOW Program Assistant

Relevance

Obesity in Hidalgo County is a major public health concern, co-varying with other health and social problems. Of the 232 counties ranked in the 2014 county health rankings (University of Wisconsin Health Institute, 2012), Hidalgo County ranks 225th in health factors, 229th in social and economic factors and 209th in clinical care. The high obesity rate in Hidalgo County is related to other poor health and social indicators. According to the county health rankings, 27% of residents have limited access to healthy foods, and 43% have limited access to exercise opportunities. Almost 1/3 of residents in Hidalgo County report fair or poor health. In 2011, 39% of the population was uninsured and 33% could not see the doctor due to costs. Provider shortages in primary physicians, dentists, and other health care professionals further inhibit access to care (University of Wisconsin Population Health Institute, 2012). Hidalgo County has a childhood poverty rate of 46%, almost double the national average.

Response

With a 42% obesity rate, Hidalgo County was the only county in Texas that qualified for this particular grant funding from the Centers for Disease Control (CDC). This 1416 grant funding has two goals: increase access to fresh fruits and vegetables and increase access to physical activity. This grant would provide the opportunity for a beginning collaboration and partnership between Texas A&M Agrilife Extension and Texas A&M Health Science Center which has a School of Public Health campus in Hidalgo County. Serving as the Program Coordinator for Extension, I work with Extension Specialists (Dr. Jenna Anding, Alice Kirk, Michael Lopez, and Dr. Jaime Rae Walker) and a WOW Program Assistant (Illeana Garcia) to further the grant goals in the four targeted communities of Weslaco, South McAllen, Penitas, and San Carlos. 2015 was the first year in this grant and assessments, community coalition development, identification of coalition goals and opportunities and program development were done. 2016 is the second year in this 3-year grant that has recently been extended to include a Year 4.

In 2016, the grant team focused on continued coalition member participation and worked with the coalition members to plan and implement the goals outlined in 2015. All coalition members serve as volunteers on the coalitions and represent partnership from the following agencies: City of Weslaco, City of Weslaco Parks and Recreation, Weslaco Independent School District, Hidalgo County Precinct #1, Hidalgo County Precinct #3, Hidalgo County Precinct #4, City of McAllen, City of McAllen Parks and Recreation, McAllen Housing Authority, The Elks Lodge, Hope Clinic, Valley Interfaith, Methodist Healthcare Ministries of South Texas, The Monitor Newspaper, San Carlos Community Center, Hidalgo County Precinct #4 Parks and Recreation, TAMU Colonias Program, Proyecto Desarrollo Humano, La Joya Independent School District, Buckner International Family Health Center, and Community residents.

In 2016, the community coalition focused on achieving their tailored goals to promote sustainable environmental changes in their community. The following activities took place:

Weslaco:
- 10 coalition meetings
- WOW Weslaco High School Celebrates Health: 3 Weslaco High School students sit on the WOW Weslaco coalition and organized a health and physical activity fair at Weslaco High School to promote wellness and physical activity amongst teens. The fair included over 20 booths from multiple agencies and clubs. Over 400 students visited the different booths, learning about healthy eating and taking part in obstacle courses, kickball, and the Healthy South Texas smoothie bike.
- The SPH funding portion of this project worked with City of Weslaco officials to provide the material to restripe multiple streets to include bike lanes as part of the City's goal to create a cohesive bike trail throughout the city.

South McAllen:
- 10 coalition meetings
- A Fresh Meals for the Summer Cooking Workshop was held in McAllen as part of the coalition's goal to promote healthy eating with simple recipes. Over 30 participants were provided with 6 cooking demonstration and recipe food tasting.
- The McAllen coalition hosted the Crime Prevention through Environmental Design (CPTED) workshop, which allowed 40 participants to receive this certification. CPTED focuses on providing city planners, law enforcement, and others with strategies to combat crime in parks, schools or public places. This workshop allowed coalition members from all the targeted communities to attend and receive the certification as they work to revitalize areas in their communities.

Penitas:
- 10 coalition meetings
- The Penitas coalition hosted a Pop Up Play Workshop for childcare providers and volunteers to provide education on different play strategies, activities, and tools.
- The Penitas coalition's main focus remains the improvement of Katarina Park. While planning and logistics is still taking place, a groundbreaking for the trail took place as construction on the trail began. Hidalgo County Precinct #3 is a vital partner in this project as they are providing labor and machinery for the trail while the grant funding provides materials needed. The community and the Precinct were very pleased with this groundbreaking as it received great media attention to this high need area.

San Carlos:
- 10 coalition meetings
- The San Carlos coalition's goals focus on increasing access to fresh fruits and vegetables for their community. A Farmers market or Mercado was started to address this need. The San Carlos Community Center hosted 4 markets this year with 50-150 residents attending each market to buy local produce from local producers and take part in Zumba, obstacle course, or other physical activities offered. Hidalgo County Precinct #4 is an important partner in this

project and provides labor and market table/tent setup. This market will continue to thrive and expand throughout and beyond the grant funding.

Results

The Texas A&M Health Science Center School of Public Health is the evaluation team for this project. The evaluation of coalition development and activity results are currently ongoing as this project continues into Year 3.

VALUE

Obesity Prevention and Reduction



The Texas A&M AgriLife Extension Service engages children and adults in programs that teach them how to eat nutritious foods and engage in regular physical activity to promote health and reduce their risk for obesity. The Texas public benefits through a healthier population, reduced health care costs, and increased productivity.

Better Living for Texans
A Fresh Start to a Healthier You!

Developed by Andrea Valdez, County Extension Agent-Family & Consumer Sciences; Frances Flores and Yolanda Rios, Better Living for Texans Program Assistants

Relevance

More than 3.7 million individuals receive benefits from the Supplemental Nutrition Assistance Program (SNAP), historically known as food stamps. Studies have shown individuals who live in poverty (including SNAP recipients) have dietary intakes that are not in agreement with current recommendations (i.e. Dietary Guidelines or MyPlate). This audience, like many, may not recognize their risk for foodborne illness. Having enough food to eat is also a challenge; an estimated 1 in 6 households in Texas experience food insecurity.

Response

The BLT Program is a cooperative endeavor among Texas A&M AgriLife Extension Service, Texas Health and Human Services Commission (HHSC), and the Food and Nutrition Services (FNS) of USDA. A component of the Supplemental Nutrition Assistance Program (SNAP), BLT offers food and nutrition education to SNAP recipients, applicants, and other low-income audiences to help improve their ability to plan and prepare nutritious meals, stretch food dollars, and prepare and store food safely. BLT also incorporates gardening and the Walk Across Texas program to promote physical activity and improve access to vegetables and fruits.

During 2016, 280 County adults completed the BLT A Fresh Start to a Healthier You! series. This program focuses on improving vegetable and fruit intake, meal planning, increasing physical activity, and adopting selected behaviors that can reduce the risk of foodborne illness. Of those participants, 279 completed the 30-day follow-up survey which allows us to assess the extent that targeted behaviors were adopted.

Results

Participant characteristics

Average household size was 4.36 persons; the average age of the participants was 45 years. Participation in the selected assistance programs was as follows: SNAP 60%, food pantries or other emergency food assistance 15%, free/reduced school meals 60%, Head Start 5%, TANF 4%, and WIC 11%.

V A L U E

Better Living for Texans



These nutrition programs teach low-income audiences to prepare nutritious meals, stretch their food resources, improve their food-safety practices, and participate in regular physical activity. This not only improves the quality of life and reduces the risk of chronic disease for participants, but also lowers public health care costs.

Changes in targeted behaviors were examined by evaluating the pre, post and (where available) follow-up surveys of those individuals who completed the program series.

Vegetable and Fruit Consumption

Behavior	Pre		Post		Follow-Up	
	N	%	N	%	N	%
Fruit Consumption						
3 or more times a day	17	6	48	17	44	23
Vegetable Consumption						
3 or more times a day	12	4	31	11	39	20

Meal Planning and Food Management Practices

	Pre		Post		Follow-Up	
	N	%	N	%	N	%
Plan meals in advance						
All or most of the time	113	41	190	70	146	79
Shop for food with a list						
All or most of the time	127	46	219	77	163	85

Food Safety

	Pre		Post		Follow-Up	
	N	%	N	%	N	%
Wash hands before preparing meals						
All or most of the time	263	93	277	98	193	100
Wash fruits or vegetables before eating or preparing						
All or most of the time	271	96	276	98	193	100

Change in Physical Activity Behaviors

	Pre		Post		Follow-Up	
	N	%	N	%	N	%
How often are you physically active for at least 30 minutes, five days a week?						
All or most of the time	122	43	193	69	133	69

Other findings:

85% of the participants identified BLT as their first exposure to AgriLife Extension. This suggests that the program is reaching new audiences who otherwise might not have the opportunity to benefit from Extension programs. 86% of the participants rated the BLT program as “excellent” while 14 % rated the program as “very good.”

In addition, 95% of the participants reported they were “very likely” to recommend BLT to another person; 5% said they were “likely” to recommend the program. In addition, the 93% of participants reported they were “very likely” or “likely” to attend another BLT program.

Friend to Friend Cancer Prevention Program

Developed by Andrea Valdez, County Extension Agent- Family & Consumer Sciences, and Rosa Guel, Friend to Friend Program Specialist

Relevance

The Friend to Friend program's purpose is to encourage women to get regular mammograms and Pap tests for the early detection of breast and cervical cancer, when the disease is most curable.

- Regular screening significantly increases the likelihood of finding cancer early, when treatment is more often successful.
- Women living in rural areas of Texas are less likely than their urban counterparts to have had a mammogram or Pap test within the past two years.
- Mortality is higher for rural women because of later diagnosis.

Response

- This project's goal is to decrease breast and cervical cancer morbidity and mortality for women living in rural Texas counties by improving screening rates and early detection of cancer.
- Through a grant from the Cancer Prevention and Research Institute of Texas (CPRIT), funding was provided for screenings and transportation for uninsured and underserved women in need of services.
- The county Extension agent, regional cancer prevention specialist, and patient navigators plan and implement a Friend to Friend event. Women attending are given the opportunity to sign a commitment card to obtain a mammogram and/or Pap test within the next year and the option to complete a help request form for assistance in obtaining screening services.

Impact of the Program

- 36 counties held Friend to Friend events throughout Texas in 2016.
- 249 women attended the Friend to Friend events on February 04, 2016 at the First Baptist Church in McAllen, Texas.

Results

Demographics of women who attended the events:

- Median age was: 42.
- Latina/Hispanic: 94.8%
- White: 0.4%
- Multiple race/ethnicity: 0.4%
- 17 total volunteers assisted at party/events.
- A Medical Professional, Breast Cancer and Cervical Cancer Survivor urged women to obtain a mammogram/Pap screening at the events.
- At the end of the event 92.5% of women, aged 40 or over, correctly identified the need for a mammogram screening every year.

- 223 Women requested help to navigate screening and diagnostic services.
- 28 Clinical sites contracted statewide for screenings, diagnostics, radiologists and lab services.
- 253 Mammogram screenings and 36 diagnostics were paid for through CPRIT funds.
- 304 Pap screenings and 52 diagnostics were paid for through CPRIT funds.
- Women were referred to other available sources for Breast and Cervical screenings and diagnostics.

V A L U E

Cancer Prevention



Participants in Texas A&M AgriLife Extension Service cancer-prevention programs learn ways to reduce their risk of developing many forms of cancer. When participants adopt behaviors that reduce cancer risks, the public benefits through reduced public health care costs and increased productivity.

Master Wellness Volunteer Program

Developed by Esly Reyes, Extension Agent Assistant-Family & Consumer Science, with support from Amy Valdez, Healthy South Texas Specialist, Andrea Valdez, County Extension Agent- Family and Consumer Sciences, Yolanda Rios, Better Living for Texans Program Assistant, and Andrew B. Crocker, Family and Community Health Extension Program Specialist

Relevance

Recent studies indicate that Hidalgo County ranks at the top for obesity (42.9%)[1], physical inactivity (22.10%)[1], diabetes (13.3%)[2], and other health problems in the state of Texas. Texas A&M AgriLife Extension offers numerous health and nutrition programs that help individuals to improve their health and quality of life. However, because there is an enormous need for health education in this county, there is also a big need for trained individuals to be advocates for our organization and help extend the education further in the community. The Master Wellness Volunteer Program provides 40 hours of health and nutrition education to volunteers. In return, they give back 40 hours of volunteer service to the community. Their service substantially increases the scope and impact of the Family and Consumer Sciences programs.

Response

The Master Wellness Volunteer training was delivered for the first time in Hidalgo County in November 2016. The classes were offered via two different methods: face-to-face and hybrid/online options to better accommodate volunteer's availability. The target individuals to participate in this training were college students, health professional retirees, and other individuals who desired to make a difference in the health of the Hidalgo County community. The strategies used to recruit were news releases, social media advertisements, and outreach events in colleges, universities, hospitals, clinics, and other community events. These volunteers received 40 hours of training, and have agreed to give back 40 hours of service to receive their certification. In addition, five hours of continuing education and ten hours of service are needed annually to maintain their certification. The Master Wellness Volunteer curriculum included the following educational constructs:

- Health and Nutrition
- Food Safety
- Dietary Guidelines
- Physical Activity
- Stress Management
- Public Speaking

Results

A total of twelve volunteers successfully completed the 40 hours of training and passed their certification exam. Seven of them completed the training through the face-to-face option and five of them through the hybrid/ online option. Throughout the training, volunteers were able to observe experienced agents and specialists deliver their programs, and had the opportunity to ask them questions to fortify their teaching skills learned. These volunteers have demonstrated competence in the different topics taught and are now ready to begin volunteering with Texas A&M AgriLife Extension Service as a Master Volunteer Intern.

Future Plans

In 2017, 14 Master Wellness Volunteers will expand health and nutrition education to our Hidalgo County community through their involvement in different Family and Consumer Sciences programs such as Dinner Tonight Healthy Cooking School, Walking Across Texas, Sí, Yo Puedo Controlar Mí Diabetes!-Diabetes program, Worksite Wellness, Better Living for Texans and more. For 2017, another Master Wellness Volunteer training will be delivered with the purpose of increasing the number of volunteers in the program and impacting the health of our community positively.

References:

1. Diabetes complications. (2016). Retrieved from (http://www.diabetes.org/living-with-diabetes/complications/.com).
2. Obesity. (2016). Retrieved from (http://www.mayoclinic.org/diseases-conditions/obesity/basics/causes/con-20014834).

MASTER WELLNESS VOLUNTEER PROGRAM

¡Sí, Yo Puedo Controlar Mí Diabetes!

Developed by Esly Reyes, Extension Agent Assistant, with support from Amy Valdez, Healthy South Texas Specialist; Andrea Valdez, County Extension Agent-Family and Consumer Sciences Agent; Claudia Quiroga, Family and Consumer Sciences Program Assistant

Relevance

¡Sí, Yo Puedo Controlar Mí Diabetes! (Sí, Yo Puedo) is an evidence-informed, culturally competent educational program targeting low-literate Hispanic/Latinos with diabetes. The curriculum is predicated on the American Diabetes Association's national standards of care and employs the Social Cognitive and Self- regulation theories as its foundational support. Empowerment is an overarching theme of the program, and, to this end, Sí, Yo Puedo aims to equip participants with knowledge and lifestyle skills to better control their diabetes.

- Diabetes is a serious public health issue in Hidalgo County, with a prevalence rate of 13.3%. This an alarming percentage compared to Texas at 13% and the United States at 9.3%.
- Diabetes increases the risk of developing further complications such as kidney disease, neuropathy, stroke, high blood pressure, and skin, eye and foot complications
- Diabetes cost Texas more than 12 billion dollars.
- Among persons with diabetes, a higher proportion of Texas Hispanic/Latinos (32.5 percent) could not see a doctor in the last 12 months due to cost compared to Whites (16.5 percent.)

Response

In 2016, 26 individuals enrolled in Sí, Yo Puedo classes delivered in Hidalgo County (Edinburg, Texas and Pharr, Texas). 21 participants successfully completed pre- and post-test surveys.

- Proper management is critical to minimize the potential negative effects of diabetes.
- Self-management education is the cornerstone for diabetic care and vital for blood glucose control.
- Recognizing the need for a culturally-relevant type 2 diabetes self-management education targeting Texas Hispanic/Latinos, Sí, Yo Puedo was developed to address this gap in health programming.

¡Sí, Yo Puedo Controlar Mí Diabetes! topics include the following:

- What is diabetes?
- Checking your blood glucose levels
- Eat healthy with diabetes
- Be active with diabetes
- Medicines and diabetes



- Preventing diabetes problems

Results

The findings below summarize the impact of the Sí, Yo Puedo program. Demographic characteristics are based on all registered participants, and outcome indicators are based on pre- and post-test findings. Outcome indicators include diabetes knowledge, self-care behaviors, self-efficacy, health status and HbA1c values.

- Demographic characteristics: 77% (N=20) of the participants were female. The average age was 63 years, and 88% (N=23) of the participants were Hispanic/Latino. Approximately 58% (N=15) of participants reported having less than a high school diploma. Seventy-three percent (N=19) of the participants reported having a yearly income under $20,000. Seventy-seven percent (N=20) of participants reported having medical insurance. Seventy-three percent (N=19) of participants reported never having received any diabetes classes.
- There was a change in diabetes knowledge, pre-test 6.7 M (out of 10) and post-test 8.2M (out of 10.)
- Self-efficacy scores improved with participants reporting increases in their confidence to engage in diabetes self-care behaviors: pre-test 3.1 M (out of 4); post-test 3.7 M (out of 4.) (Scale: 1 = I don't feel sure; 4 = I feel very sure.)
- Out of a total score of 44, diabetes self-care scores reveal that participants improved in performing routine health behaviors to better manage their diabetes: pre-test mean score 24.3 and post-test 33.9.
- Health status scores improved in their perceived health status: pre-test 3.4 M (out of 5) and post-test 2.2 M (out of 5.) (Scale: 1 = Excellent to 5 = Poor.) A lower mean score indicates improvement in health status scores.
- Average HbA1c scores improved from baseline 9.9M to 3-months post-intervention 7.7 M of the sixteen paired participant scores. A 0.5% reduction in A1c scores significantly decreases diabetes complications.

Acknowledgements

Special thanks to the following individuals for helping to make this program possible: Marylou Garza- Superior Health Plan Outreach Specialist and Judge Homer Jasso- Justice of the peace. In addition, thanks to Pharr Housing Authority and San Carlos Community Center for providing locations for this program.

Future Plans

There is an enormous need to educate individuals in Hidalgo County about diabetes. Therefore, in conjunction with the Diabetes Task Force, we have decided to implement three more Si, Yo Puedo programs throughout the year of 2017. The goal is to increase the number of participants and make a difference in their health.

Expanded Food and Nutrition Education Program (EFNEP)

Developed by Melissa De Leon, Extension Agent-Expanded Food and Nutrition Education Program; Jessica Urgate, Adult Nutrition Education Associate; Amanda Rodriguez, Emilia Padron & Iris Villanueva, Adult Nutrition Education Assistants; Rachel Garcia & Martiza Sanchez, Youth Nutrition Education Associates

Supporting Texas Families with Greatest Need since 1969

The Expanded Food and Nutrition Education Program (EFNEP) helps young families and youth with limited resources-those most risk to suffer from hunger, food insecurity and the inability to connect with available support systems. EFNEP offers practical lessons in basic nutrition, food preparation, food budget management and food safety in settings convenient for the participants. EFNEP also includes a walking program for adult participants. Program graduates reflect significant, lasting improvement in eating behaviors and healthy food habits. Texas has a need for EFNEP-2014 data show that 20% of Texas families with children under the age of 18 were living below poverty, compared to 18% of U.S. families.

EFNEP Reaches Diverse Audiences in Hidalgo County

In Hidalgo County, ethnically diverse EFNEP nutrition assistants reach youth and adult groups whose principal language may be English or Spanish.

In 2016,

- 2,143 families enrolled in EFNEP
- 22, 267 youth contacts were made through the EFNEP youth program
- 79% of EFNEP participants had children under the age of 19.
- 52% of families were at or below 100% of federal poverty level.
- 83% of families enrolled in one of more food assistance programs at entry
- 99% of EFNEP adult participants were Hispanic/Latino.

Volunteer Strengthen EFNEP

In 2016, 200 adult volunteers donated 1,456 hours of work to EFNEP in Hidalgo County. At the Texas rate of $25.11/hour, this volunteerism has a minimum dollar value of $36,560. Volunteers make a difference in their own communities, and contribute to EFNEP's continued success.

EFNEP Makes a Real Difference

Adult Program:

Using "hand-on" experiences, EFNEP adult participants complete at least a six-lesson series on stretching food dollars, improving eating habits, and practicing food safety principles. As a result of participation in EFNEP, the following food and nutrition behaviors were achieved:

- 97% showed a positive change in any food group at completion. Specifically, EFNEP participants consumed 0.5 more cups of fruits and vegetables at completion, compared to entry.

- 85% improved in one or more food resource management practices such as using a list for grocery shopping.
- 93% improved in one or more nutrition practices such as using the "Nutrition Facts" on food labels to make food choices.
- 62% improved in one or more food safety practices such as thawing foods safely.
- 34% of program participants reported a positive change in physical activity.

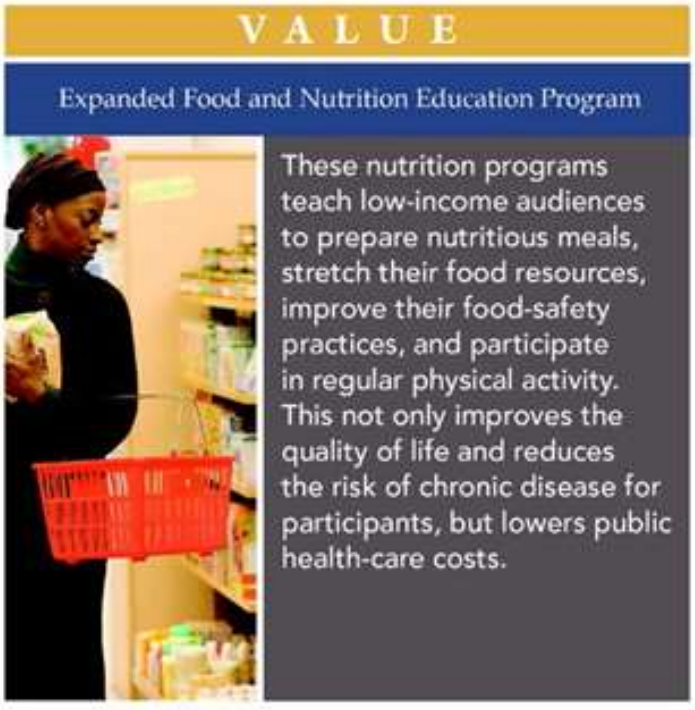
Youth Program:

The EFNEP-Youth program is directed toward low- income school –age youth. These students participate in a series of fun and educational lessons on good nutrition and food safety as part of summer programs, classroom and after-school activities. The following results show how youth participants' food behaviors improved after attending EFNEP classes.

- 79% improved ability to choose foods according to the Dietary Guidelines.
- 38% improved their safe food handling practices more often.
- 29% improved physical activity practices.

Cost-Benefits of EFNEP

Studies have shown that for every $1 spent of EFNEP, $10 were estimated to be saved in health care costs and $2 saved in food by participants. For Hidalgo County, this is $2.9 million in estimated health care costs savings and almost $595,610 in food costs.



Multi County (Hidalgo & Cameron) Child Care Conference Program

Developed by Joanne Ureste, County Extension Agent-Family Resources and Lilian Mezquida, County Extension Agent-Family & Consumer Sciences, Cameron County

Relevance

Over 60 percent of children from birth through age 6 (not yet in kindergarten) receive some form of child care on a regular basis from persons other than their parents. The Texas Workforce Commission estimates that there are over 100,000 child care providers caring for more than 760,000 children under the age of 13 in licensed or regulated child care facilities in the state of Texas. Additionally, child care is the 16th largest industry in the state, generating over 145,000 jobs and $2.3 billion in wages for Texans.

Findings from longitudinal research have clearly established the fact that quality does matter when it comes to childcare. Children who receive high-quality care (e.g., warm sensitive caregiving, well-educated child care staff, low child-to-adult ratios, small group size) develop better language, math, and social skills; exhibit fewer behavior problems; and tend to be better prepared for entrance into school. Having a well-trained child care workforce is essential to providing the high quality child care that children need to develop physically, socially, emotionally, and cognitively.

Response

On April 30, 2016, the Texas A&M AgriLife Extension Service conducted a multi-county child care provider training conference in Weslaco for 101 child care providers and directors in the Cameron County and Hidalgo County, who provide care for 539 children enrolled in 13 child care centers or family day homes. One hundred and one participants completed a written evaluation of the conference (see Table 1 for participant characteristics). A total of 606 clock hours of training were provided to child care professionals seeking to meet state mandated training requirements established by the state of Texas.

Results

One hundred and one evaluations were received at the child care conference. The majority of the child care providers were employed by a child care center (other than Head Start). There were ninety eight females and three males in attendances. The average audience was teachers whom worked for a licensed and/or registered early childhood program. The average number of years they worked in the child care profession was 7 years.

The average age of the group was 38. The majority of the group indicated they were Hispanic. 100 percent of the audiences stated they learned new information and would utilize the information to strengthen their program.

The majority of the child care provides felt the information received was accurate, easy to understand, helpful, and relevant. Overall the child care providers found the training to be very beneficial.

Child Passenger Safety Program

Developed by Joanne Ureste, County Extension Agent-Family Resources

Relevance

Traffic crashes are the leading cause of death for children age 3 and up. For children ages 14 and under, the annual cost of motor vehicle occupant-related death and injury exceeds $17.8 billion. Although safety belt and child restraint are the single-most effective tool in reducing these deaths and injuries, nationally more than half of children killed in vehicle crashes are unrestrained. Misuse and non-use of child restraints remains high.

The proper use of child safety seats reduces the risk of injury and death, leading to reduce medical costs, avoidance of lost future earnings, and improved quality of life. These economic benefits are an estimate $2,159 per child age 0 to 4 and $2,606 per child age 4 to 7 for new seat distributed, and $622 per child for seat misuse corrected with an assumed 75% continued used. Based on this formula, the total economic impacts for the 31 inspections from January 2015 through November 2016 is $46,170.

The Family Resource Program Area Committee (FR-PAC) identified locations to conduct checkup events and educational activity to promote best practice use of child safety seats and seat belts.

Response

Texas A&M AgriLife Extension Service-Hidalgo County created a partnership with Safe Riders and the Rio Grande Valley Child Passenger Safety Coalition. Safe Riders funded 36 car seats to provide to the Child Passenger Safety Seat educational events that AgriLife Extension Service-Hidalgo County would host. The Rio Grande Valley Child Passenger Safety Coalition provided 12 Certified Child Passenger Technicians. Texas A&M AgriLife Extension Service-Hidalgo County organized two Child Passenger Safety Events at Texas A&M AgriLife Extension Service-Hidalgo County and The Housing Authority of the County of Hidalgo in Weslaco, Texas. Educational programs were offer along with car seats.

The Child Passenger Safety event was advertised through news releases, media, and through information sent to area child care centers.

Results

Texas A&M AgriLife Extension Service-Hidalgo County served 60 inspections. The Family Resource Agent and the CPS Coalition taught families how to transport children correctly. There were 36 car seats in total given at the Child Passenger Safety Seat events. During the car seat passenger event, 3 children were unrestrained. Families received a new car seat because of 2 car seats were recalled, 9 were missing labels, and 16 were old/unsafe.

Money Smart Program

Developed by Joanne Ureste, County Extension Agent-Family Resources

Relevance

Recent studies indicate that people of all ages, incomes, and education levels lack basic financial knowledge and skills to ensure long-term financial stability for themselves and their families. Financial Industry Regulatory Authority conducted a study and indicated that 19% of Texans participating in the study reported spending more than their income; 30% reported having past due medical bills, 57% lack an emergency fund that would cover up to 3 months of expenses, and 39% reported using a non-bank lending product (e.g. payday loans) in the past 5 years. The Corporation for Enterprise Development reported almost 51% of Texans do not have a saving account, 20% of Texans have zero net worth, Texans have the lowest credit scores in the nation, and Texas ranks 44th in the rate of homeownership.

Many families face the constant challenge of managing limited resources to meet everyday expenses. The increasing complexity of the financial system and the lack of formal financial literacy education further burden families who are trying to make ends meet, particularly low-income families. The recent recession and slow recovery have heightened consumer awareness of the need for financial literacy education. Growing unemployment, foreclosures, and credit delinquencies have contributed to increased interest among consumers in budgeting, saving, and cutting back on spending.

The Family Resource Program Area Committee (FR-PAC) identified financial literacy topics that were needed in Hidalgo County such as creating a budget, opening a checking and savings account, investing, reading a credit report, using a credit card, and understanding various types of loans.

Response

Money Smart is a financial management program developed by the Federal Deposit Insurance Corporation (FDIC). While targeted at adults outside the financial mainstream, this curriculum can be used with adults who have low financial knowledge and skills. The curriculum helps individuals build financial knowledge, develop financial confidence, and use banking service effectively.
Money Smart has been utilized by Texas A&M AgriLife Extension Service to increase the financial literacy of a variety of Texans, recent immigrants, Head Start parents, Housing Authority residents, and participating of drug rehab programs.

Money Smart class topics include the following:

- Introduction to Bank Service
- Credit
- How to Choose and Keep a Checking Account
- How to Keep Track of Your Money
- Savings

The Family Resource Program Area Committee (FR-PAC) met quarterly throughout the year to identify issues and the target audience, decide which modules to implement, and assist with the

implementation of Money Smart. The Family Resource-PAC introduced Money Smart modules into social media to accommodate a vast audience. In addition, Money Smart modules were inputted in the Family Resources Parenting Quarterly Newsletters and were distributed by our Program Area Committee.

Implementation of Program:
Money Smart was implemented in the following locations:

- San Juan Parent Involvement Center, San Juan
- Robert E. Lee Elementary, Edinburg
- De La Vina Elementary, Edinburg
- Rowe High School, McAllen
- Thigpen-Zavala Elementary, McAllen
- Sharyland Parent Involvment Center. Mission
- Fossum Middle School, McAllen
- IDEA-Donna
- Hidalgo County Housing Authority, Weslaco
- Mid Valley Halfway Housing, Edinburg
- Head Start Professional Development Training, San Juan
- Valley View Apartments, Pharr
- San Carlos Community Center, Edinburg

Results

Evaluation documents were received from 91 participants. 45 participants completed both pre and post workshop surveys as well as end of session evaluations for sessions they attended. The pre and post surveys ask participants about their money management behaviors and attitudes about money. The pre-survey is administered at the first class and the post-survey is administered after the last class. This group of participants made impressive changes given the 4-6 week period in which they participated in classes.

One important money management best practice is the use of a budget or spending plan. At the beginning of the class, 29 participants indicated they currently used this tool. At the end of the class, 10 additional participants indicated they now used a budget or spending plan for an increase of 22%! This is a significant result that if continued, can help these participants improve their financial situations over the long-term.

The majority of participants reported ‘Always’ paying their bills on time (28 at the beginning and 30 by the end). There was movement within the group, however. Several participants made improvements including 3 participants who reported at the beginning of classes that they ‘Usually’ paid their bills on time and at the end of the classes they reported ‘Always.’ Two participants reported ‘Sometimes’ paying on time and now report ‘Usually.’ Another participant who reported ‘Sometimes,’ now reports ‘Always.’ Improvements were also made in the frequency with which participants reported saving money. At the beginning of classes, 11 participants reported saving ‘regularly’, 28 ‘as often as I can,’ and 6 ‘never.’ By the end of classes, 16 reported ‘regularly,’ 26 ‘as often as I can,’ and 2 ‘never.’ There was movement among the categories including 6 participants who moved from ‘as often as I can’ to ‘regularly,’ 4 who moved from ‘never’ to ‘as often as I can,’ and one who moved from ‘never’ to ‘regularly.’

Less than half of participants had seen a copy of their credit report (17 of the 45). This number did not increase by the end of the classes. Participants in future classes could be encouraged to complete this exercise as part of the class given the importance of checking the accuracy of information in a credit report.

The pre and post surveys ask participants 4 questions to gage their attitudes about and confidence in using money. Participants indicated improvements in all 4 questions. At the beginning of the class, 31 participants agreed with the statement 'I am in control of my money.' By the end of class, 39 participants agreed, six participants who weren't sure at the beginning agreed by the end of the classes. By the end of classes, thirty-nine participants agreed that they understood their use of money enough to make a budget – an increase from 29 at the beginning of the class. This is consistent with the 39 participants who said they now had a budget.

The average age of the group was 41. The majority of the group indicated their monthly household income was less than $1500. More than half of the group had at least graduated from high school or college – 15 high school graduates, 11 college graduates and an additional 3 with some college. The remainder of the group had less than a high school education.

All participants in the classes increased their knowledge of the concepts taught as shown in the following table (numbers in parentheses are the maximum possible score).

Module Title	Mean Before	Mean After
Keep it Safe	10.97 (24) n=34	21.42 (24)
Loan to Own	13.93 (24) n=29	22.51 (24)
Charge It Right	15.25 (28) n=32	25.33 (28)
Money Matters	11.6 (20) n=38	19.17 (20)
Pay Yourself First	16.09 (24) n=33	22.87 (24)
To Your Credit	16.32 (32) n=38	28.97 (32)
Your Own Home	13.07 (28) n=30	24.69 (28)

Strengthening Families Program

Developed by Joanne Ureste, County Extension Agent-Family Resources

Relevance

Positive parenting practices play an essential role in children development and later life success. Parents are responsible for several key caregiving tasks to help ensure that proper physical, cognitive, social, and emotional development occurs for their children. Parent is affected by many aspects of life including parent characteristics (e.g. personality, cognitive abilities, health, age, and level of education); child characteristics (e.g. temperament, developmental progress, mental health); family economic resources, and family structure (e.g. single, two-parent, grandparents raising grandchildren). Educating families about positive parenting practices and healthy family functioning is essential to improving overall child/family health and well-being. Research indicates that parents who are warm and affectionate, monitor children activities and provide consistent discipline practices that offer children guidance without harsh punishment are related to positive outcomes for children including academic competence, high self-esteem, positive peer relations, and fewer child behavior problems. Positive parenting practices in time of stress, such as financial hardship, divorce, or family illness-can often act as a buffer against such stressors and help build children coping and adjustment skills. In contrast, ineffective or dysfunctional parenting practices can lead to poor outcome for children, including behavioral problems and diagnosed mental health conditions.

The Family Resource Program Area Committee (FR-PAC) identified potential partnership to collaborate with such as the Department of Hidalgo County Adult Probation and Child Protective Services.

Response

The Strengthening Family program is a six week program designed for parents of school-aged children to strengthen the relationship between parents and their children and to equip parents with the skills they need to effectively raise their children. The program was offered in the morning and evening at the Texas A&M AgriLife Extension-Hidalgo County office.

The Family Resource Program Area Committee (FR-PAC) met quarterly throughout the year to identify issues and the target audience and assist with the implementation of Strengthening Families. Texas A&M AgriLife Extension was able to create a partnership with the Department of Hidalgo County-Adult Probation. The Department of Hidalgo County-Adult Probation clients were given the opportunity to enroll in the Strengthening Family Program. In addition the FR-PAC was able to attend the 332nd District Court, Judge Mario Ramirez courtroom, to discuss the program for referral services.

In addition, Strengthening Families modules were inputted in the Family Resources Parenting Quarterly Newsletters and were distributed by our Program Area Committee.

Results

There were eleven participants in the program, two females and nine males. The majority of the participants had less than a high school education. More than fifty percent were separated and had an annual household income from $0.00 to $9,999. The average age of the group was 31. All participants stated, after taking the class they have helped them be better parents. Fifty percent saw

good progress in their children's behavior. Some of the changes the participants made after attending the program are as follows:

- Control Temper
- Listening to others
- Organize family meetings
- Communicate better

Over the entire program has been impactful and beneficial to the participants.

4-H Grows Expansion Program

Developed by Kimberly Guillen, County Extension Agent – 4-H & Youth Development

Relevance

The 4-H Management and 4-H Membership Expansion plan includes oversight of the 4-H and youth development program which includes 4-H clubs/groups, Club Managers, volunteer leaders, and the Advisory Committee. In addition, it includes the implementation of marketing and promotion efforts aimed at recruitment of new 4-H volunteers and members as well as other efforts to expand 4-H programming including community, project, and SPIN club development. This plan also includes management and oversight of projects, activities, and events that enhance the 4-H members experience and contribute to their development in the areas of life skills, responsibility, leadership and citizenship.

The goal is to provide 4-H members, club managers and volunteer leaders with trainings and educational programming that empowers them to lead in all aspects of the program. This includes: successful community club involvement and growth, implementation and supervision of meaningful projects and activities, and to provide and support appropriate recognition for 4-H youth. Enrollment and growth goals for the 2016 County 4-H program were outlined as follows:

- Organized 4-H community clubs: 25
- Organized 4-H club enrollment: 600 members
- Enrolled & Screened 4-H volunteers: 90
- A minimum of one Special Interest club

Response

The County Extension Agent worked with the 4-H Council, Adult Leaders, Advisory Committee, Volunteers and other partners. A variety of promotional and educational methods were used to manage and implement a successful County 4-H program. These methods included (but are not limited to): face to face individual and group meetings such as workshops, trainings, contests and recognition events; written communication such as newsletters; media such as radio and electronic communication such as email, newsletters, and social media.

With the cooperation and collaboration of the County Council, Ambassadors, Club Managers, 4-H members, and Project Leaders, a Hidalgo County 4-H promotional video was produced which has received over 12,000 views and reached 30,877 people on social media.

Results

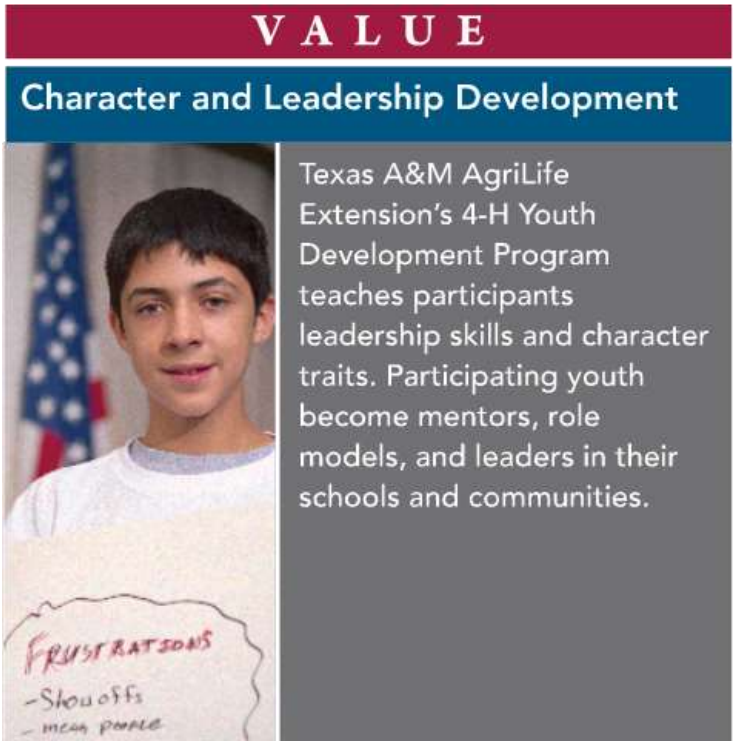
The results of the focus on growing 4-H in Hidalgo County, are as follows:

- Organized 4-H community clubs: 25
- Organized 4-H club enrollment: 645 members
- Enrolled & Screened 4-H volunteers: 107

- Two Certified Veterinary Assistant groups have been formed involving 32 youth
- New projects now available to Hidalgo County 4-H'ers include: Robotics and Rifle Shooting Sports

Acknowledgements

Several people are responsible for helping grow the 4-H program in Hidalgo County. Thank you to all of the Club Managers and Adult Project Leaders and Volunteers, 4-H parents, all of the Hidalgo County Agents and support staff, Luis Saldana – District 12 4-H Specialist, and all community members who continue to support the program.



4-H Food Challenge Program

Developed by Kimberly Guillen, County Extension Agent – 4-H & Youth Development

Relevance

With Texas being the 19th most obese state in the nation and the percentage of the food budget spent on away-from-home food increasing steadily, healthy lifestyles programming is critical. The 4-H Food Challenge is a grass-roots effort developed by County Extension Agents to address the need for a highly-charged foods experience that teaches youth about making healthy food choices and how to prepare healthy foods. In the Food Challenge, youth work together to create a dish using a predetermined set of ingredients. From these ingredients, 4-H members must identify, prepare and then present information related to the preparation process, nutritional value, serving size and cost of the dish. Throughout this process, 4-H members are applying the knowledge and skills gained through participation in the 4-H foods and nutrition project, demonstrating their culinary and food safety skills, and continuing to learn about making healthier food choices.

The goal of implementing the 4-H Food Challenge is to give youth and volunteers an opportunity for increasing knowledge related to foods and nutrition and being able to apply the knowledge and skills gained through project experiences. Specific goals include: provide opportunities for participants to exhibit their knowledge and skills when preparing and presenting a dish, equip youth with knowledge and resources to make healthy food choices, provide opportunities for participants to learn from other team members, promote teamwork, give participants opportunities for public speaking, and provide leadership opportunities for youth.

In Hidalgo County, 25 4-H youth will participate in the 2016 Food Challenge.

Response

The agent providing leadership will work with a task force to determine the educational plan related to the 4-H Food Challenge, which includes volunteer training and youth learning experiences.

Volunteers will gain knowledge and skills in foods and nutrition, the food challenge, and how to work with youth, which will be put to use when training and providing educational experiences for youth. The youth will participate in activities that will help them gain the knowledge and skills needed to have a quality, educational experience in the 4-H Food Challenge.

Learning activities will focus on building a healthy plate, basic cooking skills and food preparation methods, food safety, nutritional value of foods and function of nutrients, cost analysis, and how to alter recipes to enhance nutritional value. These learning experiences may be in the form of hands-on learning experimentation, demonstrations, tours, observations, and study materials.

The task force (which included Agents, 4-H club managers, project leaders, and parents) decided that the most crucial need for youth was to learn basic cooking skills. Two workshops were designed to teach the basics of cooking including: cooking with a skillet, boiling food, knife skills, and food safety.

Another workshop was designed to teach My Plate and interviewing skills. Mock interviews were conducted as members were prepared for Food Challenge interviews. Youth were able to practice speaking in front of others.

Results

- 40 4-H youth participated in the 2016 Hidalgo County 4-H Food Challenge
- 22 4-H youth participated in learning workshops
- 15 youth participated in District competition
- Youth gained knowledge in cooking, nutrition, and food safety
- 5 new/additional adult volunteers were utilized and learned about the 4-H Food and Nutrition project as well as Food Challenge

Acknowledgements

All project leaders, club managers, and 4-H parents involved in the food and nutrition program were instrumental in the success of the implementation of this plan. Hidalgo County AgriLife faculty including Esly Reyes and Yolanda Rios helped with the planning and educational portions as well.







HEALTHY SOUTH TEXAS IN HIDALGO COUNTY

Using the proven agriculture-based Extension model, Healthy South Texas is creating a new crop of health educators to engage Texans where they live and work to take control of their own health and wellness. Our comprehensive, multi-disciplinary team engages families, enhances education, promotes behavior change, and improves quality of medical care and health outcomes.

HEALTHY SOUTH TEXAS COALITION MEMBERS

Our county recruited, trained, and mobilized a community Healthy South Texas coalition, identifying the most critical health needs in our community and helping assess the best way to address those needs.

14 COALITION MEMBERS REPRESENTING:	
City/County/State Government (2)	Education (2)
Community Organization (7)	Medical Professional (3)

HEALTHY SOUTH TEXAS

Healthy South Texas

WALK ACROSS TEXAS!

OVER THE COURSE OF THE 8 WEEK PROGRAM, 428 PARTICIPANTS WALKED A TOTAL OF 57,495 MILES.

348 adult participants walked 57,440 miles and 80 student participants walked 55 miles.

In HST Year 1, including the cost of lost wages, the total potential economic impact for Hidalgo County WAT! Participants is approximately $2,516,482.

In Year 1, the average weekly mileage of WAT! Participants in Hidalgo County improved 3 miles from week 1 to week 8.

It is estimated that 44 of the adults who complete the WAT! Program could avoid or delay the onset of diabetes through increased physical activity.



Ribbon cutting during Walk Across Texas kick-off.

EMPOWERING YOUTH

Healthy South Texas Youth Ambassadors are local, high-school age youth recruited by agents and trained to serve as a community health and wellness advocate. These ambassadors also assist county Extension agents in providing leadership to the youth components of Healthy South Texas.

- Ten Hidalgo County youth have been selected through the application process and trained. All ambassadors are Servsafe food handler trained and certified in order to provide support and conduct food demonstrations at Dinner Tonight and various health fairs throughout the county

Youth Ambassadors are recognized during Hidalgo County Commissioners Court meeting.



DINNER TONIGHT/NUTRITION EDUCATION

Healthy eating begins at home and with Texas A&M AgriLife Extension Services Dinner Tonight! program, we make it easier for people to plan and cook healthy meals. Recognizing the challenges of busy families, this program uses face-to-face cooking schools and an all-access web-site to teach cooking tips and techniques, provide reliable nutrition information, address food safety concerns, and give guidance on food preparation.

Hidalgo County hosted a Dinner Tonight Healthy Cooking School with 280 participants on July 28, 2016. Cooking school participants indicated high levels of satisfaction with the event:

- 93% completely or mostly satisfied with program.
- 92% extremely likely or likely to make the dishes demonstrated.
- 84% first AgriLife program attended.



Dinner Tonight features healthy recipes during a healthy cooking school.

OTHER LOCAL PROGRAMS

- Provide leadership and educational programming for Si Yo Puedo diabetes education with 26 participants. 73% reported never having received diabetes education prior to class and average A1c scores improved over 3 months.
- Over 150 students participated in the Learn, Grow, Eat & GO! curriculum in schools.
- 80 participants are actively learning about nutrition and gardening through 8 community gardens.
- 23 Master Gardener workshops have reached over 1,250.

Extension Education in Hidalgo County

Personnel

Extension Agents:

Andrea Valdez, B.S., M.P.H	County Extension Agent-Family & Consumer Sciences, Hidalgo County Coordinator
Brad Cowan, B.S., M.A	County Extension Agent-Agriculture & Natural Resources
Vidal Saenz, B.S., M.S	Cooperative Extension Agent-Farm Advisor
Joanne Ureste, B.S.	County Extension Agent-Family Resources
Melissa De Leon, B.S	Extension Agent-Expanded Food & Nutrition Education Program
Ashley Gregory, B.S., M.S	County Extension Agent-Horticulture
Kimberly Guillen, B.S.	County Extension Agent- 4-H & Youth Development
Esly Reyes, B.S	Extension Agent Assistant-Family & Consumer Sciences/4-H

Program Support Staff:

Frances Flores	Better Living for Texans Program Assistant
Yolanda Rios	Better Living for Texans Program Assistant
Monica Flores	Community Outreach Program Specialist
Linda Ramirez	Program Coordinator
Iliana Parras	Family & Consumer Science Program Assistant
Illeana Garcia, B.S., M.S.	Working on Wellness Grant Program Assistant
Roy Custodio, M.S.	Growing and Nourishing Healthy Communities Program Assistant
Ricardo Carranza. M.S	Growing and Nourishing Healthy Communities Program Assistant
Andrea Torres- Barragah, M.S	Growing and Nourishing Healthy Communities Program Assistant
Nora Linda Cruz	Administrative Assistant III
Elena Almendarez	Administrative Assistant II
Luz Sena	Administrative Assistant II

Contact Us

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AI-58871 **Auditor's Office** **20. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Maria Medina, AUDITOR'S OFFICE

Department: AUDITOR'S OFFICE

Information

CAPTION

Requesting approval to submit the "Pro Rata Tobacco Settlement Distribution County Expenditure Statement - 2017" to the Department of State Health Services, and authorize County Judge to execute the report.

BACKGROUND

Fiscal Impact

Attachments

report

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/08/2017 01:37 PM
Linda Flores	Veronica Ortiz	03/17/2017 09:23 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Maria Medina		Started On: 03/07/2017 10:05 AM
Final Approval Date: 03/17/2017		

Pro Rata Tobacco Settlement Distribution

County Expenditure Statement - 2017

Ray Eufracio, CPA
County Auditor

Table of Contents

A. Pro Rata Tobacco Settlement Distribution County Expenditures Statement – 2017

B. Unreimbursed Jail Health Care (Base numbers for expenditure category B)

C. Additional Unreimbursed Personal Health Care Services Provided to the General Public (Base numbers for expenditure category C)

D. Certifications

A. PRO RATA TOBACCO SETTLEMENT DISTRIBUTION COUNTY EXPENDITURE STATEMENT – 2017

TOTAL ALLOWABLE EXPENDITURES = $16,485,109.77

TEXAS
Department of
State Health Services

PRO RATA TOBACCO SETTLEMENT DISTRIBUTION
COUNTY EXPENDITURE STATEMENT – 2017

Return completed Expenditure Statement by no later than, March 31, 2017
www.dshs.state.tx.us/tobaccosettlement
Direct your questions to: Joy Counce (512)776.2591 or DSHSTobacco@dshs.state.tx.us

Name of County: Hidalgo County, Texas

Provide **calendar year 2016 unreimbursed health care expenditures** for your *county* within the categories designated below. Information to help you prepare your statement follows:

The *Agreement Regarding Disposition of Settlement Proceeds* defines **unreimbursed health care expenditures** for counties not located wholly within a hospital district as "*those actual expenditures made by a political subdivision which are directly attributable to the provision of health care services to the general public, either directly or by contract or agreement with a third party provider, and for which no reimbursement is made by or expected from any third party source or fund.*"
Calculation of unreimbursed health care expenditures are "*all unreimbursed amounts, including unreimbursed jail health care, expended by such county for health care services to the general public during that year, *plus 15% of the total.*"
*General administrative and overhead costs of the county not directly related to the provision of health care services are contemplated in the 15% added.

Allowable Expenditure Categories:

A. Unreimbursed county indigent health care services: $ 1,318,506.94

B. Unreimbursed jail health care:
(See Footnote 1 on pg. 2 of 4)
$ 1,985,828.73
(Attach Methodology Worksheet)

C. Additional unreimbursed personal health care services provided to the general public:
(See Footnote 2 on pg. 2 of 4)
$ 11,030,542.39
(Transfer from Category C Expenditure Worksheet)

D. Other allowable expenditures:
(This category applies **ONLY** when a *Non-Hospital District Public Hospital Expenditure Statement,* regarding sale or lease of a public health care facility, applies).
(See Footnote 3 on pg. 2 of 4)
$ _____
(Transfer total from pg. 2 of the Non-Hospital District Expenditure Statement)

Total Expenditures Claimed for 2016:
Categories A+B+C+D = $
$ 14,334,878.06

Total Expenditures claimed (above) multiplied by 1.15 (Administrative and Overhead) equals Total Allowable Expenditures for 2016 (write Total below)
$ 16,485,109.77

Pub. No. F29-12280
Revised 10/2016

COUNTY EXPENDITURE STATEMENT - 2016
Total Allowable Expenditures:(Expenditure Categories A+B+C+D)

(1) Health care clinic, laboratory, and case management services.	$	739,693.06
(2) Dental care services	$	4,444.57
(3) Outreach and prevention efforts related to tobacco use, including but not limited to media campaigns, education, counseling, and production and distribution of promotional literature.	$	-
(4)Other health care outreach and prevention efforts, including but not limited to media campaigns, education, counseling, and production and distribution of promotional literature. Typical target areas for these efforts include health hazards affecting the general public.	$	70,776.08
(5) Medical transportation	$	73,602.50
(6) Behavioral or psychiatric health care services	$	1,135,672.00
(7) Capital expenditures for health care services	$	-
(7a) Employee salary and benefits to the extent the employees is engaged in patient health care or other health care services.	$	1,143,880.70
(8) Overhead costs for a health care facility	$	5,326,805.69
(9) Emergency medical services	$	3,095.02
(10) Medical supplies or equipment used for the provision of health careservices to the general public.	$	336,908.44
(11) Other services provided by the county which are also within the scope of services that hospital districts are authorized by law to provide.These will typically be diagnostic and treatment services. UPL monies provided to hospitals to provide indigent services.	$	5,500,000.00
Total	$	14,334,878.06

Tobacco Settlement Distribution Proceeds Program	Indigent Health	Medical Supplement Program	Health Department	Sheriff's Department	Juvenile Probation	Tropical Texas Center	The Easter Seals Society	Children's Advocacy Center of Hidalgo County, Inc	Texas AgriLife Cooperative Extension	YEAR 2016 TOTALS
(1) Health care screening, laboratory, and health care case management services.	$ 119,091.65		$ 812.50	$ 419,510.80	$ 200,278.11	$ -	$ -	$ -	$ -	$ 739,693.06
(2) Oral/dental health care services.			$ -	$ 155.00	$ 4,289.57	$ -	$ -	$ -	$ -	$ 4,444.57
(3) related to tobacco use, including but not limited to media campaigns, education, counseling, and production and distribution of promotional literature.	$ -		$ -	$ -	$ -	$ -	$ -	$ -		$ -
(4) Other health care outreach and prevention efforts, including but not limited to media campaigns, education, counseling, and production and distribution of promotional literature. Typical target areas for these efforts include health hazards affecting the general public.	$ -			$ -	$ -	$ -	$ -	$ -	$ 70,776.08	$ 70,776.08
(5) Medical transportation, including transportation to and from medical appointments.	$ -		$ -	$ 73,602.50	$ -	$ -	$ -	$ -	$ -	$ 73,602.50
(6) Behavioral health care services.	$ -		$ -	$ 77,205.00	$ -	$ 1,058,467.00	$ -	$ -	$ -	$ 1,135,672.00
(7) Capital expenditures for direct health care services, such as construction of ambulance facilities or clinics.	$ -		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
(7a) Employee salary and benefits to the extent the employees is engaged in patient health care or other health care services.				$ 1,143,880.70				$ -		$ 1,143,880.70
(8) Overhead costs for a health care facility.	$ 1,199,415.29		$ 3,767,568.81	$ 11,392.48	$ 292,290.62	$ -	$ 16,938.49	$ 39,200.00	$ -	$ 5,326,805.69
(9) Emergency medical services.	$ -		$ -	$ 3,095.02	$ -	$ -	$ -	$ -	$ -	$ 3,095.02
(10) Medical supplies or equipment used for the provision of health care services to the general	$ -		$ 27,680.40	$ 256,987.23	$ 52,240.81	$ -	$ -	$ -	$ -	$ 336,908.44
(11) Other services provided by the county which are also within the scope of services that hospital districts are authorized by law to provide. These will typically be diagnostic and treatment services for individuals.	$ -	$ 5,500,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,500,000.00
TOTALS	$ 1,318,506.94	$ 5,500,000.00	$ 3,796,061.71	$ 1,985,828.73	$ 549,099.11	$ 1,058,467.00	$ 16,938.49	$ 39,200.00	$ 70,776.08	$ 14,334,878.06

B. UNREIMBURSED JAIL HEALTH CARE = $1,985,828.73

(Base numbers for expenditure category B)

Unreimbursed jail health care expenditures were based on itemized health care expenditures for prisoners over the entire year, subtracting any reimbursement received from entities outside our political subdivision to cover health care expenditures for individual prisoners.

Category B Expenditure Worksheet

(1) Health care clinic, laboratory, and case management services.		$ 419,510.80
(2) Dental care services		$ 155.00
(3) Outreach and prevention efforts related to tobacco use, including but not limited to media campaign, education, counseling, and production and distribution of promotional literature.		$ -
(4) Outreach and prevention efforts related to tobacco use, including but not limited to media campaign, education, counseling, and production and distribution of promotional literature. Typical target areas for these efforts include health h		$ -
(5) Medical transportation		$ 73,602.50
(6) Behavioral or psychiatric health care services		$ 77,205.00
(7) Capital expenditures for health care services		$ -
(7a) Employee salary and benefits to the extent the employees is engaged in patient health care or other health care		$ 1,143,880.70
(8) Overhead costs for a health care facility		$ 11,392.48
(9) Emergency medical services		$ 3,095.02
(10) Medical supplies or equipment used for the provision of health careservices to the general public		$ 256,987.23
(11) Other services provided by the county which are also within the scope of services that hospital districts are authorized by law to provide.These will typically be diagnostic and treatment services. (Describe below)		$ -
Total Expenditures for Sheriff's Department		$ 1,985,828.73

C. ADDITIONAL UNREIMBURSED PERSONAL HEALTH CARE SERVICES PROVIDED TO THE GENERAL PUBLIC

$11,030,542.39

EXPENDITURE STATEMENTS

Category C Expenditure Worksheet

On the appropriate line below, enter the base numbers for your county's additional unreimbursed personal health care services provided to the general public during calendar year 2016. Any unreimbursed expenditures that you made from a trust fund or reserve account for the provision of health care services may also be included below.

(1) Health care clinic, laboratory, and case management services.	**$ 201,090.61**
(2) Dental care services	**$ 4,289.57**
(3) Outreach and prevention efforts related to tobacco use, including but not limited to media campaigns, education, counseling, and production and distribution of promotional literature.	$ -
(4) Other health care outreach and prevention efforts, including but not limited to media campaigns, education, counseling, and production and distribution of promotional literature. Typical target areas for these efforts include health hazards affecting the general public.	**$ 70,776.08**
(5) Medical transportation	$ -
(6) Behavioral or psychiatric health care services	**$ 1,058,467.00**
(7) Capital expenditures for health care services	$ -
(8) Overhead costs for a health care facility	**$ 4,115,997.92**
(9) Emergency medical services	$ -
(10) Medical supplies or equipment used for the provision of health care services to the general public.	**$ 79,921.21**
(11) Other services provided by the county which are also within the scope of services that hospital districts are authorized by law to provide. These will typically be diagnostic and treatment services. Describe:	**$ 5,500,000.00**
(12) Intergovernmental Transfer Payment(s) made by a county to a hospital(s) in their jurisdiction, **in exchange for indigent health care services**. NOTE: An *Indigent Care Affiliation Agreement* between the county and hospital(s) must also be provided to support IGT payment eligibility	$ -

TOTAL FOR CATEGORY C $ 11,030,542.39

(Transfer total to Page 1, Category C)

Pub. No. F29-12280
Revised 10/2016

Tobacco Settlement Distribution Proceeds Program
County Expenditure Statement 2016
Additional Unreimbursed Personal Health Care Services Provided To The General Public

	Health Department	Medical Supplemental Program	Juvenile Probation	Tropical Texas Center	The Easter Seals Society	Children's Advocacy Center of Hidalgo County, Inc	Texas AgriLife Cooperative Extension	YEAR 2016 TOTALS
(1) Health care screening, laboratory, and health care case management services.	$ 812.50	$ -	$ 200,278.11	$ -	$ -	$ -		$ 201,090.61
(2) Oral/dental health care services.	$ -	$ -	$ 4,289.57	$ -	$ -	$ -		$ 4,289.57
(3) Outreach and prevention efforts related to tobacco use, including but not limited to media campaigns, education, counseling, and production and distribution of promotional literature.	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
(4) Other health care outreach and prevention efforts, including but not limited to media campaigns, education, counseling, and production and distribution of promotional literature. Typical target areas for these efforts include health hazards affecting the general public.	$ -	$ -	$ -	$ -	$ -	$ -	$ 70,776.08	$ 70,776.08
(5) Medical transportation, including transportation to and from medical appointments.	$ -	$ -	$ -	$ -	$ -	$ -		$ -
(6) Behavioral health care services.	$ -	$ -	$ -	$ 1,058,467.00	$ -	$ -		$ 1,058,467.00
(7) Capital expenditures for direct health care services, such as construction of ambulance facilities or clinics.	$ -	$ -	$ -	$ -	$ -	$ -		$ -
(8) Overhead costs for a health care facility.	$ 3,767,568.81	$ -	$ 292,290.62	$ -	$ 16,938.49	$ 39,200.00		$ 4,115,997.92
(9) Emergency medical services.	$ -	$ -	$ -	$ -	$ -	$ -		$ -
(10) Medical supplies or equipment used for the provision of health care services to the general public.	$ 27,680.40	$ -	$ 52,240.81	$ -	$ -	$ -		$ 79,921.21
(11) Other services provided by the county which are also within the scope of services that hospital districts are authorized by law to provide. These will typically be diagnostic and treatment services for individuals.	$ -	$ 5,500,000.00	$ -	$ -	$ -	$ -		$ 5,500,000.00
TOTALS	$ 3,796,061.71	$ 5,500,000.00	$ 549,099.11	$ 1,058,467.00	$ 16,938.49	$ 39,200.00	$ 70,776.08	$ 11,030,542.39

D. CERTIFICATIONS

County Judge

County Auditor

Human Services/Indigent Health

Sheriff's Department

Health Department

Juvenile Probation

Tropical Texas Center

Easter Seal Society

Texas Cooperative Extension

Children's Advocacy Center

1. Unreimbursed jail health care expenditures may be calculated using either of the following two methods. The total may include unreimbursed health care expenditures for juveniles held under court commitment, at county expense. Indirect costs must be excluded from the calculation.

(1) determine the total expenditures based on itemized health care expenses for prisoners over the entire year, subtracting any reimbursement received from entities outside your political subdivision to cover health care expenses for individual prisoners; or

(2) determine the total expenditures based on itemized health care expenses for the entire year and apply the following formula:

$$\text{Total Prisoner Health Care} \times \frac{\text{Unreimbursed Jail Population}}{\text{Total Jail Population}} = \text{Unreimbursed Health Care Expenses}$$

Attach a worksheet indicating which of the above methods you used to calculate unreimbursed jail health care expenditures, as well as the base numbers for your calculation.

---

2. Expenditures in Category C must be for services such as a hospital district may provide. These are typically diagnostic and treatment services for individuals. Health care education, outreach, screening, laboratory services, counseling, and case management may be counted. Environmental services, such as mosquito control, water testing, and septic tank inspection may not be counted. Expenditures for population-based services not involving direct contact with an individual health care recipient, such as restaurant inspection, must also be excluded.

Complete the Attachment (page 4 of 4 of this expenditure statement) indicating the base numbers for your calculation of Category C expenditures.

---

3. Note the following additional provision in the tobacco settlement agreement, Section 5.B (4):

"To the extent not already included, a political subdivision shall be eligible to include expenditures from the political subdivision reserve funds and other expenditures; to the extent they are verifiable, which are attributable to proceeds from the **sale or lease of public health care facilities** To the extent that proceeds from the sale or lease of public health care facilities are represented by contractually obligated health care services for indigent residents of the political subdivision performed by the purchaser or lessee, such services shall be valued as if they had been reimbursed at Medicaid rates."

If the above provision is applicable to your political subdivision, complete and attach the ***Non-Hospital District Public Hospital Expenditure Statement*** *indicating the base numbers for your calculation of Category D expenditures.*

The deadline for submission of expenditure statement and supporting documents to the Department of State Health Services (DSHS) is March 31, 2017. The target date for payment by the Comptroller of Public Accounts to the political subdivisions, based on this information, is no later than April 30, 2017.

The information submitted on Expenditure Statement and Supporting Documents is subject to audit by the State of Texas. If ineligible expenditures are identified through an audit following payment to a political subdivision, the ineligible amount may be deducted from the subsequent year's payment to that political subdivision.

This is to certify that the above expenditures are eligible for pro rata payment in accordance with the Agreement Regarding Disposition of Settlement Proceeds between the State of Texas and American Tobacco Company, et al.

RECEIVED BY COUNTY AUD
2017 FEB 9 AM 11 17

Name of County: Hidalgo County Health & Human Services Department

Name of Certifying Officer: Eduardo Olivarez

Certifying Officer's Title: Chief Administrative Officer

Certifying Officer's Signature: _____ Date: 2-8-2017

Telephone Number: (956_) _383-6221_ Email: ___eddie.olivarez@hchd.org_____

The deadline for submission of expenditure statement and supporting documents to the Department of State Health Services (DSHS) is March 31, 2017. The target date for payment by the Comptroller of Public Accounts to the political subdivisions, based on this information, is no later than April 30, 2017.

The information submitted on Expenditure Statement and Supporting Documents is subject to audit by the State of Texas. If ineligible expenditures are identified through an audit following payment to a political subdivision, the ineligible amount may be deducted from the subsequent year's payment to that political subdivision.

This is to certify that the above expenditures are eligible for pro rata payment in accordance with the Agreement Regarding Disposition of Settlement Proceeds between the State of Texas and American Tobacco Company, et al.

Name of County: Hidalgo

Name of Certifying Officer: J. E. "Eddie" Guerra

Certifying Officer's Title: Hidalgo County Sheriff

Certifying Officer's Signature: _____ Date: 03/08/17

Telephone Number: (956) 393-6002 Email: sheriff.guerra@hidalgoso.org

STATEMENTS THAT DO NOT INCLUDE A SIGNATURE WILL NOT BE ACCEPTED

To submit your completed signed expenditure statement and documents, select a method:

Hand Delivery - must be received no later than 5:00 p.m., March 31, 2017
Department of State Health Services
Funds Coordination & Management
Attn: Joy Counce, MC 4501
1100 W 49th Street, Austin, TX 78756

Fax: (512)776.7774 – must reflect a date no later than 11:59 p.m. CST, March 31, 2017, Attn: Ms. Counce

Email: DSHSTobacco@dshs.state.tx.us – must reflect a date no later than 11:59 p.m. CST, March 31, 2017

Mail or **Ship** (via a commercial mail service) **- the postmark must reflect a date no later than 11:59 p.m. CST, March 31, 2017**
Department of State Health Services
Funds Coordination & Management
Attn: Joy Counce, MC 4501
PO Box 149347, Austin, Texas 78714-9347

Pub. No. F29-12280
Revised 01/2017

Pro Rata Tobacco Settlement Distribution County Expenditure Statement – 2017

The deadline for submission of expenditure statement and supporting documents to the Department of State Health Services (DSHS) is March 31, 2017. The target date for payment by the Comptroller of Public Accounts to the political subdivisions, based on this information, is no later than April 30, 2017.

The information submitted on Expenditure Statement and Supporting Documents is subject to audit by the State of Texas. If ineligible expenditures are identified through an audit following payment to a political subdivision, the ineligible amount may be deducted from the subsequent year's payment to that political subdivision.

This is to certify that the above expenditures are eligible for pro rata payment in accordance with the Agreement Regarding Disposition of Settlement Proceeds between the State of Texas and American Tobacco Company, et al.

Name of County: Hidalgo County

Name of Certifying Officer: Israel "Buddy" Silva, Jr.

Certifying Officer's Title: Chief Juvenile Probation Officer

Certifying Officer's Signature: _____ Date: 3-10-17

Telephone Number: (956) 587-6200 Email: buddy.silva@jpd.co.hidalgo.tx.us

STATEMENTS THAT DO NOT INCLUDE A SIGNATURE WILL NOT BE ACCEPTED

To submit your completed signed expenditure statement and documents, select a method:

Hand Delivery - must be received no later than 5:00 p.m., March 31, 2017
Department of State Health Services
Funds Coordination & Management
Attn: Joy Counce, MC 4501
1100 W 49th Street, Austin, TX 78756

Fax: (512)776.7774 – must reflect a date no later than 11:59 p.m. CST, March 31, 2017, Attn: Ms. Counce

Email: DSHSTobacco@dshs.state.tx.us – must reflect a date no later than 11:59 p.m. CST, March 31, 2017

Mail or **Ship** (via a commercial mail service) **- the postmark must reflect a date no later than 11:59 p.m. CST, March 31, 2017**
Department of State Health Services

TROPICAL
TEXAS BEHAVIORAL HEALTH
P.O. Drawer 1108 • 1901 South 24th Avenue
Edinburg, Texas 78540
(956) 289-7000

CERTIFICATION

This is to certify that Tropical Texas Behavioral Health, located at 1901 S. 24th Ave., Edinburg, Texas 78539 received $1,058,467 from Hidalgo County for health care expenditures. All funds stated above were disbursed during the calendar year ended December 31, 2016.

We served a total of 13,387 persons during the year ended December 31, 2016. Supporting documentation is attached.

W. Terry Crocker
Chief Executive Officer
2/9/17
(Date)

Patricia Garza
Chairperson of the Board
2/8/17
(Date)

Attest:
Oscar Rodriguez
Secretary
2/9/17
(Date)

easterseals
taking on disability together

The Easter Seal Society

CERTIFICATION

This is to certify that Hidalgo County pays the electricity expenses for The Easter Seal Society located at 1217 W. Houston Ave., McAllen, Texas 78501. The County paid $16,938.49 for electricity for the year ended December 31, 2016. The facility is used to provide health care services for disabled children. The County pays the electricity expense directly to Reliant Energy Solutions.

We served 2,500 children during the year ended December 31, 2016. Supporting documentation is attached.

Patricia Rosenlund
(Signature)

PATRICIA ROSENLUND, Executive Director
(Print Name/Title)

2-20-17
(Date)

956 631-9171
(Phone No.)

Hidalgo County
410 N. 13th Avenue
Edinburg, TX 78541
Office: (956) 383-1026
Fax: (956) 383-1026
http://hidalgo.agrilife.org

TEXAS A&M AGRILIFE EXTENSION

CERTIFICATION

This is to certifiy that the Texas A&M AgriLife Extension Office, located at 410 N. 13th Ave., Edinburg, TX 78541 received **$70,776.08** from Hidalgo County for outreach and prevention efforts related to health care services provided to the general public. All funds stated above were disbursed during the calendar year ended December 31, 2016.

We served **277,264** people during the year ended December 31, 2016. Supporting documentation is attached.

Andrea Valdez
Signature

Andrea Valdez, County Coordinator
Name / Title

3/7/17
Date

(956) 383-1026
Phone

ATTEST:
Nora Linda Cruz
Signature

Nora L. Cruz, Administrative Assistant III
Name of Assistant

3/7/17
Date

2017 MAR 17 PM
COUNTY
RECEIVED

The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife.
The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating

CHILDREN'S ADVOCACY CENTER OF HIDALGO COUNTY, INC.

525 W. Wisconsin Rd. • Edinburg, Texas 78539 • Phone (956) 287-9754 • Fax (956) 287-9764

WWW.CACHIDALGO.ORG

BREAKING THE CYCLE OF ABUSE, ONE CHILD AT A TIME

Executive Officers:

Lorena Castillo, President
Miquel Villarreal, V.P.
Rick Guerrero, Treasurer
Dr. Carolina Huerta, Secretary

Tina Martin, Past President

Hidalgo County Board Members:

Ricardo Rodriguez, Jr. DA
Sheriff J.E. (Eddie) Guerra
Betzabel Guerra
Linda Kostenko
Catherine A. Domian
Danielle D. Fox
Jennifer M. Lewis
Myra Montalvo
Providence Boneta
Sandra Martinez, Esq.

Starr County Board Members:

Omar Escobar, DA
Ricardo Solis

Executive Director:
Victoria Y. Medina

CERTIFICATION

This is to certify that the Children's Advocacy Center of Hidalgo County, Inc. (CAC) also known as Estrella's House located at 525 W. Wisconsin Rd., Edinburg, Texas, 78539 received $50,000 from Hidalgo County of which $39,200 were used for employee salaries and payroll taxes to the extent that they were engaged in health care services. The funds were expensed as detailed on the attached form and disbursed during the calendar year ending on December 31, 2016.

Funds were applied to the services provided at the CAC including forensic interviews, crisis intervention, and counseling. All victims and their families are served at no cost to the family. We served 1,295 child victims during the year ending December 31, 2016. Please refer to the attached 2016 Annual Report Total Victims Served by Year; Victims Served by City; Victims Served by Gender; Victims Served by Family Income Level and Referrals by Law Enforcement Agency.

Victoria Medina
(Signature)

Victoria Medina, Executive Director
(Printed Name/Title)

1/30/17
(Date)

(956) 287-9754
(Phone No.)

cactx
children's advocacy centers® of texas

Attest: Claudia Beth Vela
(Signature)

Claudia Beth Vela
(Printed Name)

1/30/2017
(Date)

CLAUDIA BETH VELA
Notary Public
STATE OF TEXAS
ID#12899703-1
My Comm. Exp. May 22, 2020

United Way
United Way of South Texas
Serving Hidalgo & Starr Counties

RECEIVED
JAN 31 2017
Hidalgo County
AUDITORS OFFICE

AI-58960 **Precinct #2** **21. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

Presentation of certificate of appreciation to Virginia Townsend on behalf of the O.W.L.S.

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/15/2017 01:40 PM
Linda Flores	Veronica Ortiz	03/17/2017 09:28 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/15/2017 01:10 PM
Final Approval Date: 03/17/2017		

AI-59037 **Precinct #2** **21. B.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

Requesting approval of Amendment No. 1 to the Interlocal Cooperation Agreement with the City of San Juan and Alamo approved by CC 09/01/2015 (AI#51086), to extend the length of the improvements to Cesar Chavez Road from Nolana Loop to Ridge Road.

BACKGROUND

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

No fiscal impact to cities. Amendment is only to extend project limits.

Attachments

First Amendment to ICA

Legal Approval Email

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 02:26 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/17/2017 02:11 PM
Final Approval Date: 03/17/2017		

STATE OF TEXAS §
DISTRICT OF HIDALGO §

FIRST AMENDMENT TO INTERLOCAL COOPERATION AGREEMENT BETWEEN HIDALGO COUNTY, TEXAS, THE CITY OF SAN JUAN, TEXAS AND THE CITY OF ALAMO, TEXAS CONCERNING CERTAIN IMPROVEMENTS TO CESAR CHAVEZ ROAD FROM NOLANA LOOP TO BUSINESS 83

This First Amendment to Interlocal Cooperation Agreement is made on this the _____ day of _____, 2017 by and between the County of Hidalgo, hereinafter referred to as the "County," the City of San Juan, Texas, hereinafter referred to as "San Juan" and the City of Alamo, Texas, hereinafter referred to as "Alamo", pursuant to the provisions of the Texas Interlocal Cooperation Act, as follows:

WITNESSETH:

WHEREAS, the County, San Juan and Alamo entered into an Interlocal Cooperation Agreement (the "Agreement") dated September 1, 2015 regarding expansion of Cesar Chavez Road to a four lane roadway facility; and

WHEREAS, the parties desire to extend the length of the improvements to Cesar Chavez Road from Nolana Loop to Ridge Road (the "Road");

NOW, THEREFORE, for and in consideration of the mutual obligations of the parties herein and other good and valuable consideration the receipt of which hereby acknowledged, San Juan, Alamo and County hereby mutually agree to the following:

1. The fourth WHEREAS clause is deleted in its entirety and the following is inserted in lieu thereof:

> WHEREAS, Cesar Chavez Road from Nolana Loop south to Ridge Road, which traverses within the jurisdiction of San Juan and Alamo is a vital north-south road within the County that is an interconnecting link to the County roadway system and is in need of expansion to a four lane roadway facility.

2. Except as modified herein, all terms and conditions of the Agreement, as amended, remain in full force and effect and County and District ratify and confirm the terms and provisions of the Agreement, as amended.

EXECUTED IN DUPLICATE ORIGINALS and effective as of the day and year first written above.

COUNTY OF HIDALGO

ATTEST:

By: _____
Ramon Garcia, District Judge

_____
Arturo Guajardo, Jr., County Clerk

APPROVED AS TO FORM:

ATLAS, HALL & RODRIGUEZ, LLP

By: _____
Stephen L. Crain

CITY OF SAN JUAN, TEXAS

By: _____
San Juanita Sanchez, Mayor

ATTEST:

_____
City Secretary

CITY OF ALAMO, TEXAS

By: _____
Diana Martinez, Mayor

ATTEST:

_____
City Secretary

Zimbra **erika.zamora@co.hidalgo.tx.us**

FW: First Amendment to Interlocal Cooperation Agreement

From : Michelle Vasquez <michvas@atlashall.com> Fri, Mar 17, 2017 01:17 PM

Subject : FW: First Amendment to Interlocal Cooperation Agreement 6 attachments

To : 'Erika Zamora' <erika.zamora@co.hidalgo.tx.us>

Cc : 'Steve Crain' <scrain@atlashall.com>

Ms. Zamora – Please use this version of the First Amendment. I did not realize the pagination was off on the previous attachment. Sorry for the inconvenience.

Thank you - Michelle

From: Michelle Vasquez [mailto:michvas@atlashall.com]
Sent: Friday, March 17, 2017 12:54 PM
To: 'Erika Zamora'
Cc: 'Steve Crain'
Subject: RE: First Amendment to Interlocal Cooperation Agreement

Ms. Zamora – Please find the revised First Amendment to Interlocal Cooperation Agreement between Hidalgo County, Texas, the City of San Juan and the City of Alamo. Thank you.

Michelle Vasquez,
Legal Assistant to Valorie C. Glass
ATLAS, HALL & RODRIGUEZ, LLP
818 W. Pecan Blvd. (78501)
P. O. Box 3725
McAllen, Texas 78502
Tel: (956) 682-5501
Fax: (956) 686-6109
michvas@atlashall.com



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Thank you.

From: Erika Zamora [mailto:erika.zamora@co.hidalgo.tx.us]
Sent: Friday, March 17, 2017 12:19 PM
To: Michelle Vasquez
Cc: Steve Crain
Subject: Re: First Amendment to Interlocal Cooperation Agreement

Steve,

Attached please find the First Amendment to ICA for Cesar Chavez with some recommended revisions for your consideration.

Please email back when ready.

Thank you,

Erika Zamora
Director of Management Operations
Hidalgo County Precinct #2
300 West Hall Acres, Suite G
Pharr, Tx 78589
(956) 787-1891 Ext. 2015 - Office
erika.zamora@co.hidalgo.tx.us

From: "Michelle Vasquez" <michvas@atlashall.com>
To: "Erika Zamora" <erika.zamora@co.hidalgo.tx.us>
Cc: "Steve Crain" <scrain@atlashall.com>
Sent: Friday, March 17, 2017 9:51:13 AM
Subject: First Amendment to Interlocal Cooperation Agreement

Ms. Zamora – Mr. Crain asked me to forward the attached First Amendment to Interlocal Cooperation Agreement between Hidalgo County, Texas, the City of San Juan and the City of Alamo. Please let us know if you have any questions or concerns. Thank you.

Michelle Vasquez,
Legal Assistant to Valorie C. Glass
ATLAS, HALL & RODRIGUEZ, LLP
818 W. Pecan Blvd. (78501)
P. O. Box 3725
McAllen, Texas 78502
Tel: (956) 682-5501
Fax: (956) 686-6109
michvas@atlashall.com

Atlas Hall Rodriguez

CONFIDENTIALITY STATEMENT
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Thank you.



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First Amendment ICA Hidalgo County, San Juan and Alamo.pdf
15 KB

AI-59039 **Precinct #2** **21. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

1. Requesting approval of an Interlocal Cooperation Agreement (ICA) between the County of Hidalgo and the City of Hidalgo, regarding road safety improvements for the Pct 2 McColl Road Project.
2. In accordance with Section 791.014 of the Texas Government Code, requesting approval of the Interlocal Cooperation Agreement (ICA) project for the Pct 2 McColl Road Project.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1200-431-00-122-135-0-841

FUNDS AVAILABLE Y/N?: Y/Pending **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funding pending approval of AI#59049 CC 3/21/17. Road safety improvements estimate for McColl Road is $25,000.00.

Attachments

ICA

Legal Approval Email

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 03:38 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/17/2017 02:31 PM
Final Approval Date: 03/17/2017		

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

INTERLOCAL COOPERATION AGREEMENT BETWEEN HIDALGO COUNTY AND CITY OF HIDALGO, TEXAS

THIS agreement is made on this the _____ day of _____, 2017 by and between **HIDALGO COUNTY, TEXAS**, hereinafter referred to as "COUNTY", and CITY OF HIDALGO, hereinafter referred to as "CITY" pursuant to the provisions of the Texas Interlocal Cooperation Act, as follows:

WITNESSETH:

WHEREAS, City is a home rule municipality located in Hidalgo County, Texas;

WHEREAS, County is a county in the State of Texas;

WHEREAS, City and County, each pursuant to its statutory and constitutional authority, are responsible for maintenance and improvements of certain public roadways within their boundaries;

WHEREAS, McColl Road from Dicker Road to Military Highway (US 281) is an important and critical integral infrastructure within Hidalgo County (the "Road");

WHEREAS, City and County desire to provide road safety improvements that include restriping of the travel lanes and pedestrian crosswalks to the Road (the "Road Safety Improvements");

WHEREAS, the Road serves as a connecting link of the County road system and such improvements to the Road are in the public safety interest of the County and City; and

WHEREAS, City and County are authorized to enter into this Agreement pursuant to the Interlocal Cooperation Act, Texas Government Code 791.001 et. seq. which authorizes local governments to contract with each other to perform governmental functions and services under the terms of the Act; and pursuant to the County Road and Bridge Act which authorizes counties to improve roadways within the limits of a City with the City's Consent.

NOW, THEREFORE, City and County in consideration of the mutual covenants expressed hereinafter, agree as follows:

1. The County shall pay the actual cost of the Road Safety Improvements to the Road in accordance with County specifications.

2. County either through its own forces or by a third party contractor shall provide all labor and equipment and materials necessary for road safety improvements of the Road at County's sole expense.

3. The parties agree that upon completion of the road safety improvements, the City shall be responsible for the maintenance and operation of the Road.

4. Pursuant to Tex. Trans Code 251.012, City authorizes County to perform the work and services described herein within its corporate city limits.

5. **Conflict of Applicable Law:** Nothing in this Agreement shall be construed so as to require the commission of any act contrary to law, and whenever there is any conflict between any provision of this Agreement and any present or future law, ordinance, or administrative, executive or judicial regulation, order or decree, or amendment thereof, contrary to which the parties have no legal right to contract, the latter shall prevail, but in such event the affected provision or provisions of the Agreement shall be modified only to the extent necessary to bring them within the legal requirements and only during the time such conflict exists.

6. **No Waiver:** No waiver by any party hereto of any breach of any provision of the Agreement shall be deemed to be a waiver of any preceding of succeeding breach of the same or any other provision hereof.

7. **Entire Agreement:** This Agreement contains the entire contract between the parties hereto and each party acknowledges that neither has made (either directly or through any agreement or representative) and representation or agreement in connection with this Agreement not specifically set forth herein. This Agreement may be modified or amended only by agreement in writing executed by City and County, and not otherwise.

8. TEXAS LAW TO APPLY: THIS AGREEMENT SHALL BE CONSTRUED UNDER AND IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, AND ALL OBLIGATION OF THE PARTIES CREATED HEREUNDER ARE PERFORMABLE IN HIDALGO COUNTY, TEXAS. THE PARTIES HEREBY CONSENT TO PERSONAL JURISDICTION IN HIDALGO COUNTY, TEXAS.

9. **Notice:** Except as maybe otherwise specifically provided in this Agreement, all notices, demands, requests or communication required or permitted hereunder shall be in writing and shall either be (i) personally delivered against a written receipt, or (ii) sent by registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

If to Hidalgo: City of Hidalgo
Attention: Hon. Martin Cepeda, Mayor
704 E Texano Drive
Hidalgo, Texas 78557

If to County: Hidalgo County, Texas
Attn: Hon. Ramon Garcia, Hidalgo County Judge
100 E. Cano, 2nd Floor
Edinburg, Texas 78539

With copy to: Hon. Eduardo "Eddie" Cantu, Commissioner, Pct. No. 2
300 West Hall Acres, Ste G
Pharr, Texas 78577

13. Each notice, demand, request or communication which shall be delivered or mailed in the manner described above shall be deemed sufficiently given for all purposes at such time as it is personally delivered to the addressee, or, if mailed, at such time as it is deposited in the United States mail.

14. **Additional Documents:** The parties hereto covenant and agree that they will execute such other and further instruments and documents as are or may become necessary or convenient to effectuate and carry out the terms of this agreement.

15. **Successors:** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, legal representatives, successors, and assigns where permitted by this Agreement.

16. **Assignment:** This Agreement shall not be assignable.

17. **Headings:** The headings and captions contained in this Agreement are solely for the convenience reference and shall not be deemed to affect the meaning or interpretation of any provision of paragraph hereof.

18. **Gender and Number:** All pronouns used in this Agreement shall include the other gender, whether used in the masculine, feminine or neuter gender, and singular shall include the plural whenever and as often as may be appropriate.

19. **Authority to Execute:** The execution and performance of this Agreement City and County have been duly authorized by all necessary laws, resolutions or corporate action, and this Agreement constitutes the valid and enforceable obligations of the City and County in accordance with its terms.

20. **Governmental Purpose:** Each party hereto is entering into the agreement for the purpose of providing for governmental services or functions and will pay for such services out of current revenues available to the paying party as herein provided.

21. **Commitment or Current Revenues Only:** In the event that during any term hereof; the governing body of any party does not appropriate sufficient funds to meet the obligations of such party under this Agreement, then any party may terminate this Agreement upon ninety (90) days written notice to the other party. Each of the parties hereto agrees, however, to use its best efforts to secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of each party hereto pursuant to the provisions of Tex. Loc. Govt. Code Ann. §271.903.

WITNESS THE HANDS OF THE PARTIES effective as of the day and year first written above.

CITY OF HIDALGO

By: _____
Hon. Martin Cepeda, Mayor

ATTEST:

_____
City Secretary

COUNTY OF HIDALGO

By: _____
Hon. Ramon Garcia, County Judge

ATTEST:

_____
County Clerk

APPROVED AS TO FORM:

By:_____
Hidalgo City Attorney

APPROVED AS TO FORM:

By:_____
Stephen L. Crain
Hidalgo County Attorney

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

APPROVAL OF
INTERLOCAL COOPERATION AGREEMENT
PROJECT

In accordance with Texas Government Code §791.014, Hidalgo County, Texas, acting by and through the Hidalgo County Commissioners Court, has been advised of a proposed project to assist the City of Hidalgo with road safety improvements that include restriping of travel lanes and pedestrian crosswalks to McColl Road from Dicker Road to Military Highway (US281) (the "Project"), through an Interlocal Cooperation Agreement to be entered into with Hidalgo County and City of Hidalgo, Texas.

By vote on _____ 2017, the Hidalgo County Commissioners Court has approved the Project identified above.

_____
By: Hon. Ramon Garcia, County Judge

ATTEST:

_____
Arturo Guajardo, County Clerk

APPROVED AS TO FORM:

ATLAS, HALL & RODRIGUEZ, LLP

By: _____
Stephen L. Crain

Zimbra **erika.zamora@co.hidalgo.tx.us**

RE: Interlocal Cooperation Agreement Between Hidalgo County and City of Hidalgo

From : Michelle Vasquez <michvas@atlashall.com> Fri, Mar 17, 2017 02:08 PM

Subject : RE: Interlocal Cooperation Agreement Between Hidalgo County and City of Hidalgo 2 attachments

To : 'Erika Zamora' <erika.zamora@co.hidalgo.tx.us>

Cc : 'Steve Crain' <scrain@atlashall.com>

Ms. Zamora – Attached please find the revised Interlocal Cooperation Agreement Between Hidalgo County and City of Hidalgo. Thank you.

Michelle Vasquez,
Legal Assistant to Valorie C. Glass
ATLAS, HALL & RODRIGUEZ, LLP
818 W. Pecan Blvd. (78501)
P. O. Box 3725
McAllen, Texas 78502
Tel: (956) 682-5501
Fax: (956) 686-6109
michvas@atlashall.com

CONFIDENTIALITY STATEMENT
The information in this email may be confidential and/or privileged. This e-mail is intended to be reviewed by only the individual or organization named above. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system.

Thank you.

From: Erika Zamora [mailto:erika.zamora@co.hidalgo.tx.us]
Sent: Friday, March 17, 2017 1:12 PM
To: michvas@atlashall.com
Subject: Fwd: Interlocal Cooperation Agreement Between Hidalgo County and City of Hidalgo

Here is the requested ICA in word.

Sent from my iPhone

Begin forwarded message:

From: Erika Zamora <erika.zamora@co.hidalgo.tx.us>
Date: March 17, 2017 at 12:25:30 PM CDT
To: Steve Crain <scrain@atlashall.com>
Subject: Re: Interlocal Cooperation Agreement Between Hidalgo County and City of Hidalgo

Steve,

I have made some changes to the description in the ICA attached. Please review.

Thank you,

Erika Zamora
Director of Management Operations
Hidalgo County Precinct #2
300 West Hall Acres, Suite G
Pharr, Tx 78589
(956) 787-1891 Ext. 2015 - Office
erika.zamora@co.hidalgo.tx.us

---

image001.jpg
5 KB

ICA Hidalgo County and City of Hidalgo.pdf
165 KB

AI-58961 **Precinct #2** **21. D.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

Approval to rescind action previously taken by Commissioners Court on 2/21/17 AI#58536 for approval of closing documents for Parcel 2 for Pct 2 Yuma Ave Extension Project.

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 04:05 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/15/2017 01:11 PM
Final Approval Date: 03/17/2017		

AI-59053 **Precinct #2** **21. E.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #

Department: COMM. PCT. #2

Information

CAPTION

Pct 2 Yuma Ave Rd Prj (1200):
1. Approval of certification of revenue as certified by the County Auditor for revenue received from the City of McAllen for Interlocal Agreement approved by Commissioners Court on 7/19/16 AI#55455 .
2. Approval of 2017 appropriation of funds into Pct 2 Yuma Ave Ext Prj in the amount of $80,000.00.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1200-431-00-122-126-0-841

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Appropriation of revenue from the City of Mcallen for Yuma Ave Ext Prj. Check was deposited into acct# 7-1200-126-30-122-033-0-000.

Certification of Revenue will be provided by Auditors Office. Request for certification of revenues letter will be submitted by Pct. 2.

Attachments

Appropriation
COR

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 04:32 PM
Ivan Cantu	Ivan Cantu	03/17/2017 04:48 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/17/2017 04:01 PM
Final Approval Date: 03/17/2017		

DATE: March 21, 2017

2017
Appropriation

DEPARTMENT HEAD: Commissioner Eduardo " Eddie" Cantu

DEPARTMENT NAME: Hidalgo County Precinct 2 Yuma Ave Ext Prj.

ACCOUNT NUMBER: 7-1200-431-00-122-126-0-841

Contact Person: Erika Zamora **Ph#** 956-787-1891

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME		AMOUNT
7-1200-431-00-122-126-0-841	Pct 2 Yuma Ave Rd Prj	Aid to Govt Agency	80,000.00
7-1200-337-00-122-015-0-000	*R&B Pct 2 Mcallen-Yuma Ave(Jcksn-McColl)*		*80,000.00*
		TOTAL BUDGET INCREASE (DECREASE)	$ 80,000.00

REASON: Appropriation of revenue from City of Mcallen for Yuma Ave Ext Prj. Ck was deposited into acct# 7-1200-126-30-122-033-0-000.

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

COUNTY of HIDALGO



EDINBURG, TEXAS 78539

HIDALGO COUNTY AUDITOR'S OFFICE
Hidalgo County Administration Building
2808 South Business Highway 281
Edinburg, Texas 78539-6243
PHONE: (956) 318-2511
FAX: (956) 318-2577
WEBSITE: www.co.hidalgo.tx.us/auditor

March 20, 2017

The Honorable Ramon Garcia, Hidalgo County Judge
The Honorable David Fuentes, Commissioner, Precinct No. 1
The Honorable Eduardo "Eddie" Cantu, Commissioner, Precinct No. 2
The Honorable Jose M. Flores, Commissioner, Precinct No. 3
The Honorable Joseph Palacios, Commissioner, Precinct No. 4

RE: Certification of Revenue

Dear Judge and Commissioners:

Pursuant to Local Government Code § 111.0707 SPECIAL BUDGET FOR REVENUE FROM INTERGOVERNMENTAL CONTRACTS:

> The county auditor shall certify to the commissioners court the receipt of all revenue from intergovernmental contracts that is available for disbursement in a fiscal year but not included in the budget for that fiscal year. On certification, the court may adopt a special budget for the limited purpose of spending the revenue from intergovernmental contracts for its intended purpose.

I, Ray Eufracio, County Auditor of Hidalgo County, certify to the Hidalgo County Commissioners Court the revenue from the intergovernmental contract between Hidalgo County and the City of McAllen, Texas for the road improvement project to Yuma Avenue in the amount of $80,000.00. These funds may now be made available by creating a new special budget or amending a current budget for its intended purposes.

CERTIFIED BY:

Raymundo Eufracio, CPA
Hidalgo County Auditor

3-20-17
Date

THE COUNTY OF HIDALGO TEXAS

Nereyda Gonzalez

From: Erika Zamora [erika.zamora@co.hidalgo.tx.us]
Sent: Friday, March 17, 2017 5:28 PM
To: ray eufracio
Cc: Linda Fong; Becky Luna; Nereyda Gonzalez; Armando Garza Jr.; Eduardo Cantu; Esther Perez; Carlos Jasso
Subject: Request for Certification of Revenue - Yuma Ave Ext Prj
Attachments: Memo to Certify Revenue.pdf

Good afternoon Mr. Eufracio,

Attached please find a memo requesting certification of revenue for Precinct #2. Please let me know if you have any questions or require any additional information.

Thank you,

Erika Zamora
Director of Management Operations
Hidalgo County Precinct #2
300 West Hall Acres, Suite G
Pharr, Tx 78589
(956) 787-1891 Ext. 2015 - Office
erika.zamora@co.hidalgo.tx.us



HIDALGO COUNTY
PRECINCT 2

Eduardo "Eddie" Cantu
COUNTY COMMISSIONER

MEMORANDUM

To: Ray Eufracio, CPA County Auditor

From: Hidalgo County Precinct # 2
Erika Zamora, Director of Management Operations

Date: March 17, 2017

Subject: Request for Certification of Revenue

Please accept this memo as my request to certify the following revenue:

Account No: 7-1200-126-30-122-033-0-000
Amount: $80,000.00

Agenda item # 59053 is currently scheduled for Commissioners' Court approval on March 21, 2017 and will require the certification of this revenue.

Attached please find a copy of the official Hidalgo County Receipt from the County Treasurer's Office that reflects what account the funds were deposited into as well as a copy of the interlocal agreement, and invoice submitted to the City for these funds.

If you have any questions regarding this matter do not hesitate to contact me at (956) 787-1891.

THE COUNTY OF HIDALGO TEXAS

300 W. Hall Acres Suite G . Pharr, TX 78577 • 956.787.1891 • eduardo.cantu@co.hidalgo.tx.us

AI-59053 **Precinct #2** **21. E.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

Pct 2 Yuma Ave Rd Prj (1200):
1. Approval of certification of revenue as certified by the County Auditor for revenue received from the City of McAllen for Interlocal Agreement approved by Commissioners Court on 7/19/16 AI#55455 .
2. Approval of 2017 appropriation of funds into Pct 2 Yuma Ave Ext Prj in the amount of $80,000.00.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1200-431-00-122-126-0-841

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Appropriation of revenue from the City of Mcallen for Yuma Ave Ext Prj. Check was deposited into acct# 7-1200-126-30-122-033-0-000.

Certification of Revenue will be provided by Auditors Office. Request for certification of revenues letter will be submitted by Pct. 2.

Attachments

Appropriation

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 04:32 PM
Ivan Cantu	Ivan Cantu	03/17/2017 04:48 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/17/2017 04:01 PM
Final Approval Date: 03/17/2017		

CITY OF McALLEN

To: HIDALGO COUNTY PRECINCT 2 107097

Check Number: 0000498543

Date: 02/23/2017

Invoice Number	Date	Description	Amount	Paid Amount
2162017	02/21/2017	INTERLOCAL AGRMNT-YUMA AVE PJC	$80,000.00	$80,000.00

TOTALS: $80,000.00 $80,000.00

THIS DOCUMENT HAS A VOID PANTOGRAPH, MICROPRINTING AND AN ARTIFICIAL WATERMARK.

CITY OF McALLEN
AND/OR McALLEN PUBLIC UTILITY
Disbursement Fund
P.O. Box 220 McALLEN, TEXAS 78505-0220

PlainsCapital Bank
Edinburg, Texas

DATE	CHECK NUMBER
Feb 23, 2017	0000498543

AMOUNT
$80,000.00

VOID AFTER 90 DAYS

Pay Eighty Thousand Dollars And 00 Cents

to the Order of:

HIDALGO COUNTY PRECINCT 2
300 W HALL ACRES SUITE G
ATTN: EDUARDO 'EDDIE' CANTU
COUNTY COMMISSIONER

⑈0000498543⑈ ⑆113229941⑆ ⑈014001230 3⑈

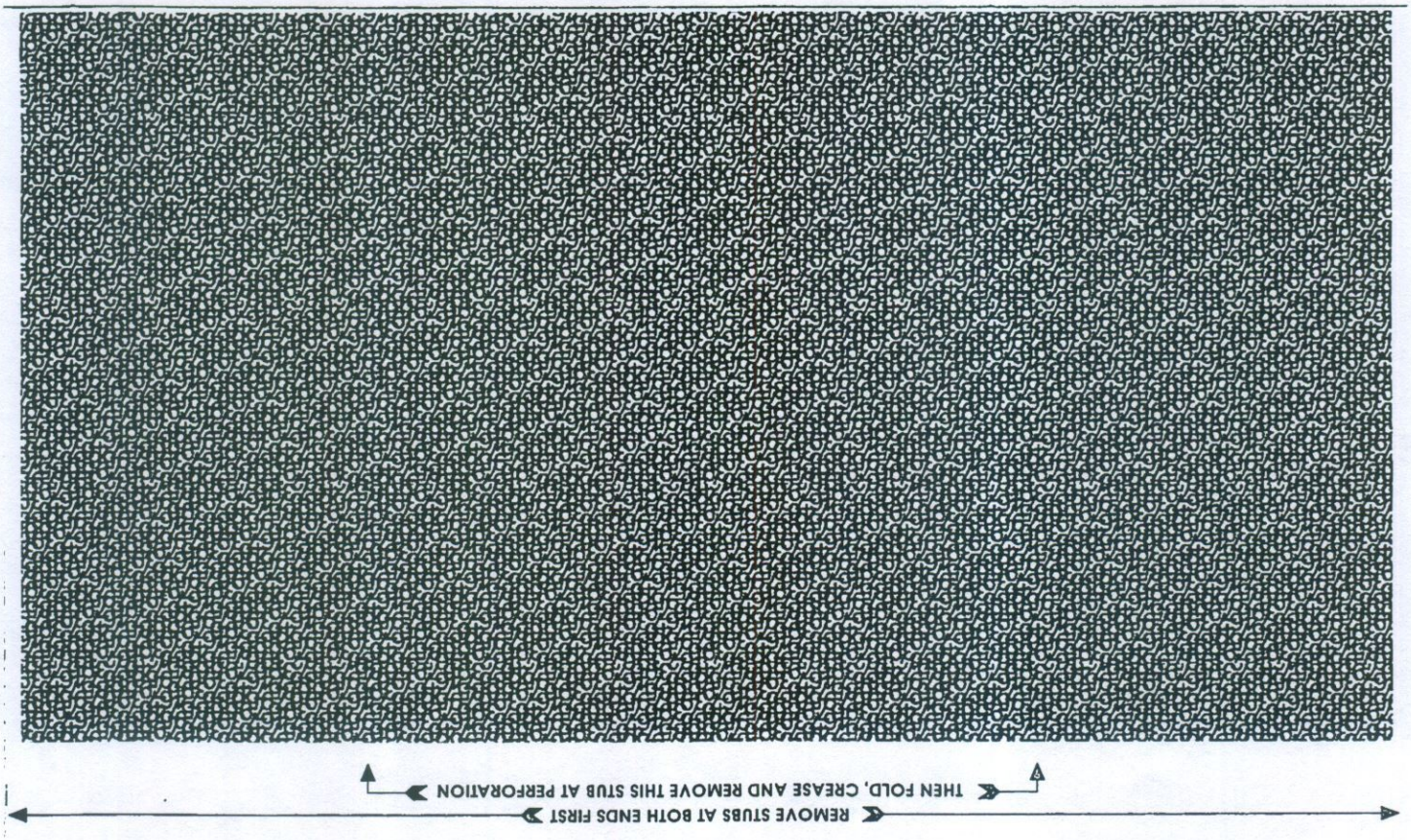
See Reverse Side For Easy Opening Instructions Engineering (Version)

CITY OF McALLEN

AND/OR McALLEN PUBLIC UTILITY
Disbursement Fund
P.O. Box 220
McALLEN, TX 78505-0220

HIDALGO COUNTY PRECINCT 2

300 W HALL ACRES SUITE G
ATTN: EDUARDO 'EDDIE' CANTU
COUNTY COMMISSIONER
PHARR, TEXAS 78577



CITY OF McALLEN

ENGINEERING DEPARTMENT

TRANSMITTAL

TO:	County of Hidalgo
ATTN:	Eduardo "Eddie" Cantu
	300 W. Hall Acres, STE. G, Pharr, TX 78577
FROM:	Yvette Barrera, P.E., CFM
	City Engineer

DATE:	February 27, 2016
RE:	First Amendment to Yuma Avenue
	Extension Project
	Interlocal Cooperative Agreement

WE ARE SENDING YOU: ☒ Attached ☐ Under separate cover via

☐ Shop Drawings ☐ Copy of Letter ☒ Documents ☐ Prints

☐ Change Order ☐ Specifications ☐ Test Reports ☒ Other: (Disk)

QUANTITY	DESCRIPTION
1	Check #498543 in the amount of $80,000 – First Amendment to Interlocal Cooperative Agreement

TRANSMITTED ARE AS CHECKED BELOW:

☐ For Approval ☐ For Correction ☐ Approved ☐ For Your Use

☐ For Signature ☐ As Requested ☐ Please forward

Remarks:

Attached please find the check in the amount of $80,000 for the Yuma Avenue Extension Project – First Amendment to Interlocal Cooperative Agreement.

HIDALGO COUNTY PRECINCT NO. 2
2017 FEB 27 PM 1 35

PRINT NAME: _____ **SIGNED:** Mary Neave

RECEIVED BY: RECEIVED BY:

DATE & TIME RECEIVED:

HIDALGO COUNTY
PRECINCT 2

COMMISSIONER
EDUARDO "EDDIE" CANTU

Eduardo "Eddie" Cantu
COUNTY COMMISSIONER

January 9, 2017

City of McAllen
Mr. Roy Rodriguez –City Manager
1300 Houston Avenue
McAllen, TX 78501

RE: Hidalgo County Pct 2 – Yuma Ave Extension Project
Interlocal Cooperation Agreement Amendment Contribution

INVOICE

Dear Mr. Rodriguez:

The County of Hidalgo is requesting payment in the amount of $80,000.00 for the Yuma Avenue Extension Project, from the City of McAllen, pursuant to the Interlocal Cooperation Agreement Amendment No. 1 (approved 7/19/2016) between the City of McAllen and the County of Hidalgo to improve Yuma Avenue.

The interlocal agreement stipulates that the City of McAllen shall pay the County $80,000.00 within thirty (30) days after the date of invoice from the County toward the development of the Project.

Please remit payment to the following:

OK
TR

County of Hidalgo
Attn: Eduardo "Eddie" Cantu, County Commissioner
300 W Hall Acres Ste G
Pharr, Texas 78577

300 W. Hall Acres Suite G . Pharr, TX 78577 • 956.787.1891 • eduardo.cantu@co.hidalgo.tx.us

01-16-17P02:13 RCVD

HIDALGO COUNTY
PRECINCT 2

COMMISSIONER
EDUARDO "EDDIE" CANTU

Eduardo "Eddie" Cantu
COUNTY COMMISSIONER

Attached please find a copy of the interlocal agreement that pertains to this payment request.

If you should have any questions regarding this request for payment, please contact Mr. Armando Garza or myself at (956) 787-1891.

Sincerely,

Eddie

Eduardo "Eddie" Cantu
Commissioner, Hidalgo County Precinct No.2

Cc: The Honorable Jim Darling, Mayor, City of McAllen
The Honorable Eduardo "Eddie" Cantu, County Commissioner
Mr. Ray Eufracio, CPA County Auditor
Ms. Linda Fong, First Assistant Auditor
Project file

THE COUNTY OF HIDALGO TEXAS

300 W. Hall Acres Suite G . Pharr, TX 78577 • 956.787.1891 • eduardo.cantu@co.hidalgo.tx.us

FILED
AT 2:45 O'CLOCK P M

AUG 29 2016

ARTURO GUAJARDO, JR., COUNTY CLERK
HIDALGO COUNTY, TEXAS
BY _____ DEPUTY

STATE OF TEXAS §
§
COUNTY OF HIDALGO §

FIRST AMENDMENT TO INTERLOCAL COOPERATION AGREEMENT BETWEEN THE COUNTY OF HIDALGO AND CITY OF MCALLEN, TEXAS CONCERNING CERTAIN IMPROVEMENTS TO E. YUMA AVENUE FROM JACKSON RD TO MCCOLL RD

This First Amendment to Interlocal Cooperation Agreement is made on this the 19th day of July, 2016 by and between the City of McAllen, Texas, hereinafter referred to as the "City" and the County of Hidalgo, Texas, hereinafter referred to as the "County", pursuant to the provisions of the Texas Interlocal Cooperation Act, as follows:

WITNESSETH:

WHEREAS, the City and the County entered into an Interlocal Cooperation Agreement (the "Agreement") dated December 15, 2015 regarding certain road improvements to E. Yuma Avenue from Jackson Road to McColl Road;

WHEREAS, the City desires the road improvements to be constructed to City standards increasing the estimated total project cost to Seven Hundred Sixty Thousand and no/100ths Dollars ($760,000.00); and

WHEREAS, the parties have agreed to increase the City's monetary participation by an additional fixed lump sum amount of Eighty Thousand and no/100ths Dollars ($80,000);

NOW, THEREFORE, for and in consideration of the mutual obligations of the parties herein and other good and valuable consideration the receipt of which hereby acknowledged, the County and City hereby mutually agree to the following:

1. The sixth WHEREAS clause is deleted in its entirety and the following is substituted in lieu thereof:

   Whereas, the total estimated cost of the project is approximately Seven Hundred Sixty Thousand and no/one hundredths Dollars ($760,000.00);

2. The seventh WHEREAS clause is deleted in its entirety and the following is substituted in lieu thereof:

   Whereas, the City desires to cooperate by contributing a fixed lump sum amount of Two Hundred Eighty Thousand and no/one hundredths Dollars ($280,000.00);

3. Numbered paragraph 3 of the Agreement is deleted in its entirety and the following is substituted in lieu thereof:

The total estimated cost of the Project will be approximately $760,000.00.

4. Numbered paragraph 4 of the Agreement is deleted in its entirety and the following is substituted in lieu thereof:

   City agrees to pay a fixed lump sum in the amount of Two Hundred Eighty Thousand and no/one hundredths Dollars ($280,000.00) to County within thirty (30) days after the date of invoice from County toward the development of the Project.

5. Except as modified herein, all terms and conditions of the Agreement, as amended, remain in full force and effect and County and City ratify and confirm the terms and provisions of the Agreement, as amended.

EXECUTED IN DUPLICATE ORIGINALS and effective as of the day and year first written above.

CITY OF MCALLEN

By: _____
Jim Darling, Mayor

ATTEST:
City Secretary

COUNTY OF HIDALGO

By: _____
Ramon Garcia, County Judge

ATTEST:
County Clerk

APPROVED BY COMMISSIONERS' COURT ON: 7/19/11

APPROVED AS TO FORM:

By: _____
McAllen City Attorney

APPROVED AS TO FORM:

ATLAS, HALL & RODRIGUEZ, LLP

By: _____
Stephen L. Crain

Hidalgo County Precinct 2
300 W Hall Acres, Suite G
Pharr, TX 78577
Phone (956) 787-1891

COMMISSIONER
EDUARDO "EDDIE" CANTU

Letter of Transmittal

To:	Nora De Los Santos – Hidalgo County Treasurer's Office
From:	Erika Zamora – Director of Administrative Operations
Date:	March 10, 2017
Subject:	Deposit Check# 0000498543 from the City of McAllen

We are sending you the following:

☐ Invoice ☐ Under Separate Cover Via _____ the following items:
☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples
☐ Specifications ☐ Copy of Letter ☐ Change Order ☑ Other CHECK#0000498543

HIDALGO COUNTY PRECINCT NO. 2 PM 3 2017 MAR 10

Copies	Date	Number	Description
1	3/10/2017		CK#0000498543 $80,000.00

These are transmitted as checked below:

☐ For Approval ☐ Approved as Submitted ☐ Resubmit _____ copies for Approval
☐ For your Use ☐ Approved as Noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☑ Hand Delivered ☐ Other _____
☐ For Bids due _____ 20__ ☐ Prints returned after loaned to us

Remarks:

Enclosed: CK#0000498543 in the amount of $80,000.00

Please deposit this check into the following account:
7-1200-126-30-122-033-0-000 R&B PCT 2-D/FR OTHR GOVT-MCALLEN YUMA AVE

Received by: _____ Date: 03-10-17

OFFICIAL HIDALGO COUNTY RECEIPT
OFFICE OF THE COUNTY TREASURER
NORMA G. GARCIA

Receipt No: 208347

Received From: PCT 2 CITY OF McALLEN RE: YUMA AVE. Date 03/13/17

1	0000498543	D/FR OTHER GOV R&B PCT 2 YUMA AVE	7-1200-126-30-122-033-0-000	80,000.00

Total: **80,000.00**

Check Total	80,000.00
Cash Total	.00
Credit Total	.00
Other Total	.00

HIDALGO COUNTY
PRECINCT NO. 2
2017 MAR 13 PM 2 49

DATE: March 21, 2017

2017
Appropriation

DEPARTMENT HEAD: Commissioner Eduardo " Eddie" Cantu

DEPARTMENT NAME: Hidalgo County Precinct 2 Yuma Ave Ext Prj.

ACCOUNT NUMBER: 7-1200-431-00-122-126-0-841

Contact Person: Erika Zamora **Ph#:** 956-787-1891

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME		AMOUNT
7-1200-431-00-122-126-0-841	Pct 2 Yuma Ave Rd Prj	Aid to Govt Agency	80,000.00
7-1200-337-00-122-015-0-000	*R&B Pct 2 Mcallen-Yuma Ave(Jcksn-McColl)*		*80,000.00*
		TOTAL BUDGET INCREASE (DECREASE)	$ 80,000.00

REASON: Appropriation of revenue from City of Mcallen for Yuma Ave Ext Prj. Ck was deposited into acct# 7-1200-126-30-122-033-0-000.

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

AI-58914 **Budget and Management** **22. A.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Sergio Cruz, BUDGET & MANAGEMENT

Submitted By: Merlen P. Munoz, BUDGET & MANAGEMENT

Department: BUDGET & MANAGEMENT

Information

CAPTION

1. Approval to undesignate the amount of $20,089.01 in the year 2016 from the 1115 Waiver Assigned Fund Balance.
2. Approval to undesignate the amount of $7,772.95 in the year 2016 from the New Courthouse Assigned Fund Balance.

BACKGROUND

On 12/13/16 CC approved the designation of funds for 1115 Waiver DSRIP and the New Courthouse (AI-57778); however, additional expenditures were processed that reduced the available amounts related to these program accounts.

Fiscal Impact

FISCAL YEAR: 2016 **ACCT. #:** 6-1100-257-00-000-00X-0-000

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funds available from the designation of funds (AI-57778) to the following accounts:
6-1100-257-00-000-003-0-000 GEN FD-ASSIGNED F/B-1115 WAIVER
6-1100-257-00-000-006-0-000 GEN FD-ASSIGNED F/B-NEW COURTHOUSE

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Merlen P. Munoz (Originator)	Merlen P. Munoz	03/10/2017 10:43 AM
Budget & Management	Veronica Ortiz	03/10/2017 11:09 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Merlen P. Munoz		Started On: 03/10/2017 10:15 AM
Final Approval Date: 03/17/2017		

AI-58902 **Budget and Management** **22. B. 1.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Sergio Cruz, BUDGET & MANAGEMENT

Submitted By: Merlen P. Munoz, BUDGET & MANAGEMENT

Department: BUDGET & MANAGEMENT

Information

CAPTION

CO 2016 (1350):
Approval of 2016 estimated revenues and appropriation of funds for Certificates of Obligation, Series 2016, in relation to bond proceeds, bond premium, and related issuance costs.

BACKGROUND

Appropriation was prepared by the County Auditor's Office.

Fiscal Impact

Attachments

Est Rev & Appropriation

Form Review

Inbox	Reviewed By	Date
Merlen P. Munoz (Originator)	Merlen P. Munoz	03/10/2017 08:25 AM
Budget & Management	Veronica Ortiz	03/10/2017 08:33 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Merlen P. Munoz		Started On: 03/09/2017 04:52 PM
Final Approval Date: 03/17/2017		

DATE: March 7, 2017

DEPARTMENT HEAD: RAY EUFRACIO, CPA, HIDALGO COUNTY AUDITOR

DEPARTMENT NAME: HIDALGO COUNTY AUDITOR'S OFFICE

ACCOUNT NUMBER: VARIOUS

SUBJECT: Budget amendment in accordance with Local Government Code §111.0705

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following budget amendment in accordance with Local Government Code §111.0705, Budget for Expenditures from Proceeds of Bonds or Other Obligations

ACCOUNT NUMBER	ACCOUNT NAME	ACCOUNT NAME
6 -1350 -393 -10 -000 -000 -0 -000	CO 2016-BOND PROCEEDS	$ 35,045,000.00
6 -1350 -393 -60 -000 -000 -0 -000	CO 2016-BOND PREMIUM	5,331,320.15
6 -1350 -476 -00 -000 -000 -0 -866	CO 2016-ISSUANCE COSTS	417,320.15
	Net Effect to Budgeted Fund Balance	$ 39,959,000.00

REASON: Increase estimated revenues and appropriate proceeds of Certificates of Obligation, Series 2016.

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

DATE

ATTEST COUNTY CLERK

AI-58915 **Budget and Management** **22. B. 2.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Sergio Cruz, BUDGET & MANAGEMENT

Submitted By: Merlen P. Munoz, BUDGET & MANAGEMENT

Department: BUDGET & MANAGEMENT

Information

CAPTION

New Courthouse (1100):
a. Approval to undesignate the amount of $3,951,866.52 in the year 2017 for expenditures related to the New Courthouse.
b. Approval of 2017 appropriation of funds in the amount of $3,951,866.52 to fund program expenditures.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-419-40-125-035-0-730

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funds available to be unassigned from account#7-1100-257-00-000-006-0-000 (Fund Balance Assigned for New Courthouse). Pending the closing of FY2016 by the Auditor's Office.

Attachments

Appropriation

Form Review

Inbox	Reviewed By	Date
Merlen P. Munoz (Originator)	Merlen P. Munoz	03/10/2017 10:50 AM
Budget & Management	Veronica Ortiz	03/10/2017 11:10 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Merlen P. Munoz		Started On: 03/10/2017 10:43 AM
Final Approval Date: 03/17/2017		

DATE: March 21, 2017

2017
Appropriation

DEPARTMENT HEAD: Sergio Cruz, Budget Officer

DEPARTMENT NAME: Department of Budget & Management for **New Courthouse**

ACCOUNT NUMBER: 7-1100-419-40-125-035-0-730

Contact Person: Merlen Munoz Ph#: (956) 292-7025 ext. 5403

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)	ACCOUNT (OBJECT) NAME		AMOUNT
7-1100-419-40-125-035-0- 730	NEW COURTHOUSE	BUILDINGS	3,951,866.52
		TOTAL BUDGET INCREASE (DECREASE)	**3,951,866.52**

REASON: Appropriate funding for anticipated expenditures.

Note: Monies are to be unassigned from acct#7-1100-257-00-000-006-0-000 Fund Balance - Assigned for New Courthouse

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

/ /
DATE

ATTEST COUNTY CLERK

AI-58919 **Budget and Management** **22. B. 3.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Sergio Cruz, BUDGET & MANAGEMENT

Submitted By: Merlen P. Munoz, BUDGET & MANAGEMENT

Department: BUDGET & MANAGEMENT

Information

CAPTION

Pct 3 Parks (1100):
a. Approval to undesignate the amount of $279,375.11 in the year 2017 for expenditures related to insurance proceeds received for the damages sustained during the May 2016 weather event.
b. Approval of 2017 appropriation of funds in the amount of $279,375.11 to fund anticipated repairs/purchases needed for the Anzalduas Park.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-452-00-123-008-0-XXX

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funds available to be unassigned from account#7-1100-257-00-000-007-0-000 (Fund Balance Assigned for Pct 3 Anzalduas Park). Pending the closing of FY2016 by the Auditor's Office.

Attachments

Appropriation

Form Review

Inbox	Reviewed By	Date
Merlen P. Munoz (Originator)	Merlen P. Munoz	03/16/2017 09:26 AM
Budget & Management	Veronica Ortiz	03/16/2017 10:09 AM
Ivan Cantu	Ivan Cantu	03/16/2017 02:52 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Merlen P. Munoz		Started On: 03/10/2017 01:50 PM
Final Approval Date: 03/17/2017		

DATE: March 21, 2017

2017
Appropriation

DEPARTMENT HEAD: Sergio Cruz, Budget Officer

DEPARTMENT NAME: Department of Budget & Management for **Pct 3 Parks**

ACCOUNT NUMBER: 7-1100-452-00-123-008-0-XXX

Contact Person: Merlen Munoz Ph#: (956) 292-7025 ext. 5403

SUBJECT: **Budget Amendments** (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

Honorable Commissioners' Court of Hidalgo County:

I would like to request the following Budget Amendments (increase (decrease)) in accordance with Local Government Code, Chapter 111, § 111.070, Item C (2).

INCREASE ACCOUNT NUMBER(S)		ACCOUNT (OBJECT) NAME		AMOUNT
7-1100-452-00-123-008-0-	751	PCT 3 PARKS	MACHINERY & EQUIPMENT	100,000.00
7-1100-452-00-123-008-0-	430	PCT 3 PARKS	REPAIR & MAINT SVCS	100,000.00
7-1100-452-00-123-008-0-	610	PCT 3 PARKS	GENERAL SUPPLIES	14,375.11
7-1100-452-00-123-008-0-	660	PCT 3 PARKS	FURNISHINGS & EQUIP	15,000.00
7-1100-452-00-123-008-0-	740	PCT 3 PARKS	IMPROVEMENTS OTHER THAN BUILDINGS	50,000.00
			TOTAL BUDGET INCREASE (DECREASE)	**279,375.11**

REASON: Appropriate funding for anticipated expenditures related to the damages sustained during the May 2016 weather event.

Note: Monies are to be unassigned from acct#7-1100-257-00-000-007-0-000 Fund Balance - Assigned for Pct 3 Anzalduas Park

DEPARTMENT HEAD SIGNATURE

APPROVED COMMISSIONERS' COURT

____/____/____
DATE

ATTEST COUNTY CLERK

AI-58992 **Purchasing Department** **23. A. 1.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Marty Salazar, PURCHASING DEPT.

Submitted By: Heidi Ortiz, PURCHASING DEPT.

Department: PURCHASING DEPT.

Information

CAPTION

A. Requesting exemption from competitive procurement requirements pursuant to Texas Local Government Code, 262.024 (7) & (A) an item that can only be obtained from one source;
B. Requesting approval of a "Sole Source Declaration" for SCI Technologies, Inc. d/b/a SkyCop, Inc. for the purchase [through the requisition/PO protocol] of a SkyCop Mobile Surveillance Unit [equipment and related items/services] for all Hidalgo County Elected Offices [commencing with the Sheriff's Office], Departments, Programs and/or Agencies (all funding sources) with the declaration to remain in effect unless otherwise revokes by Hidalgo County Commissioners' Court including compliance with HB23 and/or HB1295 when and if applicable.

BACKGROUND

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funding to be provided by user department when needed.

Attachments

Declaration
Affidavit
Vendor SS Verification
quote
Req 314855
1295

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/17/2017 04:00 PM
Budget & Management	Veronica Ortiz	03/17/2017 04:06 PM

Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Heidi Ortiz		Started On: 03/16/2017 01:51 PM
Final Approval Date: 03/17/2017		

Hidalgo County Purchasing Department
2812 S. Business Highway 281
New Administration Building
Edinburg, Texas 78539
(956) 318-2626/ Fax: (956) 318-2629

MEMORANDUM

"SOLE SOURCE DECLARATION"

TO: Hidalgo County Commissioners' Court

FROM: Martha L. Salazar, CPPB
Hidalgo County Purchasing Agent

DATE: March 21, 2017

RE: "Sole Source Declaration" – SCI Technologies, Inc. d/b/a SkyCop, Inc.

Hidalgo County Sheriff's Office requires the purchase of a customized Solar Mobile Surveillance Trailer to provide security and a law enforcement presence to remote locations. Having mobility with surveillance is critical to crime prevention and detection of criminal activity. This platform gives you "eyes in the sky on wheels" and widens the scope of surveillance without limitations of power sources and radio communication interfacing.

SCI Technologies, Inc. d/b/a SkyCop, Inc. is a patented product and trademarked with the U.S. Patent and Trademark Office. The SkyCop Mobile Surveillance Trailer allows for custom trailer design, system software and integration of specifications and features unique to the needs of Hidalgo County Sheriff's Office. SkyCop® Solar Powered Series provides custom designed self-contained units equipped with their own power plant and communication platform using advanced technology ranging from simple rechargeable battery systems to a unit housing a back-up generator. The SkyCop Solar Powered Trailer can be fitted with infrared (IR) and thermal imaging cameras, chemical sensing, gunshot recognition, high-tech DVR's and digital analytics. The unit will maintain radio communication to enable the County to capture data and then interface with a centralized fusion center. Remote locations lack access to electrical power or communications lines. The self-contained unit does not require any type of utility or communication hook up. Having remote surveillance capabilities powered by the sun enables you to do more with fewer personnel and resources. The County will experience lower operational costs and significantly higher organizational productivity and efficiency. A solar powered trailer will allow flexibility to place video, acoustic and environmental sensing detection equipment anywhere there could be a known criminal hot spot and when the criminals move on to different locations the mobile surveillance trailer can simply be hooked up to the transport vehicle and moved to the next designated location. SCI Technologies, Inc. d/b/a SkyCop, Inc. is the sole source for SkyCop Surveillance Technology.

Video, audio, and sensing devices provide the ability to capture accurate data when critical events occur. The License Plate Recognition (LPR) system relies on infrared (IR) illumination technology. The infrared illumination technology captures images of automobiles and license plates which are fed to computer systems for storage and data analytics. LPR camera can be mounted on the surveillance trailer allowing for mobile or fixed real time license plate reading, video surveillance, and analysis. This allows a quick response to apprehend and arrest criminal suspects.

The SkyCop Radar System and Sign, SkyCop Solar/Generator Hybrid Trailer, and SkyCop Standard Trailer LPR are all products of SCI Technologies, Inc. d/b/a/ SkyCop, Inc. and while SkyCop, Inc. is not the only avenue for the purchase of a surveillance trailer, after extensive research SkyCop, Inc. is the only company which can custom design a Solar/Generator Hybrid Trailer including the extensive specifications and requirements by Hidalgo County Sheriff's Office.

Therefore, Hidalgo County Sheriff's Office requires the purchase of a Solar/Generator Hybrid Trailer from SCI Technologies, Inc. d/b/a SkyCopy, Inc. with options to provide "Turnkey Solutions" (i.e. any/all equipment, parts, incidentals, accessories and installation and training of same) to include if necessary; all other related Hidalgo County Law Enforcement Agencies (all funding sources).

This Sole Source Declaration is to remain in effect unless otherwise revoked by Hidalgo County Commissioners' Court.

HIDALGO COUNTY PURCHASING DEPARTMENT
SOLE SOURCE AFFIDAVIT

THIS IS AN OFFICIAL PURCHASING DOCUMENT – RETAIN WITH PURCHASE ORDER

Before me, the undersigned official, on this day, personally appeared Charlotte Nuckles a person known to me to be the person whose signature appears below, whom after being duly sworn upon his/her oath deposed and said:

1. My name is Charlotte Nuckles. I am over the age of 18, have never been convicted of a crime and am competent to make this affidavit.
2. I am an authorized representative of the following company or firm: SCI Technologies, INC. DBA SkyCop. Inc.
3. The above named company or firm is the sole source for the following item(s), product(s) or service(s): SkyCop Mobile Surveillance Unit
4. Competition in providing the above named item(s), product(s), service(s) is precluded by the existence of a patent, copyright, secret process or monopoly as stated under Section 262.024(a)(7)(A), of the Local Government Code. Also, attached hereto is a sole source letter, which sets forth the reasons why this Vendor is a sole source provider (dated and signed).
5. There is/are TO our knowledge no other like item(s) or product(s) available for purchase that would serve the same purpose or function.
6. Note: This Vendor understands that by providing false information on this Sole Source Affidavit, it may be considered a non-responsible Vendor on this and future purchases and may result in discontinuations of any/all business with Hidalgo County.

Signature:

KIM VANCE
STATE OF TENNESSEE
NOTARY PUBLIC
SHELBY COUNTY
MY COMMISSION EXPIRES 4-26-2020

SWORN AND SUBSCRIBED TO under oath before me on 17 day of March, 2017

Notary Public

Kim Vance
Printed Name

4-26-2020
My Commission Expires

Company Name: SCI Technologies, INC. DBA SkyCop Inc.
Address, City, State & Zip Code: 3736 Gethwalt Cove, Memphis, TN 38118
Phone Number: 901-410-2151 Fax: 901-410-2151
Contact Name and Title: Marie Nichols - Office Manager
WEB Address: www.skycopvideo.com Email: mnichols@skycopinc.com
Federal Tax ID Number: 46-5277782 Texas Sales Tax Number:

Zimbra **heidi.ortiz@co.hidalgo.tx.us**

RE: Surveillance Trailer

From : Alan Yoder <alan@superioralarms.com> Mon, Mar 06, 2017 04:18 PM

Subject : RE: Surveillance Trailer

To : 'Heidi Garcia Ortiz' <heidi.ortiz@co.hidalgo.tx.us>, buyboard@superioralarms.com

Reply To : alan@superioralarms.com

Heidi,

This is a Radar trailer and Superior Alarms does not provide this type solution. It is used to clock the speed of vehicles.

Sincerely,

Alan Yoder, CET
President
CVI-20100609-1053112
Superior Alarms *(Established 1986)*
600 Ash Avenue
McAllen, Texas 78501
alan@superioralarms.com
www.superioralarms.com
956-682-6005 Office
956-213-1147 Fax
Put our 30 years of experience to work for you!

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From: Heidi Garcia Ortiz [mailto:heidi.ortiz@co.hidalgo.tx.us]
Sent: Monday, March 06, 2017 12:15 PM
To: buyboard@superioralarms.com
Subject: Surveillance Trailer

Good morning:

Attached is a list of specifications for a surveillance trailer needed by Hidalgo County Sheriff's Office. Please advise by return email if Superior Alarms is able to provide the services required. Thank you very much for your time.

Sincerely,

Heidi Garcia Ortiz

--

Heidi Garcia Ortiz, Buyer III
Hidalgo County Purchasing Department
2802 S. Business Hwy 281
Edinburg, TX 78539
956-292-7000 Ext. 4877
956-900-4455 Cell Phone
956-292-7612 Fax
heidi.ortiz@co.hidalgo.tx.us

Zimbra **heidi.ortiz@co.hidalgo.tx.us**

RE: Surveillance Trailer

From : Darryl West (Evergreen-ETI) <darryl.west@evergreen-eti.com> Tue, Mar 07, 2017 03:13 PM

Subject : RE: Surveillance Trailer

To : 'Heidi Garcia Ortiz' <heidi.ortiz@co.hidalgo.tx.us>

Hi Heidi,

Thanks for your inquiry.

Regret we are not able to quote on that custom system as described in your specifications.
We don't provide internal combustion generators (only fuel cells), or traffic radar/sign systems.
And we would not be able to provide on-site training etc due to our remote location relative to Texas.

I appreciate the opportunity, though. All the best.

–
Regards,

Darryl West
P.Eng, President
Evergreen Energy Technologies Inc.
Calgary, AB, Canada
Mobile: (403)370-5437
email: darryl.west@evergreen-eti.com
web: www.evergreen-eti.com

From: Heidi Garcia Ortiz [mailto:heidi.ortiz@co.hidalgo.tx.us]
Sent: Monday, March 06, 2017 2:29 PM
To: info@evergreen-eti.com
Subject: Surveillance Trailer

Good afternoon:

Attached is a list of specifications for a surveillance trailer needed by Hidalgo County Sheriff's Office. Please advise by return email if your company is able to provide the services required. Thank you very much for your time.

Sincerely,

Heidi Garcia Ortiz

--

Heidi Garcia Ortiz, Buyer III
Hidalgo County Purchasing Department
2802 S. Business Hwy 281
Edinburg, TX 78539
956-292-7000 Ext. 4877
956-900-4455 Cell Phone
956-292-7612 Fax
heidi.ortiz@co.hidalgo.tx.us

Zimbra **heidi.ortiz@co.hidalgo.tx.us**

RE: Surveillance Trailer

From : Ronald Jones (RJ) <rjjones@e-one.com>
Mon, Mar 06, 2017 04:03 PM
1 attachment

Subject : RE: Surveillance Trailer

To : Heidi Garcia Ortiz <heidi.ortiz@co.hidalgo.tx.us>

Ms. Ortiz,
E-ONE does not manufacturer surveillance trailers.

Thank you for your consideration.

Ronald "RJ" Jones
Manager, U.S. Government & Airport Products
| Office: 352.861.3327 | Cell: 352.266.2666 | Fax: 352.237.1161
|rjjones@e-one.com | 1601 SW 37th Avenue Ocala, FL. 34474

From: Heidi Garcia Ortiz [mailto:heidi.ortiz@co.hidalgo.tx.us]
Sent: Monday, March 06, 2017 12:53 PM
To: Jones, Ronald (RJ)
Subject: Surveillance Trailer

Good morning:

Attached is a list of specifications for a surveillance trailer needed by Hidalgo County Sheriff's Office. Please advise by return email if E-One, Inc. is able to provide the services required. Thank you very much for your time.

Sincerely,

Heidi Garcia Ortiz

--
Heidi Garcia Ortiz, Buyer III
Hidalgo County Purchasing Department
2802 S. Business Hwy 281
Edinburg, TX 78539
956-292-7000 Ext. 4877
956-900-4455 Cell Phone
956-292-7612 Fax
heidi.ortiz@co.hidalgo.tx.us



image001.png
15 KB

Zimbra **heidi.ortiz@co.hidalgo.tx.us**

Surveillance Trailer

From : Harry Hughes <Harry.Hughes@strthomas.com> Mon, Mar 06, 2017 12:49 PM

1 attachment

Subject : Surveillance Trailer

To : heidi ortiz <heidi.ortiz@co.hidalgo.tx.us>

Mrs. Heidi Garcia Ortiz,

Thank you for considering us for the business of the Surveillance Trailer. However, this is not something that Thomas Bus Gulf Coast can help you with. Hopefully we can assist you in the future with other business.

Thank you,

Harry Hughes
New Bus Sales Executive
Thomas Bus Gulf Coast,
8806 Mississippi Street, Houston, TX 77029
(713) 580-8614 Direct
(832) 216-8228 Cell
(713) 580-8659 Fax
Harry.Hughes@strthomas.com

Harry Hughes 060-S-NBSE.vcf
1 KB

Zimbra **heidi.ortiz@co.hidalgo.tx.us**

RE: Surveillance Trailer

From : OkSolar Sales <sales@oksolar.com> Mon, Mar 06, 2017 03:35 PM
Subject : RE: Surveillance Trailer
To : 'Heidi Garcia Ortiz' <heidi.ortiz@co.hidalgo.tx.us>
Reply To : sales@oksolar.com

NO only what we provide in the specs but you can add to it.

http://oksolar.com/lion/Item/000555300/solar-cctv-trailer-surveillance

- Our customer base: http://www.OkSolar.com/Customers/

Sincerely,
George
Phone: 347-624-5693 - Ext# 718
www.OkSolar.com a DBA of Generalcommunications.com Corp.

This communication contains proprietary information and may be confidential. If you are not the intended recipient of this e-mail, you are hereby notified that any dissemination, distribution or copying of this message is strictly prohibited. If you received this message in error, please delete it immediately.

From: Heidi Garcia Ortiz [mailto:heidi.ortiz@co.hidalgo.tx.us]
Sent: Monday, March 06, 2017 4:20 PM
To: Sales@oksolar.com
Subject: Surveillance Trailer

Good afternoon:

Attached is a list of specifications for a surveillance trailer needed by Hidalgo County Sheriff's Office. Please advise by return email if your company is able to provide the services required. Thank you very much for your time.

Sincerely,

Heidi Garcia Ortiz

--

Heidi Garcia Ortiz, Buyer III
Hidalgo County Purchasing Department
2802 S. Business Hwy 281
Edinburg, TX 78539
956-292-7000 Ext. 4877
956-900-4455 Cell Phone
956-292-7612 Fax
heidi.ortiz@co.hidalgo.tx.us

Zimbra **heidi.ortiz@co.hidalgo.tx.us**

RE: Surveillance Trailer

From : Gary Reber <gary@qualityvans.com> Mon, Mar 06, 2017 02:32 PM

Subject : RE: Surveillance Trailer

To : Heidi Garcia Ortiz <heidi.ortiz@co.hidalgo.tx.us>

Heidi,

I appreciate the opportunity but this is not something that we manufacture or resell so we would not be able to provide.

Regards,

Gary Reber
Quality Vans & Specialty Vehicles
2113 W 7th Street
Tempe, AZ 85281
O. (480) 464-7007
F. (480) 464-5999

gary@qualityvans.com
www.qualityvans.com

From: Heidi Garcia Ortiz [mailto:heidi.ortiz@co.hidalgo.tx.us]
Sent: Monday, March 06, 2017 10:59 AM
To: Gary Reber <gary@qualityvans.com>
Subject: Surveillance Trailer

Good morning:

Attached is a list of specifications for a surveillance trailer needed by Hidalgo County Sheriff's Office. Please advise by return email if J.A.R. Capital Group, Inc. is able to provide the services required. Thank you very much for your time.

Sincerely,

Heidi Garcia Ortiz

--

Heidi Garcia Ortiz, Buyer III
Hidalgo County Purchasing Department
2802 S. Business Hwy 281
Edinburg, TX 78539
956-292-7000 Ext. 4877
956-900-4455 Cell Phone
956-292-7612 Fax
heidi.ortiz@co.hidalgo.tx.us

This message is confidential. It may also be privileged or otherwise protected by work product immunity or other legal rules. If you have received it by mistake, please let us know by e-mail reply and delete it from your system; you may not copy this message or disclose its contents to anyone.

Req 314855

Quote

Quote Number: 542

Payment Terms: Net 30 days
Expiration Date: 03/31/2017

Quote Prepared For

Hidalgo County Sheriff's Office

Phone:

Quote Prepared By

Marie Nichols
SCI TECHNOLOGIES INC
3736 Getwell Cove
Memphis, Tennessee 38118
Phone:(901) 410-2151
Fax:
mnichols@skycopinc.com
TN License #1899

Item#	Quantity	Item	Unit Price	Adjusted Unit Price	Extended Price
One-Time Items					
1)	1	SC-HYBRID-TR SKYCOP SOLAR / GENERATOR HYBRID TRAILER INCLUDES: ELECTRIC TRAILER WITH (2) 265W SOLAR PANEL; SIX 420AH BATTERIES; 2TB ENCODER FOR STORAGE; 2 PTZ IR CAMERAS; 1 OVERVIEW CAMERA; FLASHING BLUE LIGHTS; HYDRAULIC LIFT; CELLULAR ROUTER; IVMS SOFTWARE; ONAN GENERATOR; ONBOARD FUEL TANK; PROGRAMMABLE LOGIC CONTROL AND SOFTWARE TO AUTOMATICALLY START GENERATOR WHEN NEEDED	$48,000.00	$48,000.00	$48,000.00
2)	1	SCSC-OPTLPR SKYCOP STANDARD TRAILER LPR OPTION SharpX 2 LPR Camera System - **requires server for software and database**	$20,000.00	$20,000.00	$20,000.00
3)	1	SC-TR-TRAINING Programming and training for Hybrid trailer system. On-site training for setting up and deploying trailer and Radar system. Includes training remote support for 30 days after delivery.	$9,000.00	$9,000.00	$9,000.00
4)	1	SC-RADAR-SYS SkyCop Radar System and Sign. Outdoor 11" LED display area,Red and Blue Flashing LED lights, Two 12V 18 amp hour Ni-MH battery packs, provides up to 14 days operation. AC battery charger (24 hours for full charge) 24" w x 21" h YOUR SPEED faceplate with 3" lettering on one line. Battery Housing (field accessible to swap batteries), holds 2 battery packs, lock included. Data Collection software license (per sign) Provides weekly, daily, hourly, and 1/2 hour data on # of vehicles, # of speeders, average speeds, peak speeds, 50th & 85th percentile. Radar on the Go Trailer Hitch Mount. *** Radar sign and trailer design has been improved since 2014. Radar sign will be approximately 21" above the rear of the trailer.	$7,500.00	$7,500.00	$7,500.00

Interest Charges on Past Due Accounts and Collection Costs Overdue amounts shall be subject to a monthly finance charge. In addition, customer shall reimburse all costs and expenses for attorney's fees incurred in collecting any amounts past due. Additional training or Professional Services can be provided at our standard rates.

Item#	Quantity	Item	Unit Price	Adjusted Unit Price	Extended Price
5)	1	SC-GEN-SVR SkyCop Server with Genetec Back Office Server Software and Licenses	$22,500.00	$22,500.00	$22,500.00
			One-Time Subtotal		**$107,000.00**
			Total		**$107,000.00**

Authorizing Signature _____

Date _____

Interest Charges on Past Due Accounts and Collection Costs Overdue amounts shall be subject to a monthly finance charge. In addition, customer shall reimburse all costs and expenses for attorney's fees incurred in collecting any amounts past due. Additional training or Professional Services can be provided at our standard rates.

SCI Technologies, Inc.

SkyCop SkyCop Systems

December 6, 2016

Hidalgo County Sheriff's Office
711 El Cibolo Rd.
Edinburg, TX 78541
Attn. Lt. Roy Mendez

RE: SkyCop™ Mobile Surveillance Trailer

Dear Lt. Roy Mendez

This letter serves as justification that SCI Technologies, Inc. d/b/a SkyCop, Inc is a "Sole Source" for SkyCop™ Surveillance Technology. At this time SkyCop™ products are only available through SCI Technologies, Inc. d/b/a SkyCop, Inc.

SkyCop is a patented product and trademarked with the U.S. Patent and Trademark Office. Our custom trailer design, system software and integration are unique in the market place and backed with years of experience. To our knowledge there is no other product meeting the quality, specifications, and features of the SkyCop™ Mobile Surveillance Trailer. Our product combines the following features and construction into one mobile surveillance system:

- Custom Designed and Built Heavy Duty Trailer
- Tribrid Charging Capabilities: 265W @ 12VDC Solar Panel; 2,800W 23.8Amp @ 120V Generator: 100AMP @ 12VDC Shore Power
- Leveling System for various terrains
- 18' Heavy Duty Hydraulic Mast that provides Vibration and Wind Resistant
- (6) 420AH Industrial 6V DC Batteries
- Blue Flashing Light Deterrent System
- PTZ 36X Cameras and 1 Overview Camera
- 4 Channel DVR embedded with H.264 compression and 2TB of recording storage
- 4G Wi-Fi Cellular Router for live view or playback
- Automated Monitoring System that switches power generation sources as needed

In addition, SCI Technologies, Inc. can integrate addition sensors into the system such as License Plate Recognition Cameras, PA Systems, and Radar.

Sincerely,

Charlotte Nuckles

Charlotte Nuckles
CEO
(901) 410-21510ext. 700
cnuckles@skycopinc.com

Requisition

SHERIFF'S LAW ENFORMENT FACILITY

Req # 00314855
PO #
Date: 02/10/17

Bill To: x
x

Vendor : 451673
SCI TECHNOLOGIES, INC.
SKYCOP, INC.
3736 GETWELL COVE
MEMPHIS TN 38118
FAX (901)410-2151

Ship To: SHERIFF'S LAW ENFORMENT FACILITY
711 EL CIBOLO RD.
EDINBURG TX 78539

Contact: **ZACH SAENZ**
956-393-6024

Contract No:

Special Instructions:

QUANTITY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
		SKYCOP TO BE USED FOR STNEGARDEN OPERATIONS DO NOT DUPLICATE ORDER		
1.00	EACH	ITEM# SC-HYBRID-TR SKYCOP SOLAR/GENERATOR HYBRID TRAILER INCLUDES: ELECTRIC TRAILER WITH (2) 265W SOLAR PANEL; SIX 420AH BATTERIES; 2TB ENCODER FOR STORAGE; 2 PTZ IR CAMERAS; 1 OVERVIEW CAMERA; FLASHING BLUE LIGHTS; HYDRAULIC LIFT; CELLULAR ROUTER; IVMS SOFTWARE; ONAN GENERATOR; ONBOARD FUEL TANK; PROGRAMMABLE LOGIC CONTROL AND SOFTWARE TO AUTOMATICALLY START GENERATOR WHEN NEEDED	48,000.00	48,000.00
1.00	EACH	ITEM# SCSC-OPTLPR SKYCOP STANDARD TRAILER LPR OPTION SHARPX 2 LPR CAMERA SYSTEM-** REQUIRES SERVER FOR SOFTWARE AND DATABASE	20,000.00	20,000.00
1.00	EACH	ITEM# SC-TR-TRAINING PROGRAMMING AND TRAINING FOR HYBRID TRAILER SYSTEM. ON SITE TRAINING FOR SETTING UP AND DEPLOYING TRAILER AND RADAR SYSTEM. INCLUDES TRAINING SUPPORT FOR 30 DAYS AFTER DELIVERY	9,000.00	9,000.00
1.00	EACH	ITEM# SC-RADAR-SYS SKYCOP RADAR SYSTEM AND SIGN. OUTDOOR 11" LED DISPLAY AREA, RED AND BLUE FLASHING LED LIGHTS, TWO 12V 18 AMP HOUR Ni-MH BATTERY PACKS, PROVIDES UP TO 14 DAYS OPERATION. AC BATTERY CHARGER (24 HOURS TO FULL CHARGE) 24" W X 21" H YOUR SPEED FACEPLATE WITH 3" LETTERING ON ONE LINE. BATTERY HOUSING (FIELD ACCESSIBLE TO SWAP BETTERIES) HOLDS 2 BATTERY PACKS, LOCK INCLUDED. DATA COLLECTION SOFTWARE LICENSE (PER SIGN) PROVIDES WEEKLY, DAILY, HOURLY, AND 1/2 HOUR DATA ON # OF VEHICLES, # OF SPEEDERS, AVERAGE SPEEDS, PEAK SPEEDS, 50TH & 85TH PERCENTILE. RADAR ON THE GO TRAILER HITCH MOUNT. *** RADAR SIGN AND TRAILER DESIGN HAS BEEN IMPROVED SINCE 2014. RADAR SIGN WILL BE APPROXIMATELY 21" ABOVE REAR OF THE TRAILER	7,500.00	7,500.00
1.00	EACH	ITEM# SC-GEN-SVR SKYCOP SERVER WITH GENETEC BACK OFFICE SERVER SOFTWARE AND LICENSES	22,500.00	22,500.00
		Account No	Encumbrance	
		7-1284-421-00-280-047-8-751	107,000.00	
			Freight	.00
			Total	107,000.00

Authorized By: _____

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-179797

Date Filed:
03/17/2017

Date Acknowledged:
03/19/2017

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

SCI Technologies, Inc.
Memphis, TN United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

2017-100-HGO
SkyCop Mobile Surveillance Trailer

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

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Hidalgo County

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2017-100-HGO
SkyCop Mobile Surveillance Trailer

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

KIM VANCE
STATE OF TENNESSEE NOTARY PUBLIC
SHELBY COUNTY
MY COMMISSION EXPIRES 4-26-2020

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Shelby County, this the 17 day of March, 20 17, to certify which, witness my hand and seal of office.

Kim Vance — Signature of officer administering oath
Kim Vance — Printed name of officer administering oath
Title of officer administering oath

AI-58499 **Purchasing Department** **23. B. 1.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Marty Salazar, PURCHASING DEPT.

Submitted By: Darlene Betancourt, PURCHASING DEPT.

Department: PURCHASING DEPT.

Information

CAPTION

A. Acceptance and approval of the following listed construction contract documents as awarded by Commissioners' Court on December 13, 2016 (AI#57719) for the following HC Pct. #1-Paving and Drainage Improvements Projects:

Hidalgo County Precinct No. 1 – FEMA Road Drainage Improvements - Indian Hills Subdivision	2016-399-12-07	IOC Company	$1,280,979.70

B. Pursuant to TXLGC 262.031 and in the interest of expediting a Project's progress, requesting authority/approval for the Precinct Commissioner or designee: David Suarez, Chief Administrator to execute change orders that involve Increasing or decreasing in cost of $50,000.00 or LESS and in no event to exceed the Change Order's statutory limits. The original contract price may not be decreased by 18% or more without the consent of the contractor.

BACKGROUND

Note: Contracts have been reviewed and approval as to form by legal counsel.

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

FEMA EVENT	PW	SITE	ROAD	ACCT
4245	176	18	Campacuas	6-1280-431-00-121-828-5-XXX
4245	176	19	Cherokee	6-1280-431-00-121-829-5-XXX
4245	176	20	Santawan	6-1280-431-00-121-830-5-XXX
4245	176	21	Caddoe	6-1280-431-00-121-831-5-XXX
4245	176	22	Kickapoo	6-1280-431-00-121-832-5-XXX
4245	176	23	Wichita	6-1280-431-00-121-833-5-XXX
4245	176	24	Tejas	6-1280-431-00-121-834-5-XXX
4245	176	25	Shawnee	6-1280-431-00-121-835-5-XXX

4245	176	26	Cheyenne	6-1280-431-00-121-836-5-XXX
4245	176	27	Seminole	6-1280-431-00-121-837-5-XXX
4245	176	28	Creek Place	6-1280-431-00-121-838-5-XXX

Attachments

Contract-Indian Hills

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/09/2017 11:12 AM
Budget & Management	Veronica Ortiz	03/09/2017 11:13 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Darlene Betancourt Started On: 02/13/2017 08:43 AM

Final Approval Date: 03/17/2017

Contract Number: C-16-399-12-13

Hidalgo County Precinct No.1

SPECIFICATIONS AND FORMS OF CONTRACT, BOND, AND PROPOSAL
FOR

Paving Improvements for Indian Hills East

RECONSTRUCTION OF ROADWAY
IN THE EAST INDIAN HILLS SUBDIVISION
HIDALGO COUNTY, TEXAS

Prepared for:

Hidalgo County Precinct 1

HIDALGO COUNTY OFFICIALS

RAMON GARCIA, COUNTY JUDGE
DAVID L. FUENTES, COMMISSIONER, PCT 1
EDUARDO CANTU, COMMISSIONER, PCT 2
JOE M. FLORES, COMMISSIONER, PCT 3
JOSEPH PALACIOS, COMMISSIONER, PCT 4

Prepared by:

TEDSI INFRASTRUCTURE GROUP
Consulting Engineers
1201 East Expressway 83 ♦ Mission, Texas 78572
Tel: (956) 424-7898
Fax: (956) 424-7022

TEDSI
TBPE Firm No. 1640

PROJECT ENGINEER: MARK D. CORBITT, P.E.

JAN 2017

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DESCRIPTION

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BID BOND FORM

INSURANCE REQUIREMENTS ACKNOWLEDGEMENT

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

CONFLICT OF INTEREST QUESTIONNAIRE

CONTRACT REQUIREMENTS:

CONTRACT

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- I.2 PERFORMANCE BOND
- I.3 PAYMENT BOND
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- I.5 SALES TAX AND LOCAL SALES TAX EXEMPTION CERTIFICATE
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CONTRACT – PART II: GENERAL CONDITIONS
- II.1 STANDARD GENERAL CONDITIONS OF THE CONTRACT
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CONTRACT – PART III: CONTRACT DRAWINGS

REQUEST FOR BIDS (RFB)

The County of Hidalgo would like to invite you to submit a bid for each of the following projects:

Bid No.:	Bid Description:	Opening Date:
2016-399-12-07-FAZ	"Hidalgo County Precinct No. 1 – Road & Drainage Improvements – Indian Hills Subdivision	December 07, 2016

PROCUREMENT PACKETS. Interested contractors may obtain bid packets at project engineer's office: TEDSI Infrastructure Group Inc., at 1201 E. Expressway 83, Mission, Texas 78572 Phone No. **(956) 424-7898** for the amount of **$ 100.00 each.** General and/or Prime Contractors submitting bids and/or proposals to the County of Hidalgo shall be **non-refundable.**
The PDF version of bid packets may be obtained via email **at no cost** by emailing your request to the Projected Engineer at the following address: dsolis@tedsi.com

PRE-BID CONFERENCE is scheduled for **WEDNESDAY, NOVEMBER 30, 2016** at 2:30 P.M. at **HIDALGO COUNTY ADMINISTRATION BUILDING - PURCHASING DEPARTMENT 2812 S Business Hwy 281, EDINBURG, TEXAS 78539**

A BIDDER'S BOND from a reliable surety company licensed to operate in the State of Texas or certified Cashier's Check, payable without recourse to the County of Hidalgo, for the amount of not less than **5%** of the total bid shall accompany the bid as guaranty that, if awarded the contract, the bidder will enter into a contract with the County of Hidalgo.
A Payment Bond is required in the amount of one hundred percent (100%) of the Contract Amount, if the awarded contract exceeds $25,000, and a Performance Bond is required in the amount of one hundred percent (100%) of the Contract Amount, if the awarded contract exceeds $100,000.

UPON SUBMITTING SEALED BIDS, bidders are required to properly identify (handwritten, typed or printed) sealed envelope and/or packet (SEPARATELY FOR EACH PROJECT) as follows: Bidder's name and address on the upper left hand corner of the sealed envelope and/or package and **Bid Number** on the lower left hand corner of sealed envelope/and or packet. **OVERNIGHT MAIL MUST ALSO BE PROPERLY LABELED ON THE OUTSIDE OF EXPRESS ENVELOPE OR PACKAGE.**

The sealed bid must contain **one (1) original and three (3) copies** of bid and must be clearly identified and addressed for delivery to:

HIDALGO COUNTY PURCHASING DEPARTMENT, Attn: Martha L. Salazar, CPPB, County Purchasing Agent.

HIDALGO COUNTY ADMINISTRATION BUILDING

US Postal Mail/Courier Address: 2812 S. Business Hwy 281, Edinburg, TX 78539
Physical Location: 2802 S. Business Hwy. 281 (Southeast of Canton Rd & Business Hwy 281) Edinburg, TX

BIDS ACCEPTANCE: Sealed bids will be accepted until **9:30 a.m. on Wednesday, December 07, 2016** at which time they will be opened in the Hidalgo County Purchasing Department Conference Room at **Physical Location: 2802 S. Business Hwy 281, Hidalgo County New Administration Building, Edinburg, Texas 78539.** NO FACSIMILES OR LATE ARRIVALS WILL BE ACCEPTED. ANY BID RECEIVED AFTER THAT TIME WILL NOT BE OPENED AND WILL BE RETURNED

Attention is called to the fact that not less than, the federally determined prevailing **(Davis-Bacon and Related Acts)** wage rate, as issued and contained in the contract documents, must be paid on this project. In addition, the successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex, age, disability or national origin.

BIDS MAY BE HELD by the County of Hidalgo for a period not to exceed sixty (60) days from the date of the opening of bids for the purpose of reviewing the bids and investigating the qualifications of bidders, prior to awarding of the contract.

THE COUNTY reserves the right to refuse and reject any/all bids and to waive any/all formalities or technicalities, or to accept the bids considered the best and most advantageous to the County.

Typed-written Requests For Information (RFI) shall be sent to Engineer. Please follow with a call to confirm receipt of RFI. RFI's will not be answered by phone. NO HAND WRITTEN RFI'S will be answered. All inquiries shall be forwarded by November 30, 2016. Inquiries beyond this date will not be responded. Contact project engineer for copies of Addenda.

BY ORDER OF THE COMMISSIONERS COURT OF HIDALGO COUNTY, TEXAS on this the 15th of November, 2016.

MARTHA L. SALAZAR, CPPB
HIDALGO COUNTY PURCHASING AGENT

REPORT ROAD HAZARDS @ 1-866-HCR-SAFE OR 1-866-427-7233

Bidders Documents

1. Sealed bids will be received for **"HIDALGO COUNTY (DEPT)-"PROJECT NAME"** in accordance with the specifications attached as **Exhibit "A"** hereto. Bids should address all specifications set forth. Bidders may suggest substitutions of features which they feel would be in the best interest of Hidalgo County ("County"). Strong rationale must be presented for any deviation from the specifications. Hidalgo County reserves the right to reject the deviation and its effect on the overall bid.

2. **One (1) original and Three (3) copies** of all bids are required with the bidders name and return address clearly typed and or/printed on upper left hand corner and the proper notation clearly typed/printed on the lower left hand corner of the envelope and/or package: **BID NO.: 2016-399-12-07-FAZ "HIDALGO COUNTY (DEPT)-PROJECT NAME"** and at County's Purchasing Department with a physical address: 2802 S. Business 281 and a mailing address: 2812 S. Business Hwy 281, New Administration Building, Edinburg, Texas, **on or before 9:30 A.M, WEDNESDAY, DECEMBER 7, 2016. NO FACSIMILES, EMAILS OR LATE ARRIVALS WILL BE ACCEPTED. ANY RFB RECEIVED AFTER THAT TIME WILL NOT BE OPENED AND WILL BE RETURNED. OVERNIGHT MAIL MUST ALSO BE PROPERLY LABELED ON THE OUTSIDE OF EXPRESS ENVELOPE OR PACKAGE WITH REFERENCE TO "HIDALGO COUNTY-(DEPT)- "Indian Hills" -RFB NO.: 2016-399-12-07-FAZ**

3. " Hidalgo County reserves the right to refuse and reject any/all bids and to waive any/all formalities or technicalities, or to accept the bids considered the best and most advantageous to Hidalgo County.

   Additionally, all forms listed below must be properly executed and included with your bid:

   1. Legal Notice (See page 8);
   2. Bid Page – Procurement Form – Areas of Specialization (See **Exhibit "B"**);
   3. Insurance pages with Acknowledgment Forms (See **Exhibit "C"**);
   4. Form CIQ-Conflict of Interest Questionnaire (See **Exhibit "D"**)(if applicable);
   5. Vendor Bidder Application & W-9 forms (See **Exhibit "E"**);
   6. Certification Regarding Debarment (See **Exhibit "F"**); and
   7. SAMS.gov Registration Acknowledgement (See Number 18 below).

4. Hidalgo County reserves the right to: A. separate and accept, or eliminate any item(s) listed under this bid that it deems necessary to accommodate budgetary and/or operational requirements; B. reject any or all bids submitted and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best bid for approval; C. award the bid to one bidder or to multiple bidders if the County determines it is in its best interest to do so; D. award the contract to the responsible bidder who submits the lowest and best bid. "Lowest and best" means a bid or offer providing the best value considering associated direct and indirect costs, including transport, maintenance, reliability, life cycle, warranties, and customer service after a sale.

5. The Bidder shall not substitute items named in the bid without the express written consent of Hidalgo County. Failure of the delivered item to perform as specified or failure to meet the stated delivery schedule shall release Hidalgo County from all obligations to the contracting party with regard to the item(s) in question. In such event, County may elect to award the contract to the next-lowest responsible bidder, or to reject all bids and re-advertise.

6. For work to be performed at a County owned or operated location, each bidder shall, in its sole discretion, visit the job site before preparing the bid and thoroughly familiarize himself/herself with existing conditions. Bidder should take field dimensions and note all circumstances which affect the

dollar amount of the bid.

6. Descriptive specifications are referenced in this document to indicate the general kind and quality of equipment desired by Hidalgo County. Due to various styles and models of equipment, bidders are required to include illustrations, specifications, explanation of warranties, and service data with their bid including catalogue numbers and any necessary references.

7. No bid may be withdrawn within thirty (30) days from the scheduled time to open bids.

8. Proposed prices are to remain firm for a minimum of ninety (90) days after bid opening.

9. Any interpretations, amendments, corrections or changes to this bid document must be in a written addendum and signed by the County Judge or his designee. Addenda will be mailed to all who are known to have received a copy of the Request for Bids. Bidders shall acknowledge receipt of all addenda as a part of their bid.

10. County reserves the right to accept or reject any or all Bids.

11. Costs are to be net F.O.B., County Prepaid.

12. County is exempt from Federal Excise Tax, State Tax and Local Tax. Do Not include tax in cost figure. If it is determined that tax was included in the cost figures it will not be included in the tabulation of any awards. Tax exemption certificates will be furnished upon request.

13. Funds for this procurement have been provided through the County budget for this fiscal year only. County, on an annual basis, has the right to reconsider a contract during the budget process for ensuing years if financial resources of County are insufficient to meet the liabilities of said contract. The award of a bid or contract hereunder will not be construed to create a debt of the County which is payable out of funds beyond the current fiscal year.

14. Upon award and prior to execution of a contract, Sole Proprietorships are required to submit a copy of their social security cards to the Hidalgo County Auditor's Office in order to establish an account with the County. All awarded vendors must submit a completed W-9 and a copy of their Federal ID Number Certificate.

15. DELIVERY INSTRUCTIONS:
   - No deliveries accepted after 3:00 P.M., Monday-Friday.
   - At least seventy two (72) hours prior notice of delivery must be given to Martha L. Salazar, Purchasing Agent before delivery will be accepted.
   - If you need additional information call the office listed below:

     Hidalgo County Purchasing Department
     Martha L. Salazar, Purchasing Agent
     (956) 318-2626

16. BILLING AND PAYMENT INSTRUCTIONS:
   - Invoices must include:
     a) Name and address of successful bidder
     b) Name and address of receiving department or official
     c) Purchase Order Number (if any)
     d) Notation - "HIDALGO COUNTY -RFB NO.: **2016-399-12-07-FAZ**"

Descriptive information as to the items or services delivered, including product code, item number, quantity, etc.

e) Contract number must be indicated on all invoices

- Discount payments will be considered when offered.
- Contact person for Billing and Payment questions:

Hidalgo County Auditor's Office
2808 S. Business Hwy 281
Edinburg, TX 78539
(956) 318-2511

17. SCHEDULE OF EVENTS

Bid Opening, 9:30 A.M.	December 7, 2016
Award of Contract	_____, 20 .
Commence Work or Deliver Products	_____, 20 .

18. BID OR PERFORMANCE BOND AND DEBARMENT CERTIFICATION; PAYMENT UNDER CONTRACT:

. If the contract proposed is for the construction of public works or is for a contract for goods & services exceeding $100,000, all bidders shall furnish a good and sufficient bid bond in the amount of five percent of the total contract price. A bid bond must be executed with a surety company authorized to do business in Texas. All bidders are also required to furnish a certification or acknowledgment stating that the contractor or vendor is free from suspension or debarment pursuant to federal regulation 45CFR Part 76. Register at SAMs System for Award Management @ www.sam.gov.

. Together with the signing of a contract or issuance of a purchase order following the acceptance of a bid, and prior to commencement of the actual work, the bidder shall furnish a performance bond to the County for the full amount of the contract, if that contract exceeds $50,000.

. If the contract is for $50,000 or less, no money will be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County, and, if applicable, the receipt by County of satisfactory evidence that all subcontractors and material men have been paid.

. If a contract is for the construction, alteration or repair of public buildings or public works, the contractor *shall* provide a payment bond for a contract in excess of Twenty Five Thousand Dollars ($25,000.00), as required by Tex. Govt. Code Ch. 2253.

For requirements contracts, bond requirements are determined by applying the proposed unit price to the estimated quantities included in the specifications.

19. TITLE VI NOTICE/ NONDISCRIMATION

a. "The County of Hidalgo, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat.252, 42 U.S.C. §§2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to

submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."

b. The appropriate clauses of Appendices "A" through "E" as delineated in the USDOT Standard Title VI/Nondiscrimination Assurances - Specific Assurances are hereby incorporated by reference as applicable. Title VI Appendices "A" through "E" are attached as **Exhibit "G.**

c. Bidder will attach all applicable notices to which it is obligated to provide or submit as part of the bid, including Form FHWA 1273 to be submitted by all contractors and subcontractors in relation to construction contracts.

20. ETHICAL STANDARDS:

. It shall be a breach of ethics to offer, give or agree to give any elected official, department head or employee, or former elected official, department head or employee, of the County, or for any elected official, department head or employee or former elected official, department head or employee of the County, to solicit, demand, accept or agree to accept from another person, entity or organization, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore pending before any department or agency of the County.

. It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for the County, or any person associated therewith, as an inducement for the award of a subcontract or order.

. No public official shall have an interest in a contract awarded hereunder except in accordance with Tex. Loc. Govt. Code Chapter 171.

NOTICE:
ALL COMMUNICATIONS BY A VENDOR TO THE COUNTY, ITS OFFICIALS, AND DEPARTMENT HEADS REGARDING THIS PROCUREMENT SHALL BE DONE THROUGH THE HIDALGO COUNTY PURCHASING DEPARTMENT.

21. DISCLOSURE OF CONFLICT OF INTEREST

. Effective January 1, 2016, Chapter 176 of the Texas Local Government Code requires that any vendor, person, consultant or contractor considering doing business with Hidalgo County ("the County") to disclose in the Conflict of Interest Questionnaire (the "CIQ") attached as Exhibit E, the vendor, person, consultant or contractor's affiliation or business relationship that might cause a conflict of interest with the County. By law, the CIQ must be filed with the Hidalgo County Clerk's Office no later than the seventh business day after the date the person becomes aware of facts that require that statement to be filed. The disclosure requirement applies to a person or business who contracts or seeks to contract with Hidalgo County for the sale or purchase of property, goods or service. Any purchase order or contract resulting from this process shall be considered null and void if the successful bidder fails to comply with Texas Local Government Code Chapter 176. Vendors, consultants, contractors and others who desire to conduct business with Hidalgo County are encouraged to refer to Texas Local Government Code Chapter 176 for the details of this law. An offense under Texas Local Government Code Chapter 176 is a Class C Misdemeanor.

Completed Form CIQ must be submitted to the Hidalgo County Clerk's Office located at 100 N. Closner, Edinburg, Texas 78539 - Hidalgo County Courthouse.

COMPLETION AND SUBMISSION OF FORM CIQ IS THE SOLE RESPONSIBILITY OF THE PROSPECTIVE RESPONDENT. QUESTIONS REGARDING COMPLIANCE SHOULD BE DIRECTED TO YOUR LEGAL COUNSEL.

22. CERTIFICATE OF INTERESTED PARTIES (FORM HB1295)

As of January 1, 2016, to comply with Texas Government Code Section §2252.908, and the rules issued by the Texas Ethics Commission found in Title 1, Section 46.1, 46.3 and 46.5 of the Texas Administrative Code, we have updated and revised our RFB packet. In accordance with these requirements, business must submit a completed Certificate of Interested Parties Form 1295 to the County before the County may enter into a contract with the business entity. In box 3 of Form 1295, you will provide the RFB Project No. (2016-000), as shown on the packet. Once completed and filed with the Texas Ethics Commission, Form 1295 must be printed and signed in the presence of a notary and submitted to our office either by facsimile transmission to (956) 292-7612 or via email to: tanya.delira@co.hidalgo.tx.us. Hidalgo County cannot enter into a contract until Form 1295 is submitted. Therefore, failure to timely submit Form 1295 signed and notarized may result in delay of award. Full instructions for completion and submittal of Form 1295 may be found on the Texas Ethics Commission website:

https://www.ethics.state.tx.us/tec/1295-Info.htm

THE AWARDED VENDOR WILL HAVE THIRTY (30) DAYS FROM THE DATE THE HIDALGO COUNTY COMMISSIONER'S COURT APPROVES THIS AGREEMENT TO SUBMIT THE SIGNED NOTARIZED FORM 1295. *HIDALGO COUNTY CANNOT ENTER INTO A CONTRACT UNTIL FORM 1295 IS SUBMITTED.*

23. If, during the life of any contract or bid awarded, the successful bidder's net prices generally available to other customers for items awarded herein are reduced below the contracted price, it is understood and agreed that the benefits of such reduction shall be extended to the County.

24. Bids, and all goods and services provided hereunder, shall comply with all federal, state and local laws concerning this type(s) of goods and/or services.

25. Minimum Standards for Responsible Prospective Bidders: A prospective bidder must affirmatively demonstrate bidder's responsibility. A prospective bidder, by submitting a bid, represents to County that it meets the following requirements:
    - Possess or is able to obtain adequate financial resources as required to perform under the bid;
    - Be able to comply with the required or proposed delivery schedule;
    - Have a satisfactory record of performance;
    - Have a satisfactory record of integrity and ethics;
    - Be otherwise qualified and eligible to receive an award.

26. Successful bidder will pay or cause to be paid, without cost or expenses to County, all FICA, FUTA/SUTA and Federal Income Withholding Taxes of all employees, and all wages and benefits as required by Federal or State law. Successful bidder's officers, agents and/or employees will not be entitled to any benefits of an employee or elected official of County, including, but not limited to, benefits associated with County's civil service system.

27. Any contract award to a successful bidder will be in effect until (a) the contract expires, (b) delivery and acceptance of products, and/or performance of services ordered, or (c) terminated by County with thirty

day's written notice prior to cancellation.

28. County reserves the right to enforce performance of any contract awarded hereunder in any manner prescribed by law or deemed to be in the best interest of the County in the event of breach or default by successful bidder; County reserves the right to terminate any contract immediately in the event a successful bidder fails to:

    A. Meet schedules;
    B. Pay any required fees or taxes; or
    C. Otherwise perform in accordance with the specifications.

29. Successful bidder shall defend, indemnify and save harmless County and all its elected officials, officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful bidder, or of any agent, employee, subcontractor or supplier of successful bidder in the execution of, or performance under, any contract which may result from bid award or which arises from any event or casualty happening on or within County premises themselves or happening upon or in any halls, elevators, entrances, stairways or approaches of or to such County facilities. Successful bidder shall pay any judgment with costs which may be obtained against County growing out of such injury or damages, and shall, upon request, provide a defense to County by counsel reasonably acceptable to County. Successful bidder's indemnity hereunder shall include, but is not limited to, claims relating to patent, copyright or trademark infringement, and the like, arising out of the goods and services provided by successful bidder.

30. Successful bidder shall warrant that all items/services shall conform with the specifications and/or all warranties provided under the Uniform Commercial Code and be free from all defects in material, workmanship and the like. Items supplied under a contract pursuant to this Request for Bids shall be subject to County's approval. Items found to be defective or not meeting specifications shall be replaced by successful bidder within two business days at no expense to County. Items not picked up within one (1) week after notification shall be deemed a donation to County and may be used or disposed of at County's discretion and without waiver of any other rights of County as to the item's nonconformity.

31. This document and any disputes arising hereunder shall be governed and construed according to the laws of the State of Texas, and will be performable exclusively in Hidalgo County, Texas.

32. The successful bidder shall not assign, sell, transfer or convey its rights under any awarded contract, in whole or in part, without the prior written consent of County.

BID FORM

BID FORM

HIDALGO COUNTY

2016-399-12-07-FAZ

INDIAN HILLS

BID ITEMS FOR INDIAN HILLS

BASE BID - INDIAN HILLS					
SPEC NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE (in figures)	UNIT TOTAL (in figures)
0110	EXCAVATION (ROADWAY)	13,439	CY	$ 13.50	$178,738.50
0204	SPRINKLING (DUST CONTROL)	97	MG	$ 25.00	$ 2,425.00
0216	PROOF ROLLING	40	HR	$ 50.00	$ 2,000.00
0247	FL BS (RDWY DEL)(TY E GR 4)(FNAL POS)	10,751	CY	$ 28.50	$306,403.50
0260	LIME TRT (NEW BASE)(8")	48,381	SY	$ 2.00	$96,762.00
0260	LIME TRT (EXIST MATL)(12")	48,381	SY	$ 2.00	$96,762.00
0260	LIME (HYD, COM, OR QK(SLURRY))	1,295	TON	$ 100.00	$129,500.00
0310	PRIME COAT (MC-30)	9,676	GAL	$ 3.50	$ 33,866.00
0316	ASPH (AC-10)	4,838	GAL	$ 1.25	$ 6,047.50
0341	D-GR HMA TY-D SAC-A PG76-22	5,515	TON	$ 65.00	$358,475.00
7000	STORMWATER POLLUTION PREVENTION PLAN *	1	LS	$ 10,000.00	$ 10,000.00
8000	TRAFFIC CONTROL PLAN **	6	MO	$ 10,000.00	$ 60,000.00
				BASE BID TOTAL (in figures)	$1,280,979.70

In words: one million two hundred eighty thousand nine hundred seventy nine dollars and seventy cents.

In case of DISCREPANCIES, Unit Price RULES OVER Unit Total and Total Amounts.

* THE CONTRACTOR SHALL PROVIDE AN SW3P FOR APPROVAL BY THE ENGINEER/OWNER, OBTAIN ALL NECESSARY PERMITS AND INSTALL ALL BMPs AS INDICATED ON THE APPROVED SW3P. PLAN, PERMIT, AND BMPs ARE PART OF ITEM 7000. TOTAL DISTURBED AREA IS ESTIMATED TO BE 8.7 AC.

** THE CONTRACTOR SHALL PROVIDE A SIGNED AND SEALED TRAFFIC CONTROL PLAN THAT WILL BE IMPLEMENTED AND MAINTAINED THROUGHOUT CONSTRUCTION.

Bid Total	$1,280,979.70

BIDDER/COMPANY NAME: FOC Company LLC

AUTHORIZED SIGNATURE: [signature]

PRINTED NAME: Oscar Cuellar

TITLE: managing member

CONTINUATION OF BID PAGE

The undersigned **Bidder** agrees to commence work after written notice to commence work and to substantially complete the work on which he has bid 60 calendar days as provided in Article 18 of the General Conditions of the Agreement.

Enclosed with this Proposal is a Cashier's check or Certified Check for 5% GAB _____ Dollars (_____) or a Bid Bond in the Sum of 5% GAB _____ Dollars (_____), which is agreed shall be collected and retained by the **Owner** under the conditions hereof within ten (10) days after the date this proposals is accepted; then otherwise the said bond or check shall be returned to the undersigned upon demand.

Receipts of the following Addenda on these dates shown is acknowledged:

	DATE	ACKNOWLEDGE		DATE	ACKNOWLEDGE
#1	12/06/16		#2		
#3			#4		

Respectfully submitted,

IOC Company LLC
Name of Firm

By: _____ 12/07/16
Signature Date

managing member
Title

THIS PROPOSAL MUST BE SIGNED BY AN OFFICER OF REPRESENTATIVE DULY AUTHORIZED BY THE BIDDER.

9312 E. Curve Rd.
Address

Edinburg, TX 78542

956 - 380 - 2897
Telephone Number

(Seal, if Bid is by a Corporation)

Attest: _____

RFB No. 2016-399-12-07-FAZ
Indian Hills

PLEASE NOTE THE CHANGES/CLARIFICATIONS AS FOLLOW:

I. Contract Time

i. **The total contract time for this project will be 180 Calendar Days and will be charged in accordance with Specification Item 8 Section 3.1.5.**

II. Liquidated Damages

i. **Liquidated Damages for this project will be paid by the contractor at a rate of $500 per day every day beyond the original contract time of 180 Calendar days.**

I, Elaj Tello, acknowledge receipt of ADDENDUM NO. 1 dated, November 29, 2016 for **"RFB No. 2016-399-12-07-FAZ (Indian Hills)"**

IOC Company LLC Elaj Tello
Printed Bidder Name

12/06/2016
Date

NOTE: PLEASE SUBMIT THIS ADDENDUM WITH YOUR BID PACKET, IN ORDER TO COMPLETE THE BID.....

November 29, 2016

RE:
ADDENDUM NO.1
RFB No. 2016-399-12-07-FAZ (Indian Hills).

Attn Bidders:

Attached you will find **ADDENDUM NO. 1 (1 PAGE TOTAL)** in connection with **RFB No. 2016-399-12-07-FAZ (Indian Hills).**

Please add this **ADDENDUM NO. 1** to your bid packet so as to permit your company to submit a complete bid.

Acknowledge receipt of **ADDENDUM NO. 1** by signing and returning this notice to us VIA FAX AT (956) 424-7022 or EMAIL TO: mcorbitt@tedsi.com

If you do not receive all pages of **ADDENDUM NO. 1** please notify us immediately at (956) 424-7898.

Please be advised that this **ADDENDUM NO. 1** will complete your bid packet for **RFB No. 2016-399-12-07-FAZ (Indian Hills).**

Thank you for your prompt attention to this matter.

Mark D. Corbitt, P.E., Project Manager
TEDSI Infrastructure Group Inc.

BY: _____
ADDENDUM NO. 1
ACKNOWLEDGMENT OF RECEIPT

ADDENDUM NO. 1

November 29, 2016

PROJECT REQUIREMENTS ACKNOWLEDGMENT

This is to certify that I, Oscar Cuellar, possess all of the APPLICABLE:

1. Licenses: N/A.
2. Bonds: ✓.
3. Certificates: ✓.
4. Permits: N/A.
5. Other: N/A.

necessary to carry out the required project. Furthermore, I am providing copies of the required documentation so that, if my company is awarded this bid, I may be eligible to enter into a contract with Hidalgo County and proceed to complete the project in a timely manner.

* Any licenses, bonds, certificates, permits, etc. which are required must be presented as part of the bid packet in order to expedite the bid evaluation process. Failure to provide said documentation will result in the disqualification of your bid.

Authorized Signature

12/07/16
Date

IOC Company LLC
Company

9312 E Curve Road
Address

Edinburg, TX 78542
City, State, Zip

THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we

IOC Company, LLC

9312 E. Curve Street,Edinburg, TX 78542

as Principal, hereinafter called Principal, and

Allied World Insurance Company
199 Water Street,New York, NY 10038

a corporation duly organized under the laws of the State of **NH**
as Surety, hereinafter called Surety, are held and firmly bound unto

Hidalgo County Purchasing Department

as Obligee, hereinafter called Obligee, in the sum of **Five Percent of the Greatest Amount Bid 5% G.A.B.** Dollars ($——),

for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for (Here insert full name, address and description of project)

Hidalgo County Precinct 1 Indian Hills Subdivision

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this **7th** day of **December**, **2016**.

(Witness)

IOC Company, LLC
(Principal) (Seal)

(Title)

(Witness)
John McMichael

Allied World Insurance Company
(Surety) (Seal)

Brock Baldwin (Title) ,Attorney In Fact

IMPORTANT NOTICE

TO OBTAIN INFORMATION OR TO MAKE A COMPLAINT

You may contract the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at

1-800-252-3439

You may write the Texas Department of Insurance:

P.O. Box 149104
Austin, Texas 78714-9104
Fax No. (512) 475-1771

PREMIUM or CLAIM DISPUTES

Should you have a dispute concerning your premium or about a claim, you should contact the company first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR POLICY

This notice is for information only and does not become a part or condition of the attached document.

Notice of Applicability of Chapter 2253 of the Texas Government Code

These bonds are furnished in an attempt to comply with Chapter 2253 of the Texas Government Code. These bonds shall be construed to comply with such Chapter regarding the rights created, limitations on those rights, and remedies provided. Any provision in the bonds to which this Rider is attached that expands or restricts a right or liability under such Chapter shall be disregarded, and such Chapter shall apply to these bonds.

ALLIED WORLD INSURANCE COMPANY
30 S. 17th St, Suite 1600
Philadelphia, PA 19103
USA

POWER OF ATTORNEY

Issue Date: October 12, 2016 No. 27949-A1489 Single Transaction Limit: $10,000,000

KNOW ALL MEN BY THESE PRESENTS:

Allied World Insurance Company, a New Hampshire corporation (the "Company") does hereby appoint

NAME(s): Brady K. Cox; Darrell Blaine Allen William D. Baldwin; Brock Baldwin; Brent Baldwin

FIRM: Baldwin-Cox Agency, LLC 5930 Preston View Boulevard #200 Dallas, TX 75240

Its true and lawful Attorney(s)-in-Fact, with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business, and to bind the Company thereby. This Power of Attorney shall remain in full force and effect for one year from the issued date above-referenced and shall expire on close of business of the first anniversary of such Issue Date.

IN WITNESS WHEREOF, ALLIED WORLD INSURANCE COMPANY has caused these presents to be executed by the officer named below, who is duly authorized and empowered to execute on the Company's behalf.

This 12th day of October, 2016

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
ELIZABETH S. IELLI, Notary Public
City of Philadelphia, Philadelphia County
My Commission Expires August 5, 2018

Name: Robert E. Staples
Title: Senior Vice President - Surety

State of Pennsylvania)
County of Philadelphia)ss.

On this 12th day of October, 2016, before me came the above-named officer of ALLIED WORLD INSURANCE COMPANY, to me personally known to be the individual and officer described herein, and acknowledged that he executed the foregoing instrument and affixed the seals of said corporation thereto by authority of his office.

Notary
My Commission Expires: 08/05/2018

CERTIFICATE

Excerpt of Resolution adopted by the Board of Directors of the **ALLIED WORLD INSURANCE COMPANY** (the "Corporation"), on December 31, 2012:

RESOLVED, that the proper officers of the Corporation, the head of the surety business line for the Corporation and their appointed designees (each an "Authorized Officer" and collectively, the "Authorized Officers") be, and each hereby is, authorized to appoint one or more Attorneys-in-Fact to represent and act for and on behalf of the Corporation in the transaction of the Company's surety business to execute (under the common seal of the Corporation, if appropriate) bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof.

RESOLVED, that in connection with the Corporation's transaction of surety business, the signatures and attestations of the Authorized Officers and the seal of the Corporation may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Corporation when so affixed with respect to any bond, undertaking, recognizance or other contract of indemnity or writing obligatory in the nature thereof.

RESOLVED, that in connection with the Corporation's transaction of surety business, the facsimile or mechanically reproduced signature of any Authorized Officer, whether made heretofore or hereafter, wherever appearing upon a copy of any Power of Attorney of the Corporation, with signatures affixed as next above noted, shall be valid and binding upon the Corporation with the same force and effect as though manually affixed.

RESOLVED, that in connection with the Corporation's transaction of surety business, any such Attorney-in-Fact delivering a secretarial or other certification that the foregoing resolutions still be in effect may insert in such certification the date thereof, said date to be not later than the date of delivery thereof by such Attorney-in-Fact.

RESOLVED, that the Authorized Officers be, and each hereby is, authorized to execute (under the common seal of the Corporation, if appropriate), make, file and deliver in the name and on behalf of the Corporation any and all consents, certificates, agreements, amendments, supplements, instruments and other documents whatsoever, and do any and all other things whatsoever in connection with the Corporation's transaction of surety business, as such Authorized Officer shall in his or her absolute discretion deem or determine appropriate and any of the foregoing resolutions, the transactions contemplated thereby and any ancillary matters thereto and/or to carry out the purposes and intent thereof, such deeming or determination to be conclusively evidenced by any such execution or the taking of any such action by such Authorized Officer.

I, **Daniel Zharkovky,** Secretary of the ALLEID WORLD INSURANCE COMPANY, do hereby certify that the foregoing excerpts of Resolution adopted by the Board of Directors of this corporation, and the Power of Attorney issued pursuant thereto, are true and correct, and that both the Resolution and the Power of Attorney are in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of the corporation, this 1st day of December, 2016

Daniel Zharkovky, AVP, Assistant General Counsel

Insurance Requirement Acknowledgment

I, Oscar Cuellar, authorized representative for IOC Company LLC,
Company/Vendor

hereby acknowledge receipt of the County's required insurance limits. Said requirements:

☐ will be acquired within 10 working days after notification from Purchasing Department of bid awarded by the Hidalgo County Commissioners= Court;

☐ will acquire additional amounts required to meet the County's requirements within 10 working days after notification from Purchasing Department of bid award by the Hidalgo County Commissioners= Court; currently carry the following:

Automobile Liability: $ 1,000,000 General Liability: $ 1,000,000

☐ have already been met, see attached copy of insurance certificate.

Authorized Representative

12/07/16
Date

Notice to Bidder:
A certificate of insurance for the required insurance limits shall be provided to the Purchasing Department's Contract Managers in order to qualify for award of bid and to execute a contract between your Company and the County

Failure to provide Certificates of Insurance to the Purchasing Department's Contract Managers will cause the bid award to be rescinded and re-awarded to next lowest bidder. Certificates of Insurance will be monitored and verified on a **quarterly basis** to ensure coverage policy is in place. It is the Company=s obligation to maintain the appropriate insurance coverage throughout the term of the contract.

THIS FORM MUST ACCOMPANY BID PACKET

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 8/5/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER BancorpSouth Insurance Services, Inc. GEM Insurance 3355 West Alabama Suite 850 Houston TX 77098	CONTACT NAME: PHONE (A/C, No, Ext): 713-961-2848 FAX (A/C, No): 713-961-5459 E-MAIL ADDRESS:
INSURED IOCCOMP-01 IOC Company, LLC; IOC Trucking, LLC; Terra Firma Materials, LLC PO Box 4737 Edinburg TX 78540	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Charter Oak Fire Insurance Company — 25615 INSURER B : Phoenix Insurance Company — 25623 INSURER C : Great American Insurance Co. — 16691 INSURER D : Hanover Lloyds Insurance Company — 41602 INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** 1679723391 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE / X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY / X PRO-JECT / LOC OTHER:			CO2G27413A	9/7/2015	9/7/2016	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$1,000,000 $300,000 $5,000 $1,000,000 $2,000,000 $2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS / SCHEDULED AUTOS X HIRED AUTOS / X NON-OWNED AUTOS X MCS-90			BA2G289781	9/7/2015	9/7/2016	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) $	$1,000,000 $ $ $ $
C	X UMBRELLA LIAB / X OCCUR EXCESS LIAB / CLAIMS-MADE DED / X RETENTION $ 10,000			TUU461609001	9/7/2015	9/7/2016	EACH OCCURRENCE AGGREGATE $	$5,000,000 $5,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UB2G321109	9/7/2015	9/7/2016	X PER STATUTE / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $1,000,000 $1,000,000 $1,000,000
D	Leased/Rented Equipment			RHDA67811702	8/4/2015	8/4/2016	Per Item/Aggregate	650,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

*
*
*
*
*
*

See Attached...

CERTIFICATE HOLDER

City of Alamo
420 N. Tower Rd.
Alamo TX 78516

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Earl G. Schneider

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The ACORD name and logo are registered marks of ACORD

AGENCY CUSTOMER ID: IOCCOMP-01
LOC #:

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
BancorpSouth Insurance Services, Inc.	IOC Company, LLC; IOC Trucking, LLC; Terra Firma Materials, LLC PO Box 4737 Edinburg TX 78540
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

*

The General Liability and Auto policies include a blanket additional insured provision which includes primary and non-contributory wording on the basis which provides additional insured status to the certificate holder only when there is a written contract between the named insured and the additional insured that requires such status subject to policy terms, conditions and exclusions.

The General Liability, Auto, and Workers Compensation policies include a blanket waiver of subrogation endorsement and a blanket 30-day notice of cancellation endorsement that provides these features only when there is a written contract between the named insured and the certificate holder that requires it.

The Umbrella policy is follow form.

Workers Compensation Excluded Officers: Ismelda Cuellar; Oscar Cuellar; Nancy Cuellar-Davenport
Workers Compensation includes USL&H

Project Name: Crockett Avenue Paving Improvement. Paving Project from 13th St. to Alamo Road

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The ACORD name and logo are registered marks of ACORD

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of Texas)

County of Hidalgo)

Oscar Cuellar, being first duly sworn, deposes and says that:

(1) He is Managing Member, of IOC Company LLC, the Bidder that has submitted the attached Bid;

(2) He is fully informed respecting the preparation and contents of this attached bid and of all pertinent circumstances respecting such bid;

(3) Such bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representative:, employees or parties in interest, including this affiant, has in any way colluded, conspired a collusive or sham Bid in connection with the Contract for which the attaché Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication of conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner or any person interested in the proposed Contract; and

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Managing Member
(Title)

Subscribed and sworn to before me on this 06

Day of December 2016

_____

Bookkeeper
Title

MARIA GUADALUPE ALCOCER
Notary Public
STATE OF TEXAS
ID#11786463
My Comm. Exp. June 2, 2020

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

IOC Company LLC

2 ☑ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

Hidalgo County

Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☑ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☑ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

Signature of vendor doing business with the governmental entity

12/07/16

Date

Contract Requirements

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

CONSTRUCTION CONTRACT
C-16-399-12-13

This Agreement, entered into this **13th** day of **December, 2016** by and between Hidalgo County (hereinafter called the "OWNER," and, **IOC Company, LLC** (a Texas corporation), of County of Hidalgo, and State of Texas, hereinafter called "CONTRACTOR".

WITNESSETH

That for and in consideration of the payments and agreement hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

"Paving Improvements for Indian Hills East"

Hereinafter called the project, for the sum of **One Million Two Hundred Eighty Thousand Nine Hundred Seventy Nine dollars and Seventy Cents ($1,280,979.70)** and all extra work in connection therewith, under the terms and stated in the General and Special Conditions of the Contract; and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, the General Conditions and Special Conditions printed or written explanatory matter thereof, the specifications and contract documents therefore as prepared by **TEDSI Infrastructure Group**, entitled the Architect/Engineer, and as enumerated in Paragraph 1.01.A.12 of the General Conditions, all of which are made a part hereof and collectively evidence and constitute the contract.

The CONTRACTOR hereby agrees to commence work under this contract on or after a date to be specified in written "Notice to Proceed" of the OWNER and to fully complete the project within **180** consecutive calendar days thereafter. The CONTRACTOR further agrees to pay, as liquidated damages, the sum of **$500.00** for each consecutive calendar day thereafter.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the contract, subject to additions and deductions, as provided in the General Conditions of the contract, and to make payments on account thereof as provided in Paragraphs 14.02.C and 14.07.C of the General Conditions.

IN WITNESS WHREOF, the parties to these present have executed this contract in five (5) counterparts, each of which shall be deemed an original, in year and day first above mentioned.

APPROVED BY COMMISIONERS COURT ON _____ **,2017 .**

CONTRACTOR: _____
Print Name & Title: Oscar Cuellar / Managing Member
Name of Firm: IOC Company, LLC
Address: 9312 E. Curve Rd. Edinburg, TX 78542
Fed I.D. #/SS #: 36-4597 6062

STATE OF TEXAS

COUNTY OF HIDALGO

This instrument was acknowledged before me on this the 31st day of January, 2017 by Managing Member (Title) of and on behalf of IOC Company, LLC. (A corporation)

Martina I. Carrisalez
Notary Public-Signature

MARTINA ISABEL CARRISALEZ
Notary ID # 125161304
My Commission Expires
January 11, 2021

APPROVED AS TO FORM:
Atlas & Hall, L.L.P.
800 Pecan
McAllen, Texas 78504

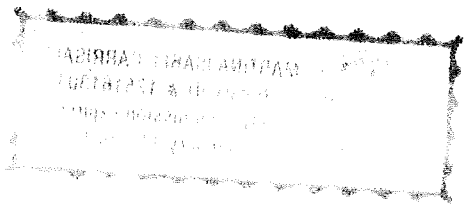
BY: _____

ATTEST:

Arturo Guajardo, Jr., County Clerk

COUNTY OF HIDALGO:

Ramon Garcia, County Judge



Vote: 3 - 0 - Unanimously

3. **AI-57507** A. Approval of order for exemption from competitive bidding requirements under Texas Local Government Code, Chapter/Section, 262.024 (a)(4), a professional service;

On motion by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., seconded by COMMISSIONER PCT. 3, JOE M. FLORES, the Court made a UNANIMOUS vote of approval.

Vote: 3 - 0 - Unanimously

B. Acceptance and approval of a negotiated engagement/agreement/contract with Dr. Norma Jean Farley, MD/forensic pathologist for the provision of autopsies & related services as drafted and developed by District Attorney's Office confirming compliance with those provisions set forth in Government Code 2254- 1) on a basis of demonstrated competence and qualifications to perform the services; and, 2) for a fair and reasonable price (fees permitted by law).

Martha Salazar stated that this is subject to final legal review and compliance by the district attorney's office. It has been attached to the agenda but will provide a final review before it's executed.

On motion by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., seconded by COMMISSIONER PCT. 3, JOE M. FLORES, the Court made a UNANIMOUS vote of approval.

Vote: 3 - 0 - Unanimously

B. Pct. 1

1. **AI-57719** A. Recommendation by project engineers, LeFevre Engineering & Management Consulting, LLC, & TEDSI Infrastructure Group to award the Base Bid to the responsible vendor submitting the lowest and best bid meeting all specifications, subject to compliance with HB 1295 and SAM.gov , for the following FEMA projects in the amounts listed:

	PROJECT NAME	PROJECT NO.	AWARD RECOMMENDATION TO VENDOR:	AMOUNT:
1	Hidalgo County Precinct No. 1 – FEMA Road Drainage Improvements - Indian Hills Subdivision	2016-399-12-07	IOC Company	$1,280,979.70
2	Hidalgo County Precinct No. 1 – FEMA Road Drainage Improvements - Mile 13 1/2 North Road, Mile 11 North Road, and Yvette Circle	2016-398-12-07	2GS, LLC dba Earthworks Enterprises	$519,662.30

Martha Salazar informed that there were concerns regarding funding not being recognized at this time. However, at the moment in order to award a bid, funding must be in place and sufficient. Second concern was running out of time, however, it's still good until May 2017.

On motion by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., seconded by COMMISSIONER PCT. 3, JOE M. FLORES, the Court made a UNANIMOUS vote of approval.

Vote: 3 - 0 - Unanimously

B. Pursuant to TXLGC 262.031 and in the interest of expediting a project's progress, requesting authority/approval for the Precinct Commissioner or designee: Raul Lozano, [unless otherwise voiced/announced by Current Commissioner] to execute change orders that involve ...'an increase or decrease in cost of $50,000.00 or LESS and in no event to exceed the Change Order's statutory limits...'. The original contract price may not be decreased by 18 % or more without the consent of the contractor".

On motion by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., seconded by COMMISSIONER PCT. 3, JOE M. FLORES, the Court made a UNANIMOUS vote of approval.

Vote: 3 - 0 - Unanimously

SPECIAL MEETING - December 13, 2016

BE IT REMEMBERED, that on this 13th day of December A.D., 2016, there was begun and held a SPECIAL MEETING of the Honorable Commissioners' Court of Hidalgo County, Texas, wherein the following members thereof were present, to-wit:

HONORABLE RAMON GARCIA	HIDALGO COUNTY JUDGE
HONORABLE A.C. CUELLAR, JR.	COMMISSIONER, PRECINCT NO. 1
HONORABLE EDUARDO "EDDIE" CANTU	COMMISSIONER, PRECINCT NO. 2
HONORABLE JOE M. FLORES	COMMISSIONER, PRECINCT NO. 3
HONORABLE JOSEPH PALACIOS	COMMISSIONER, PRECINCT NO. 4

and ARTURO GUAJARDO, JR., COUNTY CLERK & EX-OFFICIO CLERK OF THE COMMISSIONERS' COURT of Hidalgo County, Texas, wherein the following proceedings were had, to-wit:

AGENDA
CC REGULAR
HIDALGO COUNTY
COMMISSIONERS COURT MEETING
December 13, 2016
9:30 A.M.

NOTICE is hereby given in accordance with Chapter 551, Texas Government Code, that a SPECIAL MEETING of the Commissioners' Court will be held at the Edinburg Council Chambers 415 W. University Drive, Edinburg, Hidalgo County, Texas. Discussion and possible action relating to the following business will be transacted:

1. **Roll Call**

   All members of the court were present at the meeting.

2. **Pledge of Allegiance**

   Judge Garcia led the courtroom in reciting the Pledge of Allegiance.

3. **Prayer**

   Julia Sullivan Benitez led the courtroom in Prayer.

4. **Approval of Consent Agenda**

   The court approved the consent agenda for the exception of Item.11.B.3 to be further discuss.

5. **County Judge's Office:**

A. **AI-57766** Resolution in Honor of Precinct 1 Commissioner A.C. Cuellar, Jr.

Judge Garcia read a resolution in honor of Precinct 1 Commissioner A.C. Cuellar, Jr. for his humble public service to the people of Hidalgo County since taking office in 2013.

On motion by COMMISSIONER PCT. 3, JOE M. FLORES, seconded by COMMISSIONER PCT. 4, JOSEPH PALACIOS, the Court made a UNANIMOUS vote of approval.

Vote: 5 - 0 - Unanimously

Members of the public recognized and accredited the commissioner for all the improvements accomplished during his term. County colleagues expressed thanks and gratitude to the commissioner for the support provided during various projects. Family and friends supported Commissioner Cuellar at the last meeting of his term.

State Representative Armando "Mando" Martinez presented Commissioner Cuellar with the official flag from the State Capital which flew over the capital on Labor Day.

Ricardo Rodriguez, Jr. Criminal District Attorney, reminisced about the humble beginnings of Commissioner Cuellar and himself, working on the fields. Rodriguez, remarked that even at that time they were already providing a public service to the county. The district attorney recognized the work accomplished by the commissioner and for all the endure work by the precinct 1 staff.

Court proceeded to Item.6.A.

B. **AI-57762** Discussion and approval the Economic Development Incentives Program Guidelines and Criteria under the provisions of Section 381.004.

Commissioner Flores stepped away from the meeting.

Michael Leo informed that nothing is changing, they're only asking for re-approving.

On motion by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., seconded by COMMISSIONER PCT. 2, EDUARDO "EDDIE" CANTU, the Court made a UNANIMOUS vote of approval.

Vote: 4 - 0 – Unanimously

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2016-144745

Date Filed:
12/09/2016

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

IOC Company , LLC
Edinburg, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County Precinct No 1

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

2016-399-12-07
Paving Improvements for Indian Hills

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Cuellar , Oscar	Edinburg, TX United States	X	
Cuellar , Nancy	Edinburg, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

NOTARY PUBLIC STATE OF TEXAS
MARTINA ISABEL CARRISALEZ
My Commission Expires
January 10, 2017

AFFIX NOTARY STAMP / SEAL ABOVE

Signature of authorized agent of contracting business entity

Sworn to and subscribed before me, by the said Oscar Cuellar, this the 9th day of December, 20 16, to certify which, witness my hand and seal of office.

Martina Carrisalez | Martina Carrisalez | Bookkeeper

Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2016-144745

Date Filed:
12/09/2016

Date Acknowledged:
12/20/2016

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

IOC Company , LLC
Edinburg, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County Precinct No 1

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

2016-399-12-07
Paving Improvements for Indian Hills

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Cuellar , Oscar	Edinburg, TX United States	X	
Cuellar , Nancy	Edinburg, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

SAM Search Results
List of records matching your search for :

Search Term : ioc* company* llc*
Record Status: Active

ENTITY	IOC COMPANY, LLC	Status:Active
DUNS: 610705753	+4:	CAGE Code: 5L3P7 DoDAAC:
Expiration Date: Sep 16, 2017	Has Active Exclusion?: No	Delinquent Federal Debt?: Yes
Address: 9312 E CURVE RD City: EDINBURG ZIP Code: 78542	State/Province: TEXAS Country: UNITED STATES	

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/15/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Stephanie Dexter
BancorpSouth Insurance Services, Inc. GEM Insurance 3355 West Alabama Suite 850 Houston TX 77098	PHONE (A/C, No, Ext): 713-622-2330 FAX (A/C, No): 713-622-2053 E-MAIL ADDRESS: stephanie.dexter@bxsi.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Phoenix Insurance Company	25623
INSURER B : Charter Oak Fire Insurance Company	25615
INSURER C : Great American Insurance Co.	16691
INSURER D : Texas Mutual Insurance Company	22945
INSURER E :	
INSURER F :	

INSURED	IOCCOMP-01
IOC Company, LLC; IOC Trucking, LLC; Terra Firma Materials, LLC PO Box 4737 Edinburg TX 78540	

COVERAGES **CERTIFICATE NUMBER:** 900502016 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	X COMMERCIAL GENERAL LIABILITY			CO2G27413A	9/7/2016	9/7/2017	EACH OCCURRENCE	$1,000,000
	CLAIMS-MADE [X] OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$300,000
							MED EXP (Any one person)	$5,000
							PERSONAL & ADV INJURY	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$2,000,000
	POLICY [X] PRO-JECT [ ] LOC						PRODUCTS - COMP/OP AGG	$2,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY			BA2G289781	9/7/2016	9/7/2017	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS / X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
	X MCS-90							$
C	X UMBRELLA LIAB X OCCUR			TUU461609002	9/7/2016	9/7/2017	EACH OCCURRENCE	$5,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$5,000,000
	DED X RETENTION $10,000							$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N			TSF0001312520	9/12/2016	9/7/2017	X PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] N/A (Mandatory in NH)						E.L. EACH ACCIDENT	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$1,000,000
							E.L. DISEASE - POLICY LIMIT	$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

*
*
*
*
*
*
See Attached...

CERTIFICATE HOLDER

Hidalgo County Purchasing Department
2812 S. Business Highway 281
Edinburg TX 78539

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Earl G. Schneider

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AGENCY CUSTOMER ID: IOCCOMP-01

LOC #:

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
BancorpSouth Insurance Services, Inc.	IOC Company, LLC; IOC Trucking, LLC; Terra Firma Materials, LLC PO Box 4737 Edinburg TX 78540
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

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FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

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The General Liability, Auto, and Workers Compensation policies include a blanket waiver of subrogation endorsement and a blanket 30-day notice of cancellation endorsement that provides these features only when there is a written contract between the named insured and the certificate holder that requires it.

The Umbrella policy is follow form.

Workers Compensation Excluded Officers: Ismelda Cuellar; Oscar Cuellar; Nancy Cuellar-Davenport
Workers Compensation includes USL&H

Project: Hidalgo County Precinct No. 1 - FEMA Road Drainage Improvements - Indian Hills Subdivision (Contract #C-16-399-12-13)

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Paving Improvements for Indian Hills East
Hidalgo County Precinct No. 1
Contract Number - C-16-399-12-13

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

The State of Texas §
§
County of Hidalgo §

_____ being first duly sworn, deposes and says that

(1) He is _____, of _____,
the Bidder that has submitted the attached bid;

(2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such bid;

(3) Such bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner or any person interested in the proposed Contract; and

(5)The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

BIDDER: _____

Signature:_____ Date: _____

Name / Title: _____

Address: _____
(Street, City, State, Zip)

Subscribed and sworn to before me this _____day of _____, 20__.

By: _____, Notary Public in and for Hidalgo County, Texas.
My commission expires _____.

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

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OFFICE USE ONLY

Date Received

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2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

_____

Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

_____ _____

Signature of vendor doing business with the governmental entity Date

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

PART I

CONTRACT AWARD FORMS AND CERTIFICATIONS

FORMS TO SIGN BY CONTRACTOR AS PART OF EXECUTED AGREEMENT:

I.1 NON-COLLUSION AFFIDAVIT OF CONTRACTOR

I.2 PERFORMANCE BOND

I.3 PAYMENT BOND

I.4 INSURANCE REQUIREMENTS AND CONTRACTOR'S CERTIFICATE OF INSURANCE

I.5 SALES TAX AND LOCAL SALES TAX CERTIFICATE

FORMS TO SIGN PRIOR TO FINAL PAYMENT / ACCEPTANCE OF WORK:

I.6 AFFIDAVIT AND WAIVER OF LIEN – PRIME CONTRACTOR

I.7 RELEASE AND WAIVER OF CLAIMS BY SUBCONTRACTORS AND PRODUCT VENDORS

I.8 CONTRACTOR'S AFFIDAVIT AS TO STATUS OF LIEN

OTHER:

I.9 WAGE RATES (GENERAL DECISION NUMBER: TX140008 01/03/2014)

FORM I.1

NON-COLLUSION AFFIDAVIT OF CONTRACTOR

The State of Texas §
§
County of Hidalgo §

_____ being first duly sworn, deposes and says that:

(1) He / She is _____ of _____, the Contractor that submitted the Bid on the accepted Contract Price;

(2) He / She is fully informed respecting the preparation and contents of the Bid on the accepted Contract Price and of all pertinent circumstances respecting such Bid;

(3) Such Bid on the accepted Contract Price is genuine and is not a collusive or sham Bid;

(4) Neither the said Contractor nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Bid on the accepted Contract Price or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner or any person interested in the proposed Contract; and

(5) The price or prices quoted in the Bid on the accepted Contract Price are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Contractor or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

CONTRACTOR: _____

Signature:_____ Date: _____

Name / Title: _____

Address: _____
(Street, City, State, Zip)

Subscribed and sworn to before me this _____day of _____, 20___.

By: _____, Notary Public in and for Hidalgo County, Texas.
My commission expires _____.

Bond No. S001-4303

FORM I.2
PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, IOC Company, LLC as Principal, and Allied World Insurance Company as Surety, are hereby held and firmly bound unto **HIDALGO COUNTY** (hereinafter called the Oblige) in the amount of One Million Two Hundred Eighty Thousand, Nine Hundred Seventy Nine and 70/100ths Dollars ($ 1,280,979.70) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Oblige, dated the 13th day of December, 2016, for **Contract No. C-16-399-12-13 FEMA Road Drainage Improvements-Indian Hills Subdivision** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform the Work in accordance with the plans, specifications and contract documents, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Texas Government Code, Section 2253.021 (b), for the benefit of Oblige and provisions of said Section to the same extent as if it were copied in length herein.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts, each one of which shall be deemed an original, this the 13th day of December A.D., 2016.

CONTRACTOR: IOC Company, LLC

Principal Signature: _____ Date: 12/13/2016

Name / Title: Managing Member

Address: 9312 E. Curve Road, Edinburg, Texas 78542
(Street, City, State, Zip)

Signaure: _____ Date: 12/13/2016
Witness to Principal

Printed Name / Title: Luis Martinez / Project Manager

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ of the corporation named as Principal in the BOND; that _____ who signed the BOND on behalf of Principal, was then _____ of the corporation; that I know his or her signature, and his or her signature is genuine; and that the BOND was duly signed for and on behalf of the corporation by authority of its governing body.

Signature: _____ Corporate Seal:

Date: _____

PERFORMANCE BOND, CONT'D.

ATTEST:

(Surety) Secretary Neira Hernandez

(SEAL)

SURETY: Allied World Insurance Company

Attorney-In-Fact Signature

Printed Name: Darrell Blaine Allen, Attorney-In-Fact

Address: 199 Water Street
(Street)
New York, NY 10038
(City, State, Zip)

Witness to Surety Sharon Grant

Address: 5930 Preston View Blvd., Ste 200
(Street)
Dallas, TX 75240
(City, State, Zip)

Notes: (1) Date of Bond must be prior to date of Contract.
(2) Provide correct name of Contractor, indicate corporation, partnership or an individual, as case may be.
(3) Provide correct name of Surety and Surety must attach its original power of attorney to this BOND.
(4) If Contractor is partnership, all partners must sign and execute BOND.
(5) Indicate County or Parish and State.

Bond No. S001-4303

FORM I.3

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, IOC Company, LLC as Principal, and Allied World Insurance Company as Surety, are hereby held and firmly bound unto **HIDALGO COUNTY** (hereinafter called the Oblige) in the amount of One Million Two Hundred Eighty Thousand, Nine Hundred Seventy Nine and 70/100ths Dollars ($1,280,979.70) for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Oblige, dated the 13th day of December, 2016, for **Contract No. C-16-399-12-13 FEMA Road Drainage Improvements-Indian Hills Subdivision** which contract is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution of the work provided in said contract in accordance with the plans, specifications and contract documents, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Texas Government Code, Section 2253.021(c) for the beneficiaries described by such sub-section, and provisions of said Section to the same extent as if it were copied in length herein.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts, each one of which shall be deemed an original, this the 13th day of December A.D., 2016.

CONTRACTOR: IOC Company, LLC

Principal Signature: _____ Date: 12/13/2016

Name / Title: Managing Member

Address: 9312 E. Curve Road, Edinburg, Texas 78542
(Street, City, State, Zip)

Signaure: _____ Date: 12/13/2016
Witness to Principal

Printed Name / Title: Luis Martinez / Project Manager

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ of the corporation named as Principal in the BOND; that _____ who signed the BOND on behalf of Principal, was then _____ of the corporation; that I know his or her signature, and his or her signature is genuine; and that the BOND was duly signed for and on behalf of the corporation by authority of its governing body.

Signature: _____ Corporate Seal:

Date: _____

PAYMENT BOND, CONT'D.

ATTEST:

(Surety) Secretary Neira Hernandez

SURETY: Allied World Insurance Company

Attorney-In-Fact Signature

Printed Name: Darrell Blaine Allen

(SEAL)

Address: 199 Water Street
(Street)
New York, NY 10038
(City, State, Zip)

Witness to Surety Sharon Grant

Address: 5930 Preston View Blvd, Ste 200
(Street)
Dallas, Texas 78540
(City, State, Zip)

Notes: (1) Date of Bond must be prior to date of Contract.
(2) Provide correct name of Contractor, indicate corporation, partnership or an individual, as case may be.
(3) Provide correct name of Surety and Surety must attach its original power of attorney to this BOND.
(4) If Contractor is partnership, all partners must sign and execute BOND.
(5) Indicate County or Parish and State.

IMPORTANT NOTICE

TO OBTAIN INFORMATION OR TO MAKE A COMPLAINT

You may contract the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at

1-800-252-3439

You may write the Texas Department of Insurance:

P.O. Box 149104
Austin, Texas 78714-9104
Fax No. (512) 475-1771

PREMIUM or CLAIM DISPUTES

Should you have a dispute concerning your premium or about a claim, you should contact the company first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR POLICY

This notice is for information only and does not become a part or condition of the attached document.

Notice of Applicability of Chapter 2253 of the Texas Government Code

These bonds are furnished in an attempt to comply with Chapter 2253 of the Texas Government Code. These bonds shall be construed to comply with such Chapter regarding the rights created, limitations on those rights, and remedies provided. Any provision in the bonds to which this Rider is attached that expands or restricts a right or liability under such Chapter shall be disregarded, and such Chapter shall apply to these bonds.

ALLIED WORLD INSURANCE COMPANY
30 S. 17th St, Suite 1600
Philadelphia, PA 19103
USA

POWER OF ATTORNEY

Issue Date: October 12, 2016 | No. 27949-A1528 | Single Transaction Limit: $10,000,000

KNOW ALL MEN BY THESE PRESENTS:

Allied World Insurance Company, a New Hampshire corporation (the "Company") does hereby appoint

NAME(s): Brady K. Cox, Darrell Blaine Allen William D. Baldwin, Brock Baldwin, Brent Baldwin

FIRM: Baldwin-Cox Agency, LLC 5930 Preston View Boulevard #200 Dallas, TX 75240

Its true and lawful Attorney(s)-in-Fact, with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business, and to bind the Company thereby. This Power of Attorney shall remain in full force and effect for one year from the issued date above-referenced and shall expire on close of business of the first anniversary of such Issue Date.

IN WITNESS WHEREOF, ALLIED WORLD INSURANCE COMPANY has caused these presents to be executed by the officer named below, who is duly authorized and empowered to execute on the Company's behalf.

This 12th day of October, 2016

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
ELIZABETH K. BIELLI, Notary Public
City of Philadelphia, Philadelphia County
My Commission Expires August 5, 2018

Name: Robert E. Staples
Title: Senior Vice President - Surety

State of Pennsylvania)
County of Philadelphia)ss.

On this 12th day of October, 2016, before me came the above-named officer of ALLIED WORLD INSURANCE COMPANY, to me personally known to be the individual and officer described herein, and acknowledged that he executed the foregoing instrument and affixed the seals of said corporation thereto by authority of his office.

Notary
My Commission Expires: 08/05/2018

CERTIFICATE

Excerpt of Resolution adopted by the Board of Directors of the **ALLIED WORLD INSURANCE COMPANY (the "Corporation")**, on December 31, 2012:

RESOLVED, that the proper officers of the Corporation, the head of the surety business line for the Corporation and their appointed designees (each an "Authorized Officer" and collectively, the "Authorized Officers") be, and each hereby is, authorized to appoint one or more Attorneys-in-Fact to represent and act for and on behalf of the Corporation in the transaction of the Company's surety business to execute (under the common seal of the Corporation, if appropriate) bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof.

RESOLVED, that in connection with the Corporation's transaction of surety business, the signatures and attestations of the Authorized Officers and the seal of the Corporation may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Corporation when so affixed with respect to any bond, undertaking, recognizance or other contract of indemnity or writing obligatory in the nature thereof.

RESOLVED, that in connection with the Corporation's transaction of surety business, the facsimile or mechanically reproduced signature of any Authorized Officer, whether made heretofore or hereafter, wherever appearing upon a copy of any Power of Attorney of the Corporation, with signatures affixed as next above noted, shall be valid and binding upon the Corporation with the same force and effect as though manually affixed.

RESOLVED, that in connection with the Corporation's transaction of surety business, any such Attorney-in-Fact delivering a secretarial or other certification that the foregoing resolutions still be in effect may insert in such certification the date thereof, said date to be not later than the date of delivery thereof by such Attorney-in-Fact.

RESOLVED, that the Authorized Officers be, and each hereby is, authorized to execute (under the common seal of the Corporation, if appropriate), make, file and deliver in the name and on behalf of the Corporation any and all consents, certificates, agreements, amendments, supplements, instruments and other documents whatsoever, and do any and all other things whatsoever in connection with the Corporation's transaction of surety business, as such Authorized Officer shall in his or her absolute discretion deem or determine appropriate and any of the foregoing resolutions, the transactions contemplated thereby and any ancillary matters thereto and/or to carry out the purposes and intent thereof, such deeming or determination to be conclusively evidenced by any such execution or the taking of any such action by such Authorized Officer.

I, **Daniel Zharkovky,** Secretary of the ALLEID WORLD INSURANCE COMPANY, do hereby certify that the foregoing excerpts of Resolution adopted by the Board of Directors of this corporation, and the Power of Attorney issued pursuant thereto, are true and correct, and that both the Resolution and the Power of Attorney are in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of the corporation, this 13th day of December, 2016

Daniel Zharkovky, AVP, Assistant General Counsel

FORM I.4

CONTRACTOR'S CERTIFICATE OF INSURANCE

The Contractor shall furnish proof of insurance, which will also include any subcontractor that is subcontracted by the Contractor in at least the following limits, to be in place prior to providing any services under this Contract and to continue at all times in force in effect during the term of this Contract:

(1) Automobile liability insurance policy with limits of at least three hundred thousand dollars ($300,000.00) per person and five hundred thousand dollars $500,000.00 per occurrence, consistent with potential exposure to Hidalgo County under the Texas Tort Claims Act. Coverage should injury to or death of persons and property damage claims (with limits up to five hundred thousand dollars ($500,000.00)) arising out of the services provided to Hidalgo County hereunder;

(2) Uninsured/Underinsured motorist coverage in an amount equal to the bodily injury limits set forth immediately above;

(3) A five hundred thousand dollar ($500,000.00) Comprehensive General Liability insurance policy providing additional coverage to all underlying liabilities of Hidalgo County consistent with potential exposure of Hidalgo County under the Texas Tort Claims Act;

(4) Workers compensation insurance in amounts established by Texas law, unless the Bidder is specifically exempted from the Texas Workers' Compensation Act, Texas Labor Code Chapter 401, et. seq.

Certificates of insurance naming Hidalgo County as an additional insured shall be submitted to Hidalgo County for approval prior to any services being performed by Contractor. Each policy of insurance required hereunder shall extend for a period equivalent to, or longer than the term of the Contract, and any insurer hereunder shall be required to give at least thirty (30) days written notice to Hidalgo County prior to the cancellation of any such coverage on the termination date, or otherwise. This Contract shall be automatically suspended upon the cancellation, or other termination, of any required policy of insurance hereunder, and such suspension shall continue until evidence adequate replacement coverage is provided to Hidalgo County. If replacement coverage is not provided within thirty (30) days following suspension of the Contract, this Contract shall automatically terminate.

FORM I.5

SALES TAX AND LOCAL SALES TAX EXEMPTION CERTIFICATE FOR CONTRACTORS

This Contract is to be performed for an exempt organization as defined by Article 20.04 (H)(4) of the Texas Limited Sales, Excise, and Use Tax Act and the undersigned hereby claims an exemption from payment of taxes under Chapter 20, Title 122A, revised civil statutes of Texas, and Article 1066 (C), entitle Local Sales and Use Tax, revised civil statutes of Texas.

The Contractor performing this Contract may purchase, rent, or lease materials, supplies, equipment used or consumed in the performance of this Contract by issuing to his retailer an exemption certificate in lieu of the tax, said exemption certificate complying with State Comptroller's Ruling No. 95.9.07. Any such exemption certificate issued by the Contractor in lieu of the tax shall be subject to the provisions of the State Comptroller's Ruling No. 905.0.09 as amended to be effective October 2, 1968.

EXECUTED this the _____ day of _____ 20___.

CONTRACTOR: _____

Principal Signature:_____ Date: _____

Name / Title: _____

Address: _____
(Street, City, State, Zip)

FORM I.6

AFFIDAVIT AND WAIVER OF LIEN
CONTRACTOR

The State of Texas §
§
County of Hidalgo §

THIS AFFIDAVIT TO BE COMPLETED AND SUBMITTED UPON ACCEPTANCE OF COMPLETED PROJECT BY OWNER AND PRIOR TO FINAL PAYMENT.

_____, the undersigned Principal of _____, Contractor, personally appeared before me, the undersigned Notary Public in and for Hidalgo County, Texas, who being duly sworn by me states on oath that all product suppliers, subcontractors, payrolls, sales tax, privilege tax or license, old age benefits tax, state and federal unemployment insurance, and other liabilities in the performance of **Contract No. _____ Paving and Drainage Improvements for Mile 9 North Road**, Project, have been paid in full, and that the above named Contractor waives any claims and releases to Hidalgo County, Owner, from any rights or claims (including lien rights) for debts due and owing by virtue of the furnishing of any labor, products, and supplies furnished for the Project.

The above named Contractor agrees to indemnify the Owner and save him harmless on account of any loss Contractor may sustain in reliance upon this Affidavit and Waiver of Lien including the amount of any lien Contractor may be compelled to pay all costs relating thereto and a reasonable attorney's fee.

CONTRACTOR: _____

Signature:_____ Date: _____

Name / Title: _____

Address: _____
(Street, City, State, Zip)

Subscribed and sworn to before me this _____day of _____, 20__.

By: _____, Notary Public in and for Hidalgo County, Texas.
My commission expires _____.

FORM I.7

RELEASE AND WAIVER OF CLAIMS BY SUBCONTRACTORS AND PRODUCT VENDORS

The State of Texas §
§
County of Hidalgo §

THIS AFFIDAVIT TO BE COMPLETED BY EACH SUBCONTRACTOR AND VENDOR AND SUBMITTED PRIOR TO FINAL PAYMENT.

_____, the undersigned Principal of _____, Sub-Contractor / Vendor, personally appeared before me, the undersigned Notary Public in and for Hidalgo County, Texas, who being duly sworn by me states on oath that all bills for labor and products, subcontractors, payrolls, sales tax, privilege tax or license, old age benefits tax, state and federal unemployment insurance, and other liabilities in the performance of subcontract for furnishing labor or products in the construction of **Contract No.** _____ **Paving and Drainage Improvements for Mile 9 North Road**, Project, have been paid in full or that funds are in hand to discharge such liabilities when due, and that the above named Sub-Contractor / Vendor waives any claims and releases to Hidalgo County, Owner, and _____, Contractor, from any rights or claims (including lien rights) for debts due and owing by virtue of the furnishing of any labor, products, and supplies furnished for the Project.

SUB-CONTRACTOR OR VENDOR: _____

Signature:_____ Date: _____

Name / Title: _____

Address: _____
(Street, City, State, Zip)

Subscribed and sworn to before me this _____day of _____, 20__.

By: _____, Notary Public in and for Hidalgo County, Texas.

My commission expires _____.

FORM I.8

CONTRACTOR'S AFFIDAVIT AS TO STATUS OF LIEN

The State of Texas §
§
County of Hidalgo §

THIS AFFIDAVIT TO BE COMPLETED AND SUBMITTED UPON ACCEPTANCE OF COMPLETED PROJECT BY OWNER AND PRIOR TO FINAL PAYMENT.

_____, the undersigned Principal of _____, Contractor, personally appeared before me, the undersigned Notary Public in and for Hidalgo County, Texas, who being duly sworn by me states on oath that to the best of his knowledge and belief, except as listed below, the Releases and Waivers of Claim attached hereto include all subcontractors and vendor of labor, products, and equipment provided by all persons who may have liens against the property of Hidalgo County, Owner, arising out of the construction of **Contract No.** _____ **Paving and Drainage Improvements for Mile 9 North Road** Project.

Exceptions: (If none, write "None".) Any exception listed shall be bonded by the Contractor to indemnify the Owner, and a copy of each bond shall be attached hereto.

1.
2.
3.
4.

CONTRACTOR: _____

Signature:_____ Date: _____

Name / Title: _____

Address: _____
(Street, City, State, Zip)

Subscribed and sworn to before me this _____day of _____, 20__

By: _____, Notary Public in and for Hidalgo County, Texas.
My commission expires _____.

FORM I.9

WAGE RATES

(GENERAL DECISION NO: TX160008 01/08/2016)

General Decision Number: TX160008 01/08/2016 TX8

Superseded General Decision Number: TX20150008

State: Texas

Construction Types: Heavy and Highway

Counties: Cameron, Hidalgo and Webb Counties in Texas.

HEAVY & HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016

* SUTX2011-003 08/02/2011

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER (Paving & Structures)	$ 12.46	
FORM BUILDER/FORM SETTER (Structures)	$ 12.30	
FORM SETTER (Paving & Curb)	$ 12.16	
LABORER		
Asphalt Raker	$ 10.61	
Flagger	$ 9.10	
Laborer, Common	$ 9.86	
Laborer, Utility	$ 11.53	
Pipelayer	$ 11.87	
Work Zone Barricade Servicer	$ 12.88	
POWER EQUIPMENT OPERATOR:		
Asphalt Distributor	$ 13.48	
Asphalt Paving Machine	$ 12.25	
Broom or Sweeper	$ 10.33	
Crane, Lattice Boom 80 Tons or Less	$ 14.39	
Crawler Tractor	$ 16.63	
Excavator, 50,000 lbs or less	$ 12.56	
Excavator, over 50,000 lbs	$ 15.23	
Foundation Drill, Truck Mounted	$ 16.86	
Front End Loader Operator, Over 3 CY	$ 13.69	

Front End Loader, 3 CY or less.....$ 13.49
Loader/Backhoe.....$ 12.77
Mechanic.....$ 15.47
Milling Machine.....$ 14.64
Motor Grader Operator, Rough.....$ 14.62
Motor Grader, Fine Grade....$ 16.52
Scraper.....$ 11.07

Servicer.....$ 12.34

Steel Worker (Reinforcing).....$ 14.07

TRUCK DRIVER
Lowboy-Float.....$ 13.63
Single Axle.....$ 10.82
Single or Tandem Axle Dump..$ 14.53
Tandem Axle Tractor with Semi Trailer.....$ 12.12

WELDER.....$ 14.02

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

==========

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate

changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the

Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION



PART II

GENERAL CONDITIONS

II.1 STANDARD GENERAL CONDITIONS

II.2 SUPPLEMENTARY GENERAL CONDITIONS

II.3 GOVERNING SPECIFICATIONS

II.4 GENERAL NOTES

II.1

STANDARD

GENERAL CONDITIONS

OF THE

CONSTRUCTION CONTRACT

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Work.

3. *Application for Payment*--The form acceptable to ENGINEER which is to be used by CONTRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

7. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.

8. *Bonds*--Performance and payment bonds and other instruments of security.

9. *Change Order*--A document recommended by ENGINEER which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*--The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.

13. *Contract Price*--The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.

15. *CONTRACTOR*--The individual or entity with whom OWNER has entered into the Agreement.

16. *Cost of the Work*--See paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *ENGINEER*--The individual or entity named as such in the Agreement.

20. *ENGINEER's Consultant*--An individual or entity having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.

21. *Field Order*--A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

22. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

23. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

24. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

25. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

26. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

27. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

28. *Notice of Award*--The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.

29. *Notice to Proceed*--A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform the Work under the Contract Documents.

30. *OWNER*--The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.

31. *Partial Utilization*--Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.

32. *PCBs*--Polychlorinated biphenyls.

33. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

34. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.

35. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

36. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

37. *Resident Project Representative*--The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.

40. *Site*--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.

41. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

42. *Subcontractor*--An individual or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the Site.

43. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

44. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

45. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.

46. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

47. *Unit Price Work*--Work to be paid for on the basis of unit prices.

48. *Work*--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

49. *Work Change Directive*--A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

50. *Written Amendment*--A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

1.02 *Terminology*

A. *Intent of Certain Terms or Adjectives*

1. Whenever in the Contract Documents the terms "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.10 or any other provision of the Contract Documents.

B. *Day*

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. *Defective*

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. *Furnish, Install, Perform, Provide*

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.

E. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 *Delivery of Bonds*

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02 *Copies of Documents*

A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times com-

mence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

A. *CONTRACTOR's Review of Contract Documents:* Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.

B. *Preliminary Schedules:* Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:

1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and

3. a preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

C. *Evidence of Insurance:* Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.

2.06 *Preconstruction Conference*

A. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to ENGINEER.

1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.

2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.

3. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.

C. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.

3.02 *Reference Standards*

A. *Standards, Specifications, Codes, Laws, and Regulations*

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

3.05 *Reuse of Documents*

A. CONTRACTOR and any Subcontractor or Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER or ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

B. Upon reasonable written request, OWNER shall furnish CONTRACTOR with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and OWNER's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, includ-

ing, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *ENGINEER's Review:* After receipt of written notice as required by paragraph 4.03.A, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

C. *Possible Price and Times Adjustments*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.08 and 11.03.

2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or

c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.

3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be

made therefor as provided in paragraph 10.05. However, OWNER, ENGINEER, and ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.

2. If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price of Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

4.05 *Reference Points*

A. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.

D. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or anyone for whom CONTRACTOR is responsible creates a Hazardous Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) notify OWNER and ENGINEER (and promptly thereafter confirm such notice in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a Claim therefor as provided in paragraph 10.05.

F. If after receipt of such written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in paragraph 10.05. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or

Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.F shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.

B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

C. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain. OWNER shall deliver to CONTRACTOR, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by CONTRACTOR or any other additional insured) which OWNER is required to purchase and maintain.

5.04 *CONTRACTOR's Liability Insurance*

A. CONTRACTOR shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed by CONTRACTOR, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to

perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:

1. with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the CONTRACTOR pursuant to paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment (and CONTRACTOR shall furnish OWNER and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to OWNER and any such additional insured of continuation of such insurance at final payment and one year thereafter).

5.05 *OWNER's Liability Insurance*

A. In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.04, OWNER, at OWNER's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property

insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER;

5. allow for partial utilization of the Work by OWNER;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with paragraph 5.07.

D. OWNER shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of CONTRACTOR, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by CONTRACTOR, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policies provided under paragraph 5.06, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the Site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.

5.07 *Waiver of Rights*

A. OWNER and CONTRACTOR intend that all policies purchased in accordance with paragraph 5.06 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and all other

individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. OWNER and CONTRACTOR waive all rights against each other and their respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) under such policies for losses and damages so caused.

None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

B. OWNER waives all rights against CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to OWNER's property or the Work caused by, arising out of, or resulting from fire or other peril whether or not insured by OWNER; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by OWNER during partial utilization pursuant to paragraph 14.05, after Substantial Completion pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.

C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against CONTRACTOR, Subcontractors, ENGINEER, or ENGINEER's Consultants and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A.* Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with OWNER and made payable to OWNER as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.B. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

B. OWNER as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, OWNER as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, OWNER as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A.* If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the

certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with

the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences,
and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.02 *Labor; Working Hours*

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the

Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly

run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 as it may be adjusted from time to time as provided below.

1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances described below.

1. *"Or-Equal" Items:* If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;

b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.

c. The procedure for review by ENGINEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.

d. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify

that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.

C. *Engineer's Evaluation:* ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.05.A and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.

D. *Special Guarantee:* OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

E. *ENGINEER's Cost Reimbursement:* ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's Consultants for evaluating each such proposed substitute.

F. *CONTRACTOR's Expense:* CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. CONTRACTOR shall submit an acceptable replacement

for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.

E. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.06, the agreement between the CONTRACTOR and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same.

6.07 *Patent Fees and Royalties*

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for

the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

6.09 *Laws and Regulations*

A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in paragraph 10.05.

6.10 *Taxes*

A. CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations,

and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER.

6.13 *Safety and Protection*

A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals will be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified perfomance and design criteria, materials, and similar data to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.E.

B. CONTRACTOR shall also submit six (6) Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.

C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. *Submittal Procedures*

1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and

d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

E. *ENGINEER's Review*

1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. ENGINEER's review and approval will be only to determine if the items covered by the submittals

will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.3 and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

F. *Resubmittal Procedures*

1. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.18 *Continuing the Work*

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 *CONTRACTOR's General Warranty and Guarantee*

A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or

2. normal wear and tear under normal usage.

B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:

1. observations by ENGINEER;

2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;

4. use or occupancy of the Work or any part thereof by OWNER;

5. any acceptance by OWNER or any failure to do so;

6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;

7. any inspection, test, or approval by others; or

8. any correction of defective Work by OWNER.

6.20 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:

1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and

2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.

B. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of CONTRACTOR under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or

2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

ARTICLE 7 - OTHER WORK

7.01 *Related Work at Site*

A. OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and

2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in paragraph 10.05.

B. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of

such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.02 *Replacement of ENGINEER*

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

8.03 *Furnish Data*

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

8.04 *Pay Promptly When Due*

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

8.06 *Insurance*

A. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

8.09 *Limitations on OWNER's Responsibilities*

A. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *OWNER'S Representative*

A. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and will not be changed without written consent of OWNER and ENGINEER.

9.02 *Visits to Site*

A. ENGINEER will make visits to the Site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, ENGINEER, for the benefit of OWNER, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work.

B. ENGINEER's visits and observations are subject to all the limitations on ENGINEER's authority and responsibility set forth in paragraph 9.10, and particularly, but without limitation, during or as a result of ENGINEER's visits or observations of CONTRACTOR's Work ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.10 and in the Supplementary Conditions. If OWNER designates another representative or agent to represent OWNER at the Site who is not ENGINEER's Consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Clarifications and Interpretations*

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Docu-

ments. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification or interpretation, a Claim may be made therefor as provided in paragraph 10.05.

9.05 *Authorized Variations in Work*

A. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefor as provided in paragraph 10.05.

9.06 *Rejecting Defective Work*

A. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.07 *Shop Drawings, Change Orders and Payments*

A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.

B. In connection with ENGINEER's authority as to Change Orders, see Articles 10, 11, and 12.

C. In connection with ENGINEER's authority as to Applications for Payment, see Article 14.

9.08 *Determinations for Unit Price Work*

A. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR the ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.05.

9.09 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.

B. When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

9.10 *Limitations on ENGINEER's Authority and Responsibilities*

A. Neither ENGINEER's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such

authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the perfomance of the Work. ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

C. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

E. The limitations upon authority and responsibility set forth in this paragraph 9.10 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants. See Article 18.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:

1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change.

10.05 *Claims and Disputes*

A. *Notice:* Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER and the other party to the Contract within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).

B. *ENGINEER's Decision:* ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:

1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or

2. if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.

D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of CONTRACTOR in the perfomance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work

shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

3. Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such bids to OWNER, who will then determine, with the advice of ENGINEER, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph 11.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of CONTRACTOR.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.

i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.

j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.01.A.1 or specifically covered by paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.

3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

4. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.

C. *CONTRACTOR's Fee:* When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.02 *Cash Allowances*

A. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:

1. the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

2. CONTRACTOR's costs for unloading and handling on the Site, labor, installation costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

B. Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of

Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.

B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).

C. *CONTRACTOR's Fee:* The CONTRACTOR's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under paragraphs 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;

b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.

12.03 *Delays Beyond CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in paragraph 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 *Delays Within CONTRACTOR's Control*

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 *Delays Beyond OWNER's and CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.06 *Delay Damages*

A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:

1. delays caused by or within the control of CONTRACTOR; or

2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility

owners or other contractors performing other work as contemplated by Article 7.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. OWNER, ENGINEER, ENGINEER's Consultants, other representatives and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection or approval.

D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER's and ENGINEER's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation.

F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in

question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

13.05 *OWNER May Stop the Work*

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this sentence. If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.09 *OWNER May Correct Defective Work*

A. If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.06.A, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

B. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractors, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.

C. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefor as provided in paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.

D. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. *Applications for Payments*

1. At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge CONTRACTOR's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to pro-gress payments will be as stipulated in the Agreement.

B. *Review of Applications*

1. ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application.

2. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's observations on the Site of the executed Work as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Comple tion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.08, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work.

3. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents; or (ii) that there may not be other matters or issues between the parties

that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

4. Neither ENGINEER's review of CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.

5. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.02.B.2. ENGINEER may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;

b. the Contract Price has been reduced by Written Amendment or Change Orders;

c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or

d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.

C. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.

D. *Reduction in Payment*

1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:

a. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;

b. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWNER to secure the satisfaction and discharge of such Liens;

c. there are other items entitling OWNER to a set-off against the amount recommended; or

d. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.

2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld. OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.

3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

14.03 *CONTRACTOR's Warranty of Title*

A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Promptly thereafter, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR will certify to OWNER and ENGINEER that such part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will promptly make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. *Application for Payment*

1. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. *Review of Application and Acceptance*

1. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.09. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. *Payment Becomes Due*

1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

14.08 *Final Completion Delayed*

A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not

fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 OWNER May Suspend Work

A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefor as provided in paragraph 10.05.

15.02 *OWNER May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);

2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;

3. CONTRACTOR's disregard of the authority of ENGINEER; or

4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.03 *OWNER May Terminate For Convenience*

A. Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. for reasonable expenses directly attributable to termination.

B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *CONTRACTOR May Stop Work or Terminate*

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days written notice to OWNER and ENGINEER, and provided OWNER or ENGINEER do not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.03. In lieu of terminating the Contract and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09 and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to

exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

II.2 SUPPLEMENTAL GENERAL CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 Edition) and other provisions of the Contract Documents as indicated below. All provisions, which are not so amended or supplemental, remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings indicated below, which are applicable to both the singular and plural thereof.

SC-6.10 Delete paragraph 6.10 in its entirety and insert the following in its place:

*The **owner** qualifies for the state and local tax exemption in the purchase of certain materials and equipment, the **Contractor** shall utilize the form provided herewith exhibit "D".*

SC-11.01 Delete paragraph 11.01 in its entirety.

SC-11.02 Delete paragraph 11.02 in its entirety.

SC-12.01B.25 & B.3 Delete paragraph 12.01B.2 & B.3 in its entirety.

SC-12.01.C.2 Delete paragraph 12.01.C.2 in its entirety.

SC Article 14.02 C.1 Replace "**Ten days**" with "**Thirty days**" to read as follows: Thirty days after presentation of the Application for Payment to OWNER with ENGINEER'S recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by the OWNER TO CONTRACTOR.

SC Article 16 Add the following languague at the end of the paragraph of Article 16:

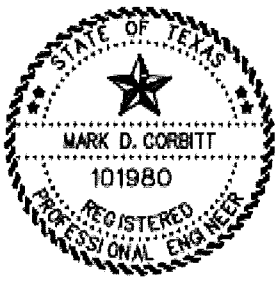
There are no dispute resolution methods and procedures set forth in the Supplemental Conditions:

GENERAL PREVAILING WAGE LEGAL REQUIREMENTS

The **Contractor**'s attention is called to Texas Government Code Chapter 2258, which must be complied with attached herewith as Exhibit "C"

ENGINEER'S CERTIFICATION

The selected Specifications, Special Provisions, Special Specifications, General Notes and Specification Data in this document have been selected by me, or under my responsible supervisions as being applicable to this project. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.



The seal appearing on this document was authorized by:

Engineer's Name: Mark D. Corbitt, P.E.

Engineer Signature: Mark Corbitt

Date: November 08, 2016

II.3 GOVERNING SPECIFICATIONS

The following specifications and special provisions are those under which payment is to be made. These, together with such other pertinent items, if any, as may be referred to in the specifications and below, and including the special provisions listed below, constitute the governing specifications for this Contract.

STANDARD SPECIFICATIONS

Item 1
Abbreviations and Definitions

1. APPLICABILITY

Wherever the following terms are used in these specifications or other Contract documents, the intent and meaning will be interpreted as shown below.

2. ABBREVIATIONS

AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
AI	Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALSC	American Lumber Standard Committee, Inc.
AMRL	AASHTO Materials Reference Laboratory
ANLA	American Nursery and Landscape Association
ANSI	American National Standards Institute
APA	The Engineered Wood Association
API	American Petroleum Institute
APWA	American Public Works Association
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASBI	American Segmental Bridge Institute
ASCE	American Society of Civil Engineers
ASLA	American Society of Landscape Architects
ASME	American Society of Mechanical Engineers
ASNT	American Society for Nondestructive Testing
ASTM	American Society for Testing and Materials
AWC	American Wood Council
AWG	American Wire Gage
AWPA	American Wood Protection Association
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BMP	Best Management Practices
CFR	Code of Federal Regulations
CMP	Corrugated Metal Pipe
COE	U.S. Army Corps of Engineers
CRSI	Concrete Reinforcing Steel Institute
DBE	Disadvantaged Business Enterprise
DMS	Departmental Material Specification
EIA	Electronic Industries Alliance
EPA	United States Environmental Protection Agency
FHWA	Federal Highway Administration, U.S. Department of Transportation
FSS	Federal Specifications and Standards (General Services Administration)
GSA	General Services Administration
HUB	Historically Underutilized Business
ICEA	Insulated Cable Engineers Association

IEEE	Institute of Electrical and Electronics Engineers
IESNA	Illuminating Engineering Society of North America
IMSA	International Municipal Signal Association
ISO	International Organization for Standardization
ITS	Intelligent Transportation System
ITE	Institute of Transportation Engineers
LRFD	Load and Resistance Factor Design
MASH	Manual for Assessing Safety Hardware
MPL	Material Producer List
NCHRP	National Cooperative Highway Research Program
NCR	Nonconformance Report
NEC	National Electrical Code (Published by NFPA)
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NIST	National Institute of Standards and Technology
NRM	Nonhazardous Recyclable Material
NRMCA	National Ready Mixed Concrete Association
NSBA	National Steel Bridge Alliance
NTPEP	National Transportation Product Evaluation Program
OSHA	Occupational Safety & Health Administration, U.S. Department of Labor
PCA	Portland Cement Association
PCI	Precast/Prestressed Concrete Institute
PPI	Plastics Pipe Institute
PS&E	Plans, Specifications, and Estimates
PSL	Project-Specific Location
PTI	Post-Tension Institute
QA	Quality Assurance
QC	Quality Control
RCP	Reinforced Concrete Pipe
RPLS	Registered Public Land Surveyor
RRC	Railroad Commission of Texas
SBE	Small Business Enterprise
SFPA	Southern Forest Products Association
SI	International System of Units
SPIB	Southern Pine Inspection Bureau
SSPC	The Society for Protective Coatings
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TDLR	Texas Department of Licensing and Regulation
TMUTCD	Texas Manual on Uniform Traffic Control Devices
UL	Underwriters Laboratory, Inc.
USC	United States Code
WRI	Wire Reinforcement Institute
WWPA	Western Wood Products Association

3. DEFINITIONS

3.1. **Abrasive Blasting**. Spraying blasts of pressurized air combined with abrasive media.

3.2. **Actual Cost**. Contractor's actual cost to provide labor, material, equipment, and project overhead necessary for the work.

3.3. **Addendum**. Change in proposal forms developed between advertising and bid submittal deadline.

3.4. **Additive Alternate**. A bid item contained in a proposal that is not a regular item or a replacement alternate bid item. The additive alternate item(s) include work that may be added to the base bid at the time of letting.

3.5. **Advertisement**. The public announcement required by law inviting bids for work to be performed or materials to be furnished.

3.6. **Affiliates**. Two or more firms are affiliated if they share common officers, directors, or stockholders; a family member of an officer, director, or stockholder of one firm serves in a similar capacity in another of the firms; an individual who has an interest in, or controls a part of, one firm either directly or indirectly also has an interest in, or controls a part of, another of the firms; the firms are so closely connected or associated that one of the firms, either directly or indirectly, controls or has the power to control another firm; one firm controls or has the power to control another of the firms; or the firms are closely allied through an established course of dealings including, but not limited to the lending of financial assistance.

3.7. **Air Blasting**. Spraying blasts of pressurized air free of oil and moisture.

3.8. **Air Temperature**. The temperature measured in degrees Fahrenheit (°F) in the shade, not in the direct rays of the sun, and away from artificial heat.

3.9. **Anticipated Profit**. Profit for work not performed.

3.10. **Apparent Low Bidder**. The Bidder determined to have the numerically lowest total bid as a result of the tabulation of bids by the Department.

3.11. **Architect of Record**. A person registered as an architect or licensed as a landscape architect, in accordance with State law, exercising overall responsibility for the design or a significant portion of the design and performs certain Contract administration responsibilities as described in the Contract; or a firm employed by the State to provide professional architectural services.

3.12. **Arterial Highway**. A highway used primarily for through traffic and usually on a continuous route.

3.13. **Available Bidding Capacity**. The Contractor's approved bidding capacity less uncompleted work on Department Contracts.

3.14. **Award**. The Commission's acceptance of a Contractor's bid for a proposed Contract that authorizes the Department to enter into a Contract.

3.15. **Bid**. The offer from the Bidder for performing the work described in the proposal.

3.16. **Bid Bond**. The security executed by the Contractor and the Surety furnished to the Department to guarantee payment of liquidated damages if the Contractor fails to enter into an awarded Contract.

3.17. **Bid Error**. A mathematical mistake made by a Bidder in the unit price entered into the proposal.

3.18. **Bidder**. An individual, partnership, limited liability company, corporation, or joint venture submitting a bid for a proposed Contract.

3.19. **Bidders Questionnaire**. A prequalification form completed by a prospective Bidder reflecting a Bidder's financial data and experience.

3.20. **Bidding Capacity**. The maximum dollar value a Contractor may have under Contract with the Department at any given time.

3.21. **Blast Cleaning**. Using one of the blasting methods including, but not limited to water blasting, low-pressure water blasting, high-pressure water blasting, abrasive blasting, water-abrasive blasting, shot blasting, slurry blasting, water injected abrasive blasting, and brush blasting.

3.22. **Bridge**. A structure, including supports, erected over a depression or an obstruction (e.g., water, a highway, or a railway) having a roadway or track for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 ft. between faces of abutments, spring lines of arches, or extreme ends of the openings for multiple box culverts.

3.23. **Brush Blasting**. Sweeping lightly with an abrasive blast to remove loose material.

3.24. **Building Contract**. A Contract entered under Transportation Code, Chapter 223, Subchapter A, "Competitive Bids," for the construction or maintenance of a Department building or appurtenance facilities. Building Contracts are considered to be construction Contracts.

3.25. **Callout Work**. Contracts, or work items in Contracts, that require a Contractor's response on an as-needed basis (e.g., see Item 351, "Flexible Pavement Structure Repair").

3.26. **Certificate of Insurance**. A form approved by the Department covering insurance requirements stated in the Contract.

3.27. **Change Order**. Written order to the Contractor detailing changes to the specified work, item quantities or any other modification to the Contract.

3.28. **Commission**. The Texas Transportation Commission or authorized representative.

3.29. **Concrete Construction Joint**. A joint formed by placing plastic concrete in direct contact with concrete that has attained its initial set.

3.30. **Concrete Repair Manual**. Department manual specifying methods and procedures for concrete repair as an extension of the standard specifications.

3.31. **ConcreteWorks©**. Department-owned software for concrete heat analysis. Software is available on Department website.

3.32. **Construction Contract**. A Contract entered under Transportation Code, Chapter 223, Subchapter A, for the construction, reconstruction, or maintenance of a segment of the State highway system.

3.33. **Consultant**. The licensed professional engineer or engineering firm, or the architect or architectural firm, registered in the State of Texas and under Contract to the Department to perform professional services. The consultant may be the Engineer or architect of record or may provide services through and be subcontracted to the Engineer or architect of record.

3.34. **Contract**. The agreement between the Department and the Contractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract documents.

3.35. **Contract Documents**. Elements of the Contract including, but not limited to the plans, specifications incorporated by reference, special provisions, special specifications, Contract bonds, change orders, and supplemental agreements.

3.36. **Contract Time**. The number of working days specified for completion of the work, including authorized additional working days.

3.37. **Contractor**. The individual, partnership, limited liability company, corporation, or joint venture and all principals and representatives with which the Contract is made by the Department.

3.38. **Controlled Access Highway**. Any highway to or from which access is denied or controlled, in whole or in part, from or to abutting land or intersecting streets, roads, highways, alleys, or other public or private ways.

3.39. **Control of Access**. The condition in which the right to access of owners or occupants of abutting land or other persons in connection with a highway is fully or partially controlled by public authority.

3.40. **Control Point**. An established point shown on the plans to provide vertical and horizontal references for geometric control for construction.

3.41. **Cross-Sections**. Graphic representations of the original ground and the proposed facility, at right angles to the centerline or base line.

3.42. **Culvert**. Any buried structure providing an opening under a roadway for drainage or other purposes. Culverts may also be classified as bridges. (See Section 1.3.22., "Bridge.")

3.43. **Cycle**. The activity necessary for performing the specified work within the right of way project limits once.

3.44. **Daily Road-User Cost**. Damages based on the estimated daily cost of inconvenience to the traveling public resulting from the work.

3.45. **Debar (Debarment)**. Action taken by the Department or federal government pursuant to regulation that prohibits a person or company from entering into a Contract, or from participating as a subcontractor, or supplier of materials or equipment used in a highway improvement Contract as defined in Transportation Code, Chapter 223, Subchapter A.

3.46. **Detour**. A temporary traffic route around a closed portion of a road.

3.47. **Department**. The Texas Department of Transportation (TxDOT).

3.48. **Departmental Material Specifications**. Reference specifications for various materials published by the Construction Division.

3.49. **Direct Traffic Culvert**. Concrete box culvert whose top slab is used as the final riding surface or is to have an overlay or other riding surface treatment.

3.50. **Disadvantaged Business Enterprise**. A for-profit small business certified through the Texas Unified Certification Program in accordance with 49 CFR Part 26, that is at least 51% owned by one or more socially and economically disadvantaged individuals, or in the case of a publicly owned business, in which is at least 51% of the stock is owned by one or more socially and economically disadvantaged individuals, and whose management and daily business operations are controlled by one or more of the individuals who own it.

3.51. **Divided Highway**. A highway with separate roadways intended to move traffic in opposite directions.

3.52. **Easement**. A real property right acquired by one party to use land belonging to another party for a specified purpose.

3.53. **Electronic Vault**. The Department's bidding system where electronic bids are stored before bid opening.

3.54. **Engineer**. The Chief Engineer of the Department or the authorized representative of the Chief Engineer.

3.55. **Expressway**. A divided arterial highway for through traffic with full or partial control of access and generally with grade separations at intersections.

3.56. **Family Member**. A family member of an individual is the individual's parent, parent's spouse, step-parent, step-parent's spouse, sibling, sibling's spouse, spouse, child, child's spouse, spouse's child, spouse's child's spouse, grandchild, grandparent, uncle, uncle's spouse, aunt, aunt's spouse, first cousin, or first cousin's spouse.

3.57. **Force Account**. Payment for directed work based on the actual cost of labor, equipment, and materials furnished with markups for project overhead and profit.

3.58. **Freeway**. An expressway with full control of access.

3.59. **Frontage Road**. A local street or road auxiliary to and located along an arterial highway for service to abutting property and adjacent areas and for control of access (sometimes known as a service road, access road, or insulator road).

3.60. **Hazardous Materials or Waste**. Hazardous materials or waste include but are not limited to explosives, compressed gas, flammable liquids, flammable solids, combustible liquids, oxidizers, poisons, radioactive materials, corrosives, etiologic agents, and other material classified as hazardous by 40 CFR 261, or applicable state and federal regulations.

3.61. **High-Pressure Water Blasting**. Water blasting with pressures between 5,000 and 10,000 psi.

3.62. **Highway, Street, or Road**. General terms denoting a public way for purposes of vehicular travel, including the entire area within the right of way. Recommended usage in urban areas is highway or street; in rural areas, highway or road.

3.63. **Historically Underutilized Business**. A corporation, sole proprietorship, partnership, or joint venture formed for the purpose of making a profit certified by the Texas Building and Procurement Commission, and 51% owned by one or more persons who are economically disadvantaged because of their identification as members of certain groups, including African Americans, Hispanic Americans, Asian-Pacific Americans, Native Americans, or women, and have a proportionate interest and demonstrate active participation in the control, operation, and management of the business' affairs. Individuals meeting the HUB definition are required to be residents of the State of Texas. Businesses that do not have their primary headquarters in the State of Texas are not eligible for HUB certification.

3.64. **Incentive and Disincentive Provisions**. An adjustment to the Contract price of a predetermined amount for each day the work is completed ahead of or behind the specified milestone, phase, or Contract completion dates. The amount of the incentive and disincentive is determined based on estimated costs for engineering, traffic control, delays to the motorists, and other items involved in the Contract.

3.65. **Independent Assurance Tests**. Tests used to evaluate the sampling and testing techniques and equipment used in the acceptance program. The tests are performed by the Department and are not used for acceptance purposes.

3.66. **Inspector**. The person assigned by the Engineer to inspect for compliance with the Contract any or all parts of the work and the materials used.

3.67. **Intelligent Transportation System**. An integrated system that uses video and other electronic detection devices to monitor traffic flows.

3.68. **Intersection**. The general area where 2 or more highways, streets, or roads join or cross, including the roadway and roadside facilities for traffic movements within it.

3.69. **Island**. An area within a roadway from which vehicular traffic is intended to be excluded, together with any area at the approach occupied by protective deflecting or warning devices.

3.70. **Joint Venture**. Any combination of individuals, partnerships, limited liability companies, or corporations submitting a single bid proposal.

3.71. **Lane Rental**. A method to assess the Contractor daily or hourly rental fees for each lane, shoulder, or combination of lanes and shoulders taken out of service.

3.72. **Letting**. The receipt, opening, tabulation, and determination of the apparent low Bidder.

3.73. **Letting Official**. The Executive Director or any Department employee empowered by the Executive Director to officially receive bids and close the receipt of bids at a letting.

3.74. **Licensed Professional Engineer**. A person who has been duly licensed by the Texas Board of Professional Engineers to engage in the practice of engineering in the State of Texas; also referred to as a Professional Engineer.

3.75. **Limits of Construction**. An area with established boundaries, identified within the highway right of way and easements, where the Contractor is permitted to perform the work.

3.76. **Local Street or Road**. A street or road primarily for access to residence, business, or other abutting property.

3.77. **Low-Pressure Water Blasting**. Water blasting with pressures between 3,000 and 5,000 psi.

3.78. **Major Item**. An item of work included in the Contract that has a total cost equal to or greater than 5% of the original Contract or $100,000 whichever is less. A major item at the time of bid will remain a major item. An item not originally a major item does not become one through the course of the Contract.

3.79. **Manual of Testing Procedures**. Department manual outlining test methods and procedures maintained by the Materials and Pavements Section of the Construction Division.

3.80. **Material Producer List**. Department maintained list of approved products.

3.81. **Materially Unbalanced Bid**. A bid that generates a reasonable doubt that award to the Bidder submitting a mathematically unbalanced bid will result in the lowest ultimate cost to the State.

3.82. **Mathematically Unbalanced Bid**. A bid containing bid prices that do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs.

3.83. **Median**. The portion of a divided highway separating the traffic lanes in opposite directions.

3.84. **Milestone Date**. The date that a specific portion of the work is to be completed, before the completion date for all work under the Contract.

3.85. **Monolithic Concrete Placement**. The placement of plastic concrete in such manner and sequence to prevent a construction joint.

3.86. **National Holidays**. January 1, the last Monday in May, July 4, the first Monday in September, the fourth Thursday in November, and December 24 or December 25.

3.87. **Nonhazardous Recyclable Material**. A material recovered or diverted from the nonhazardous waste stream for the purposes of reuse or recycling in the manufacture of products that may otherwise be produced using raw or virgin materials.

3.88. **Nonresident Bidder**. A Bidder whose principal place of business is not in Texas. This includes a Bidder whose ultimate parent company or majority owner does not have its principal place of business in Texas.

3.89. **Nonresponsive Proposal**. A proposal that does not meet the criteria for acceptance contained in the proposal form.

3.90. **Non-Site-Specific Contracts**. Contracts where a geographic region is specified for the work and work orders, with or without plans, detail the limits and work to be performed.

3.91. **Notification**. Either written or oral instruction to the Contractor. Voice mail is oral notification.

3.92. **Pavement**. That part of the roadway having a constructed surface for the use of vehicular traffic.

3.93. **Pavement Structure**. Combination of surface course and base course placed on a subgrade to support the traffic load and distribute it to the roadbed.

3.93.1. **Surface Course**. Pavement structure layers designed to accommodate the traffic load. The top layer resists skidding, traffic abrasion, and the disintegrating effects of climate and is sometimes called the wearing course.

3.93.2. **Base Course**. One or more layers of specified material thickness placed on a subgrade to support a surface course.

3.93.3. **Subgrade**. The top surface of a roadbed upon which the pavement structure, shoulders, and curbs are constructed.

3.93.4. **Subgrade Treatment**. Modifying or stabilizing material in the subgrade.

3.94. **Payment Bond**. The security executed by the Contractor and the Surety, furnished to the Department to guarantee payment of all legal debts of the Contractor pertaining to the Contract.

3.95. **Performance Bond**. The security executed by the Contractor and the Surety, furnished to the Department to guarantee the completion of the work in accordance with the terms of the Contract.

3.96. **Plans**. The drawings approved by the Engineer, including true reproductions of the drawings that show the location, character, dimensions, and details of the work and are a part of the Contract.

3.97. **Power of Attorney for Surety Bonds**. An instrument under corporate seal appointing an attorney-in-fact to act on behalf of a Surety in signing bonds.

3.98. **Prequalification**. The process for determining a Contractor's eligibility to bid work.

3.99. **Prequalification Statement**. The forms on which required information is furnished concerning the Contractor's ability to perform and finance the work.

3.100. **Project-Specific Location**. A material source, plant, waste site, parking area, storage area, field office, staging area, haul road, or other similar location either outside the project limits or within the project limits but not specifically addressed in the Contract.

3.101. **Proposal**. The offer from the Bidder submitted on the prescribed form, including addenda issued, giving unit bid prices for performing the work described in the plans and Specifications.

3.102. **Proposal Form**. The form printed and sent to the Bidder by the Department or printed by the Bidder from the Department's bidding system.

3.103. **Proposal Guaranty**. The security furnished by the Bidder as a guarantee that the Bidder will enter into a Contract if awarded the work.

3.104. **Quality Assurance**. Sampling, testing, inspection, and other activities conducted by the Engineer to determine payment and make acceptance decisions.

3.105. **Quality Control**. Sampling, testing, and other process control activities conducted by the Contractor to monitor production and placement operations.

3.106. **Ramp**. A section of highway for the primary purpose of making connections with other highways.

3.107. **Recurring Maintenance Work Contracts**. Contracts or work for which maintenance is needed at the same location on more than one occasion (e.g., mowing contracts for which mowing cycles are requested on multiple occasions).

3.108. **Referee Tests**. Tests requested to resolve differences between Contractor and Engineer test results. The referee laboratory is the Construction Division.

3.109. **Regular Item**. A bid item contained in a proposal and not designated as an additive alternate or replacement alternate bid item.

3.110. **Rental Rate Blue Book for Construction Equipment**. Publication containing equipment rental rates.

3.111. **Replacement Alternate**. A bid item identified the proposal form that a Bidder may substitute for a specific regular item of work.

3.112. **Responsive Bid**. A proposal that meets all requirements of the proposal form for acceptance.

3.113. **Right of Way**. A general term denoting land or property devoted to transportation purposes.

3.114. **Roadbed**. The graded portion of a highway prepared as foundation for the pavement structure and shoulders. On divided highways, the depressed median type and the raised median type highways are considered to have 2 roadbeds. Highways with a flush median are considered to have 1 roadbed. Frontage roads are considered separate roadbeds.

3.115. **Road Master**. A railroad maintenance official in charge of a division of railway.

3.116. **Roadside**. The areas between the outside edges of the shoulders and the right of way boundaries. Unpaved median areas between inside shoulders of divided highways and areas within interchanges are included.

3.117. **Roadway**. The portion of the highway (including shoulders) used by the traveling public.

3.118. **Routine Maintenance Contract**. A Contract let through the routine maintenance contracting procedure to preserve and repair roadways, rights of way, and appurtenances.

3.119. **Sandblasting, Dry**. Spraying blasts of pressurized air combined with sand.

3.120. **Sandblasting, Wet**. Spraying blasts of pressurized water combined with sand.

3.121. **Shoulder**. That portion of the roadway contiguous with the traffic lanes for accommodation of stopped vehicles for emergency use or for lateral support of base and surface courses.

3.122. **Shot Blasting**. Spraying blasts of pressurized air combined with metal shot.

3.123. **Sidewalk**. Portion of the right of way constructed exclusively for pedestrian use.

3.124. **Slurry Blasting**. Spraying blasts of pressurized air combined with a mixture of water and abrasive media.

3.125. **Special Provisions**. Additions or revisions to these standard specifications or special specifications.

3.126. **Special Specifications**. Supplemental specifications applicable to the Contract not covered by these standard specifications.

3.127. **Specifications**. Directives or requirements issued or made pertaining to the method and manner of performing the work or to quantities and qualities of materials to be furnished under the Contract. References to DMSs, ASTM or AASHTO specifications, or Department bulletins and manuals, imply the latest standard

or tentative standard in effect on the date of the proposal. The Engineer will consider incorporation of subsequent changes to these documents in accordance with Item 4, "Scope of Work."

3.128. **Small Business Enterprise**. A firm (including affiliates) whose annual gross receipts do not exceed the U.S. Small Business Administration's size standards for 4 consecutive years.

3.129. **State**. The State of Texas.

3.130. **State Holiday**. A holiday authorized by the State Legislature excluding optional state holidays and not listed in Section 1.3.86., "National Holidays." A list of state holidays can be found on the Department's website.

3.131. **Station**. A unit of measurement consisting of 100 horizontal feet.

3.132. **Subcontract**. The agreement between the Contractor and subcontractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract documents.

3.133. **Subcontractor**. A Subcontractor is defined as an individual, partnership, limited liability company, corporation, or any combination thereof that the Contractor sublets, or proposes to sublet, any portion of a Contract, excluding a material supplier, a hauling firm hauling only from a commercial source to the project, truck owner-operator, wholly-owned subsidiary, or specialty-type businesses such as security companies and rental companies.

3.134. **Subsidiary**. Materials, labor, or other elements that because of their nature or quantity have not been identified as a separate item and are included within the items on which they necessarily depend.

3.135. **Substructure**. The part of the structure below the bridge seats but not including, bearings, drilled shafts, or piling. Parapets, back walls, wing walls of the abutments, and drainage structures are considered parts of the substructure.

3.136. **Superintendent**. The representative of the Contractor who is available at all times and able to receive instructions from the Engineer or authorized Department representatives and to act for the Contractor.

3.137. **Superstructure**. The part of the structure above the bridge seats or above the springing lines of arches and including the bearings. Flatwork construction may be considered superstructure.

3.138. **Supplemental Agreement**. Written agreement entered into between the Contractor and the State and approved by the Surety, covering alterations and changes in the Contract. A supplemental agreement is used by the Department whenever the modifications include assignment of the Contract from one entity to another or other cases as desired by the Department.

3.139. **Surety**. The corporate body or bodies authorized to do business in Texas bound with and for the Contractor for the faithful performance of the work covered by the Contract and for the payment for all labor and material supplied in the prosecution of the work.

3.140. **Surplus Materials**. Any debris or material related to the Contract not incorporated into the work.

3.141. **Suspension**. Action taken by the Department or federal government pursuant to regulation that prohibits a person or company from entering into a Contract, or from participating as a subcontractor, or supplier of materials or equipment used in a highway improvement Contract as defined in Transportation Code, Chapter 223, Subchapter A.

3.142. **Traffic Lane**. The strip of roadway intended to accommodate the forward movement of a single line of vehicles.

3.143. **Traveled Way**. The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

3.144. **Truck Owner-Operator**. An individual who owns and operates 1 truck for hire.

3.145. **UT-Bridge**. Department-owned software for steel girder erection. Software is available on the Department's website.

3.146. **UT-Lift**. Department-owned software for steel girder erection. Software is available on the Department's website.

3.147. **Utility**. Privately, publicly, or cooperatively owned lines, facilities, and systems for producing, transmitting, or distributing communications, power, heat, gas, oil, water, waste, or storm water that are not connected with the highway drainage, signal systems, or other products that directly or indirectly serve the public; the utility company.

3.148. **Verification Tests**. Tests used to verify accuracy of QC and QA and mixture design testing.

3.149. **Water-Abrasive Blasting**. Spraying blasts of pressurized water combined with abrasive media.

3.150. **Water Blasting**. Spraying blasts of pressurized water of at least 3,000 psi.

3.151. **Water-Injected Abrasive Blasting**. Abrasive blasting with water injected into the abrasive/air stream at the nozzle.

3.152. **Wholly-Owned Subsidiary**. A legal entity owned entirely by the Contractor or subcontractor.

3.153. **Work**. The furnishing of all labor, materials, equipment, and other incidentals necessary for the successful completion of the Contract.

3.154. **Work Order**. Written notice to the Contractor to begin the work. The work order may include the date when work and time charges will begin, the allowable number of working days, and plan sheets providing details specific to a location or to an item of work for non-site-specific work. A work order is part of the Contract.

3.155. **Written Notice**. Written notice is considered to have been duly given if delivered in person to the individual or member to whom it is intended or if sent by regular, registered, or certified mail and delivered to the last known business address; sent by facsimile to the last known phone number; or sent by e-mail to the last known address. The date of the letter will serve as the beginning day of notice. Unclaimed mail or failure to provide current contact information will not be considered a failure to provide written notice.

Item 2
Instructions to Bidders

1. INTRODUCTION

Instructions to the Contractor in these Specifications are generally written in active voice, imperative mood. The subject of imperative sentences is understood to be "the Contractor." The Department's responsibilities are generally written in passive voice, indicative mood. Phrases such as "as approved," "unless otherwise approved," "upon approval," "as directed," "as verified," "as ordered," and "as determined" refer to actions of the Engineer unless otherwise stated, and it is understood that the directions, orders, or instructions to which they relate are within the limitations of and authorized by the Contract.

2. ELIGIBILITY OF BIDDERS

Obtain a prequalification form from the Department's website. A Bidder may choose to be prequalified by submitting either a Confidential Questionnaire or a Bidder's Questionnaire. Submit the appropriate questionnaire at least 10 calendar days before the last day of the bid opening for the District or statewide letting. Comply with all technical prequalification requirements in the proposal.

2.1. **Confidential Questionnaire**. Submit a Confidential Questionnaire and an audited financial statement for approval. Once prequalified, a Bidder's eligibility is valid for a period of one year from the balance sheet statement date.

2.2. **Bidder's Questionnaire**. Bidders prequalified with a Bidder's Questionnaire are only eligible to bid on projects identified as being waived from the requirements of Section 2.2.1., "Confidential Questionnaire." These projects are designated with a "W" on the Proposal Request Form. Submit a Bidder's Questionnaire for approval. Once prequalified, a Bidder's eligibility is valid for a period of one year from the date the Bidder's Questionnaire was received by the Department.

3. ISSUING PROPOSAL FORMS

The Department will issue a proposal form to a prequalified Bidder if the Engineer's estimate is within that Bidder's available bidding capacity. Request a proposal form electronically from the Department's website. A proposal form printed directly from the Department's website is for informational purposes only and will not be accepted as an official proposal form. In the case of a joint venture, all joint venture participants must be prequalified. An equally divided portion of the Engineer's estimate must be within each participant's available bidding capacity.

The Department will not issue a proposal form if one or more of the following apply:

- the Bidder is suspended or debarred by the Commission, Department, or any federal agency,
- the Bidder has not fulfilled the requirements for prequalification,
- the Bidder does not have the available bidding capacity,
- the Bidder is prohibited from rebidding a specific proposal form due to a bid error on the original proposal form,
- the Bidder failed to enter into a Contract on the original award,
- the Bidder was defaulted or terminated on the original Contract, unless the Department terminated in the best interest of the State or the public,
- the Bidder or a subsidiary or affiliate of the Bidder has received compensation from the Department to participate in the preparation of the plans or specifications on which the bid or Contract is based, or

- the Bidder is ineligible to bid on any proposed Contract in accordance with Article 7.15., "Responsibility for Damage Claims."

4. INTERPRETING ESTIMATED QUANTITIES

The quantities listed in the proposal form are approximate and will be used for the comparison of bids. Payments will be made for the work performed in accordance with the Contract.

5. EXAMINING DOCUMENTS AND WORK LOCATIONS

Examine the proposal form, plans, specifications, and specified work locations before submitting a bid for the work. Submitting a bid will be considered evidence that the Bidder has performed this examination. Borings, soil profiles, water elevations, and underground utilities shown on the plans were obtained for use of the Department in the preparation of plans. This information is provided for the Bidder's information only and the Department makes no representation as to the accuracy of the data. Be aware of the difficulty of accurately classifying all material encountered in making foundation investigations, the possible erosion of stream channels and banks after survey data have been obtained, and the unreliability of water elevations other than for the date recorded.

Oral explanations, instructions, or consideration for Contractor-proposed changes in the proposal form given during the bidding process are not binding. Only requirements included in the proposal form, associated specifications, plans, and Department-issued addenda are binding. Request explanations of documents in adequate time to allow the Department to reply before the bid opening.

Immediately notify the Department of any error, omission, or ambiguity discovered in any part of the proposal form and Contract documents. The Department will issue addenda when appropriate.

6. PREPARING THE BID

Prepare the bid on the proposal form furnished by the Department. Informational proposal forms printed from the Department's website will not be accepted.

Specify a unit price in dollars and cents for each regular item and additive alternate item, or replacement alternate item for which an estimated quantity is given.

When "Working Days" is an Item, submit the number of working days to be used to complete the Contract or phases of the Contract shown on the plans.

The Department will not accept an incomplete bid. A bid that has one or more of the deficiencies listed below is considered incomplete:

- the proposal form was not signed,
- certifications were not acknowledged,
- a regular item or the additive alternate item are left blank,
- a regular item and the corresponding replacement alternate item are left blank,
- the proposal form submitted had the incorrect number of items, or
- the Bidder did not acknowledge all addenda.

7. NONRESPONSIVE BID

The Department will not accept a nonresponsive bid. A bid that has one or more of the deficiencies listed below is considered nonresponsive:

- the bid was not in the hands of the Letting Official at the time and location specified in the advertisement,

- a bid was submitted for the same proposal form by a Bidder or Bidders and one or more of its partners or affiliates,
- the Bidder was not authorized to receive a proposal form under Article 2.3., "Issuing Proposal Forms",
- the Bidder failed to acknowledge receipt of all addenda issued,
- the proposal form was signed by a person who was not authorized to bind the Bidder or Bidders.
- the proposal guaranty did not comply with the requirements contained in this Item,
- the bid was in a form other than the official proposal form issued by the Department,
- the Bidder modified the bid in a manner that altered the conditions or requirements for work as stated in the proposal form,
- the Bidder bid more than the maximum or less than the minimum number of allowable working days shown on the plans when working days was an Item,
- the Bidder did not attend a specified mandatory pre-bid conference, or
- the Bidder did not meet the requirements of the technical qualification.

8. ELECTRONIC BID

The Bidder is responsible for taking the appropriate measures to submit a bid. These measures include, but are not limited to acquiring hardware, software, and Internet connectivity needed for submitting a bid via the Department's bidding system.

8.1. **Proposal Form**. Use the electronic proposal form in the Department's bidding system. When regular bid items have corresponding replacement alternate items, select the bid item or group of items to be used for the bid tabulation. Acknowledge all addenda listed in the Department's bidding system.

The electronic proposal form does not contain the special provisions, special specifications, general notes, and other Contract documents. These documents are included by reference.

8.2. **Proposal Guaranty**. Provide a proposal guaranty in the amount indicated on the proposal form. Use an electronic bid bond. Guaranty checks or printed bid bonds will not be accepted.

Use the most current version of the electronic bond issued by the Department. For a joint venture, the bond must be in the name of all joint venture participants. Enter the bond authorization code into the Department's bidding system.

It is the Bidder's responsibility to ensure the electronic bid bond is issued in the name or names of the Bidder or Bidders.

8.3. **Submittal of Bid**. Submit the bid to the vault using the Department's bidding system.

8.4. **Revising the Proposal Form**. Make desired changes in the Department's bidding system up until the time and date set for the opening of bids. The last bid submitted to the vault will be used for tabulation purposes.

8.5. **Withdrawing a Bid**. Submit an electronic or written request to withdraw a bid before the time and date set for the opening. The Department will not accept oral requests. An electronic request must be made using the Department's bidding system.

A written request must be signed and submitted to the Letting Official with proof of identification. The request must be made by a person authorized to bind the Bidder or Bidders. In the case of joint venture, the Department will accept a request from any person authorized to bind a party to the joint venture. The Department may require written delegation of authority to withdraw a bid when the individual sent to withdraw the bid is not authorized to bind the Bidder or Bidders.

9. PRINTED BID

9.1. **Proposal Form**. Mark all entries in ink. As an alternative to hand writing the unit prices in the proposal form, submit a typed proposal form. A typed proposal form must contain the information in the format shown on the "Example of Bid Prices Submitted by Computer Printout" in the proposal form.

When regular bid items have corresponding replacement alternate items, select the bid item or group of items to be used for the bid tabulation. Acknowledge all addenda by checking the appropriate box on the addendum acknowledgement page. Provide the complete and correct name of the Bidder submitting the bid. A person authorized to bind the Bidder must sign the proposal form. In the case of a joint venture, provide the complete and correct name of all Bidders submitting the bid. In the case of a joint venture, the person signing the proposal form must be authorized to bind all joint venture participants.

If a proposal form contains both regular items for domestic steel or iron materials and replacement alternate items for foreign steel or iron materials, the Bidder must either:

- submit unit bid prices for domestic items only, or
- submit unit bid prices for both the domestic and foreign items.

9.2. **Proposal Guaranty**. Provide a proposal guaranty in the amount indicated on the proposal form. Use either a guaranty check or a printed bid bond. An electronic bid bond may be used as the guaranty. Ensure the electronic bid bond meets the requirements of Section 2.8.2., "Proposal Guaranty," and submit the electronic bid bond with the printed bid.

9.2.1. **Guaranty Check**. Make the check payable to the Texas Transportation Commission or the Texas Department of Transportation. The check must be a cashier's check, money order, or teller's check drawn by or on a state or national bank, or a state or federally chartered credit union (collectively referred to as "bank"). The check must be dated on or before the date of the bid opening. Postdated checks will not be accepted. The type of check or money order must be indicated on the face of the instrument, except in the case of a teller's check, and the instrument must be no more than 90 days old. A check must be made payable at or through the institution issuing the instrument; be drawn by a bank and on a bank; or be payable at or through a bank. The Department will not accept personal checks, certified checks, or other types of money orders.

9.2.2. **Bid Bond**. Use the bid bond form provided by the Department. Submit the bid bond in the amount specified with the powers of attorney dated and attached. The bond must be dated on or before the date of the bid opening, bear the impressed seal of the Surety, and be signed by the Bidder or Bidders and an authorized individual of the Surety. As an alternative for joint venture Bidders, each of the Bidders may submit a separate bid bond completed as outlined in this Section. Bid bonds will only be accepted from Sureties authorized to execute a bond under and in accordance with state law.

9.3. **Submittal of Bid**. Place the completed proposal form and the proposal guaranty in a sealed envelope marked to indicate the contents.

When submitting by mail or delivery service, place the envelope in another sealed envelope and address as indicated in the official advertisement. It is the Bidder's responsibility to ensure that the sealed bid arrives at the location described on or before the time and date set for the bid opening. To be accepted, the bid must be in the hands of the Letting Official by that time of opening regardless of the method chosen for delivery.

9.4. **Revising the Proposal Form**. Make desired changes to the proposal form in ink, initial each change made, and submit the proposal to the Letting Official. Correction fluid or tape will be considered a change to the bid and requires the initials of the Bidder. The Department will not make revisions to a bid on behalf of a Bidder.

9.5. **Withdrawing a Bid**. Submit a written request to withdraw a bid before the time and date set for the opening. The Department will not accept oral requests. A written request must be signed and submitted to the Letting Official with proof of identification. The request must be made by a person authorized to bind the Bidder or Bidders. In the case of joint venture, the Department will accept a request from any person authorized to bind

a party to the joint venture. The Department may require written delegation of authority to withdraw a bid when the individual sent to withdraw the bid is not authorized to bind the Bidder or Bidders.

10. OPENING AND READING OF BIDS

At the time, date, and location specified in the official advertisement, the Letting Official will publicly open and read bids.

11. TABULATING BIDS

11.1. **Official Total Bid Amount**. The Department will sum the products of the quantities and the unit prices bid in the proposal form to determine the official total bid amount, except as provided in Section 2.11.5., "Consideration of Unit Prices." The official total bid amount is the basis for determining the apparent low Bidder. The total bid amounts will be compared and the results made public.

11.2. **Consideration of Bid Format**. When a Bidder submits both an electronic bid and a printed bid that is responsive, the unit bid prices in the printed bid will be used to determine the total bid amount. If the printed bid is incomplete or nonresponsive, the electronic bid will be used in the tabulation of the total bid amount.

If a Bidder submits 2 or more printed bids, all responsive bids will be tabulated. The bid with the lowest tabulation will be used to determine the total bid amount.

11.3. **Rounding of Unit Prices**. The Department will round off all unit bids involving fractional parts of a cent to the nearest one-tenth cent ($0.001) in determining the amount of the bid as well as computing the amount due for payment of each item under the Contract. For rounding purposes, entries of five-hundredths of a cent ($0.0005) or more will be rounded up to the next highest tenth of a cent, while entries less than five-hundredths of a cent will be rounded down to the next lowest tenth of a cent.

11.4. **Interpretation of Unit Prices**. The Department will make a documented determination of the unit bid price if a unit bid price is illegible or conflicting in the case of replacement alternate items. The Department's determination will be final.

11.5. **Consideration of Unit Prices**.

11.5.1. **Additive Alternate Items.** The Department will sum the products of the quantities and the unit prices bid for the regular items in the proposal form to determine the total bid amount for the base bid. The official total bid amount will be determined by the summation of the base bid plus a pre-determined order of additive alternate items, not to exceed the Department's budgeted amount for the Contract. An estimate of the budgeted amount may be shown on the plans.

The Contract will identify the base bid work and additive alternate work to be performed. The Department makes no guarantee that the additive alternate work will be required.

11.5.2. **A + B Bidding**. The official total bid amount will be determined by the summation of the Contract amount and the time element. The Department will use the following formula to make the calculation:

A + B1 + B2 + BX + ... + BT

The Contract amount, equal to A in the formula, is determined by the summation of the products of the approximate quantities shown in the proposal and the unit bid prices bid, and the time element, equal to B1, B2, BX (when phases are included as bid components), and BT (substantial completion of the project when included as a bid component), of the bid is determined by multiplying the number of working days bid to substantially complete the project, or phases, by the daily road-user cost (RUC) provided on the plans. When partial days are bid they will be rounded up to the nearest whole day.

The formula above determines the low Bidder and establishes the Contract time.

11.5.3. **Rubber Additives**. For proposed Contracts without federal funds, if an alternate item for "Hot Asphalt-Rubber Surface Treatments" or "Hot-Mix Asphalt Concrete Pavement" which contains ground tire rubber is shown in the proposal form and the Bidder bids that alternate item, the amounts bid for "Hot Asphalt-Rubber" and "Aggregate" or "Hot-Mix Asphalt Concrete" will be reduced to 85% of the amounts actually bid. This reduction will only be used for the purposes of determining the lowest Bidder. To qualify, the ground tire rubber used must be produced from scrap tire ground in a facility in Texas. Payment for "Hot Asphalt-Rubber" and "Aggregate" or "Hot-Mix Asphalt Concrete" will be at the actual unit prices bid.

11.5.4. **"Buy America."** The use of foreign steel is only allowed when shown on the plans. For a Bidder who proposes to use foreign steel or iron materials to be considered the apparent low Bidder, their total bid must be at least 25% lower than the next lowest bid if that bid proposes to use domestic steel or iron materials.

This requirement does not apply to minimal use of steel or iron materials provided that the total cost of all foreign source items used in the project, as delivered to the project site, is less than $2,500 or one-tenth-of-one-percent (1/10 of 1%) of the Contract amount, whichever is greater.

11.5.5. **Home State Bidding Preference**. For the purpose of determining the apparent low Bidder on proposed Contracts without federal funds, the Department will select the option that results in the greatest bidding preference to the resident Bidder.

11.5.5.1. **Reverse Application of Non-Resident Bidder's Home State Bidding Preference**. The total bid amount will be based upon the reverse application of the non-resident Bidder's home state bidding preference, if any. This will also apply to another state's preference for a Bidder that offers materials grown, produced, processed, or manufactured in that state.

Any reverse application of the home state bidding preference would be the greater of the following:

- the amount by which a resident Bidder would be required to underbid the non-resident Bidder to obtain a comparable contract in the state in which the non-resident's principle place of business is located; or
- the amount by which a resident Bidder would be required to underbid the non-resident Bidder to obtain a comparable contract in the state in which a majority of the manufacturing relating to the Contract will be performed.

11.5.5.2. **Texas Home State Bidding Preference**. A Bidder will be considered the apparent low Bidder if the Bidder's home office is located in this state and their bid does not exceed an amount equal to 105% of the apparent low bid received from a Bidder whose home office is not located in this state. This will not apply to a Bidder from a bordering state whose state does not give a preference to a Bidder in a manner similar to this Section.

12. CONSIDERATION OF BID ERRORS

The Department will consider a claim of a bid error by the apparent low Bidder if the following requirements have been met:

- a written notification is submitted to the Department within 5 business days after the date the bid is opened; and
- the submittal identifies the items of work involved and include bidding documentation. The Department may request clarification of submitted documentation.

The Department will evaluate the claim of an error by the apparent low Bidder by considering the following:

- the bid error relates to a material item of work,
- the bid error amount is a significant portion of the total bid,
- the bid error occurred despite the exercise of ordinary care, and
- the delay of the proposed work will not impact cost and safety to the public.

Acceptance of the bid error claim by the Department will result in the rejection of all bids. The erring Contractor will not be allowed to bid the project when it is relet. Rejection of bids due to the Contractor's bid error may result in the application of sanctions by the Department.

13. TIE BIDS

If the official total bid amount for 2 or more Bidders is equal and those bids are the lowest submitted, each tie Bidder will be given an opportunity to withdraw their bid. If 2 or more tie Bidders do not withdraw their bids, the low Bidder will be determined by a coin toss or a series of coin tosses when there are more than 2 Bidders. If all tie Bidders request to withdraw their bids, no withdrawals will be allowed and the low Bidder will be determined by a coin toss or a series of coin tosses when there are more than 2 Bidders. The Letting Official will preside over the proceedings.

Item 3
Award and Execution of Contract

1. AWARD OF CONTRACT

The Commission or designated representative will award, reject, or defer the Contract within 30 days after the opening of the proposal. The Department reserves the right to reject any or all proposals and to waive technicalities in the best interest of the State.

1.1. **Award**. The Commission or designated representative will award the Contract to the low Bidder as determined by Article 2.11., "Tabulating Bids." The Commission may award a Contract to the second lowest Bidder when the following requirements have been met:

- the Contract is for maintenance work with an Engineer's estimate less than $300,000 and the Contract does not include federal funds,
- the low Bidder withdraws its bid or fails to enter into Contract,
- the second lowest Bidder agrees to perform the work at the unit bid prices of the low Bidder,
- the Executive Director recommends in writing the award of the Contract to the second lowest Bidder, and
- the Commission agrees with the Executive Director's recommendation for award to the second lowest Bidder.

1.2. **Rejection**. The Commission or designated representative will reject the Contract if:

- collusion may have existed among the Bidders. Collusion participants will not be allowed to bid future proposals for the same Contract,
- the low bid is mathematically and materially unbalanced. The Bidder will not be allowed to bid future proposals for the same Contract,
- the lowest bid is higher than the Department's estimate and re-advertising for bids may result in a lower bid,
- the low bid contains a bid error that satisfies the requirements and criteria in Article 2.12., "Consideration of Bid Errors," or
- rejection of the Contract is in the best interest of the State.

1.3. **Deferral**. The Commission may defer the award or rejection of the Contract when deferral is in the best interest of the State.

2. RESCINDING OF AWARD

The Commission or designated representative reserves the right to cancel the award of any Contract before contract execution with no compensation due when the cancellation is in the best interest of the State. The Department will return the proposal guaranty to the Contractor.

3. DISADVANTAGED BUSINESS ENTERPRISE (DBE)/SMALL BUSINESS ENTERPRISE (SBE)

Submit all DBE/SBE information in the timeframe specified when required by the proposal.

4. EXECUTION OF CONTRACT

Provide the following within 15 days after written notification of award of the Contract.

4.1. **Contract**. Execute the Contract as prescribed by the Department.

4.2. **Bonds**. Execute and date the performance and payment bond in the full amount of the Contract with the powers of attorney. Provide bonds in accordance with Table 1. Furnish the payment and performance bonds as a guaranty for the protection of the claimants and the Department for labor and materials and the faithful performance of the work.

Table 1
Bonding Requirements

Contract Amount	Required Bonds
Less than $25,000	None
$25,000 to $100,000	Payment
More than $100,000	Performance and Payment

Sample versions of the standard performance and payment bonds may be viewed on the Department's website.

4.3. **Insurance**. Submit a certificate of insurance showing coverages in accordance with Contract requirements.

Insurances must cover the work for the duration of the Contract and must remain in effect until final acceptance. Failure to obtain and maintain insurance for the contracted work may result in suspension of work or default of the Contract. If the insurance expires and coverage lapses for any reason, stop all work until the Department receives an acceptable certificate of insurance.

Provide the Department with a certificate of insurance verifying the types and amounts of coverage shown in Table 2. The certificate of insurance must be in a form approved by the Texas Department of Insurance. Any certificate of insurance provided must be available for public inspection.

Table 2
Insurance Requirements

Type of Insurance	Amount of Coverage
Commercial General Liability Insurance	Not Less Than: $1,000,000 each occurrence
Business Automobile Policy	Not Less Than: $600,000 combined single limit
Workers' Compensation	Not Less Than: Statutory
All Risk Builder's Risk Insurance (For building-facilities contracts only)	100% of Contract Price

By signing the Contract, the Contractor certifies compliance with all applicable laws, rules, and regulations pertaining to workers' compensation insurance. This certification includes all subcontractors. Pay all deductibles stated in the policy. Subcontractors must meet the requirements of Table 2 either through their own coverage or through the Contractor's coverage.

The Workers' Compensation policy must include a waiver of subrogation endorsement in favor of the Department.

For building-facilities contracts, provide All Risk Builder's Risk Insurance to protect the Department against loss by storm, fire or extended coverage perils on work and materials intended for use on the project including the adjacent structure. Name the Department under the Lost Payable Clause.

For contracts with railroad requirements, see project-specific details for additional insurance requirements.

Provide a substitute Surety on the Contract bonds in the original full Contract amount within 15 days of notification if the Surety is declared bankrupt or insolvent, the Surety's underwriting limitation drops below the Contract amount or the Surety's right to do business is terminated by the State. The substitute Surety must be authorized by the laws of the State and acceptable to the Department. Work will be suspended until a substitute Surety is provided. Working day charges will be suspended for 15 days or until an acceptable Surety is provided, whichever is sooner.

The work performed under this section will not be measured or paid for directly but will be subsidiary to pertinent Items.

4.4. **Business Ownership Information**. Submit the names and social security numbers of all individuals owning 25% or more of the firm, or firms in the case of a joint venture, on the Department's form.

4.5. **List of Quoting Suppliers and Subcontractors**. For a construction Contracts, submit a list of all suppliers and subcontractors that quoted on the Contract. Include names, addresses, telephone numbers, and types of work required.

4.6. **Railroad Documents**. Provide all required documents for satisfaction of railroad requirements for projects that have work which involves railroad right of way. Comply with the requirements of Article 5.8., "Cooperation With Railroads."

5. FAILURE TO ENTER CONTRACT

If the Contractor fails to comply with all of the requirements in Article 3.4., "Execution of Contract," the proposal guaranty will become the property of the State, not as a penalty, but as liquidated damages. The Contractor forfeiting the proposal guaranty will not be considered in future proposals for the same work unless there has been a substantial change in design of the work.

6. APPROVAL AND EXECUTION OF CONTRACT

The Contract will be approved and signed under authority of the Commission.

7. RETURN OF PROPOSAL GUARANTY

The proposal guaranty check of the low Bidder will be retained until after the Contract has been rejected or awarded and executed. Bid bonds will not be returned.

8. BEGINNING OF WORK

Do not begin work until authorized in writing by the Engineer.

Verify all quantities of materials shown on the plans before ordering.

For Contracts with callout work and work orders, the purchase of materials before a work order is issued or without prior written approval of the Engineer is at the Contractor's risk, and the Department is not obligated for the cost of the materials or work to acquire the materials.

9. ASSIGNMENT OF CONTRACT

Do not assign, sell, transfer, or otherwise dispose of the Contract or any portion rights, title, or interest (including claims) without the approval of the Commission or designated representative. The Department must deem any proposed assignment justified and legally acceptable before the assignment can take place.

10. EXCLUDED PARTIES

The Contractor certifies by signing the Contract that the Contractor will not enter into any subcontract with a subcontractor that is debarred or suspended by the Department or any federal agency.

Item 4
Scope of Work

1. CONTRACT INTENT

The intent of the Contract is to describe the completed work to be performed. Furnish materials, supplies, tools, equipment, labor, and other incidentals necessary for the proper prosecution and completion of the work in accordance with Contract documents.

2. PRECONSTRUCTION CONFERENCE

Before starting work, schedule and attend a preconstruction conference with the Engineer. Failure to schedule and attend a preconstruction conference is not grounds for delaying the beginning of working day charges. The preconstruction conference may be scheduled with the safety preconstruction meeting described in Section 7.2.2., "Safety Preconstruction Meeting" and the railroad coordination meeting described in Article 5.8, "Cooperation With Railroads". Work with the Engineer to resolve or escalate all issues. Execute the project pledge and establish an issue escalation ladder.

2.1. **Project Pledge**. Contractor representatives at the level of foreman and above will certify in writing they will approach the construction of this project in a manner consistent with delivering a high quality project in a safe, cost-effective, and timely manner, and they will be committed to not allowing personality conflicts or personal interests to interfere with providing the public with a quality project. Failure to uphold this commitment may result in grounds for removal from the project.

2.2. **Issue Resolution Process**. An issue is any aspect of the Contract where parties of the Contract do not agree. The individuals identified at the lowest level of the issue escalation ladder will initiate the issue resolution process by escalating any issue that remains unresolved within the time frame outlined in the issue escalation ladder.

Work with the Engineer to resolve all issues during the course of the Contract. Refer to Article 4.7., "Dispute or Claims Procedure" for all unresolved issues.

3. PARTNERING

The intent of this section is to promote an environment of trust, mutual respect, integrity, and fair-dealing between the Department and the Contractor.

Informal partnering does not make use of a facilitator, while formal partnering uses the services of a facilitator (internal or external).

3.1. **Procedures for Partnering Meetings and Format**. Informal partnering is required, unless formal partnering is mutually agreed to in lieu of the informal partnering.

3.2. **Facilitators**. The facilitator is to act as a neutral party seeking to initiate cooperative working relationships. This individual must have the technical knowledge and ability to lead and guide discussions. Choose either an internal or external facilitator. The facilitator must be acceptable to the Engineer.

3.2.1. **Internal Facilitators**. A Department or Contractor staff member may be selected as the facilitator at no additional cost to either party.

3.2.2. **External Facilitators**. A private firm or individual that is independent of the Contractor and the Department may be selected as the facilitator. Submit the facilitator's name and estimated fees for approval before contracting with the facilitator.

3.3. **Meetings and Arrangements**. Coordinate with the Engineer for meeting dates and times, locations including third party facilities, and other needs and appurtenances including but not limited to audio or visual equipment. Make all meeting arrangements for formal partnering. Use Department facilities or facilities in the vicinity of the project if available. Submit the estimated meeting costs for approval before finalizing arrangements.

Coordinate facilitator discussions before the partnering meeting to allow the facilitator time to prepare an appropriate agenda. Prepare a list of attendees with job titles and include critical Contractor, subcontractor, and supplier staff in the list. Provide the facilitator the list of attendees and invite the attendees listed.

The Department will invite and provide a list of attendees that includes but is not limited to Department, City, County, law enforcement, railroad, and utility representatives.

Participate in additional partnering meetings as mutually agreed.

3.4. **Payment**. Expenses for labor, Contractor equipment, or overhead will not be allowed. Markups as prescribed in Article 9.7., "Payment for Extra Work and Force Account Method," will not be allowed.

Informal partnering will be conducted with each party responsible for their own costs.

For formal partnering using internal facilitators, the Contractor will be responsible for arrangements and for expenses incurred by its internal facilitator, including but not limited to meals, travel, and lodging. Department facilitators may be used at no additional cost.

For formal partnering using external facilitators, submit an invoice to the Engineer for reimbursement. The Department will reimburse the Contractor for half of the eligible expenses as approved. For external facilitators not approved by the Department but used at the Contractor's option, the Contractor will be responsible for all costs of the external facilitator.

For meeting facilities and appurtenances, submit an invoice to the Engineer for reimbursement. The Department will reimburse the Contractor for half of the eligible expenses as approved.

4. CHANGES IN THE WORK

The Engineer reserves the right to make changes in the work including addition, reduction, or elimination of quantities and alterations needed to complete the Contract. Perform the work as altered. These changes will not invalidate the Contract nor release the Surety. The Contractor is responsible for notifying the sureties of any changes to the Contract.

If the changes in quantities or the alterations do not significantly change the character of the work under the Contract, the altered work will be paid for at the Contract unit price. If the changes in quantities or the alterations significantly change the character of the work, the Contract will be amended by a change order. If no unit prices exist, this will be considered extra work and the Contract will be amended by a change order. Provide cost justification as requested, in an acceptable format. Payment will not be made for anticipated profits on work that is eliminated.

Agree on the scope of work and the basis of payment for the change order before beginning the work. If there is no agreement, the Engineer may order the work to proceed under Article 9.7., "Payment for Extra Work and Force Account Method," or by making an interim adjustment to the Contract. In the case of an adjustment, the Engineer will consider modifying the compensation after the work is performed.

A significant change in the character of the work occurs when:

- the character of the work for any item as altered differs materially in kind or nature from that in the Contract, or
- a major item of work varies by more than 25% from the original Contract quantity, except for non-site-specific Contracts.

When the quantity of work to be done under any major item of the Contract is more than 125% of the original quantity stated in the Contract, then either party to the Contract may request an adjustment to the unit price on the portion of the work that is above 125%.

When the quantity of work to be done under any major item of the Contract is less than 75% of the original quantity stated in the Contract, then either party to the Contract may request an adjustment to the unit price. Adjust the unit price by multiplying the Contract unit price by the factor in Table 1.

Table 1
Quantity-Based Price Adjustment Factors

% of Original Quantity	Factor
≥ 50 and < 75	1.05
≥ 25 and < 50	1.15
< 25	1.25

If the changes require additional working days to complete the Contract, Contract working days will be adjusted in accordance with Item 8, "Prosecution and Progress."

5. DIFFERING SITE CONDITIONS

During the progress of the work, differing subsurface or latent physical conditions may be encountered at the site. The 2 types of differing site conditions are defined as:

- those that differ materially from those indicated in the Contract, and
- unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract.

Notify the Engineer in writing when differing site conditions are encountered. The Engineer will notify the Contractor when the Department discovers differing site conditions. Unless directed otherwise, suspend work on the affected items and leave the site undisturbed. The Engineer will investigate the conditions and determine whether differing site conditions exist. If the differing site conditions cause an increase or decrease in the cost or number of working days specified for the performance of the Contract, the Engineer will make adjustments, excluding the loss of anticipated profits, in accordance with the Contract. Additional compensation will be made only if the required written notice has been provided.

6. REQUESTS FOR ADDITIONAL COMPENSATION AND DAMAGES

Notify the Engineer in writing of any intent to request additional compensation once there is knowledge of the basis for the request. An assessment of damages is not required to be part of this notice but is desirable. The intent of the written notice requirement is to provide the Engineer an opportunity to evaluate the request and to keep an accurate account of the actual costs that may arise. Minimize impacts and costs.

If written notice is not given, the Contractor waives the right to additional compensation unless the circumstances could have reasonably prevented the Contractor from knowing the cost impact before performing the work. Notice of the request and the documentation of the costs will not be construed as proof or substantiation of the validity of the request. Submit the request in enough detail to enable the Engineer to determine the basis for entitlement, adjustment in the number of working days specified in the Contract, and compensation.

Damages occur when impacts that are the responsibility of the Department result in additional costs to the Contractor that could not have been reasonably anticipated at the time of letting. Costs of performing

additional work are not considered damages. For Contractor damages, the intent is to reimburse the Contractor for actual expenses arising out of a compensable impact. No profit or markups, other than labor burden, will be allowed. For damages, labor burden will be reimbursed at 35% unless the Contractor can justify higher actual cost. Justification for a higher percentage must be in accordance with the methodology provided by the Department, submitted separately for project overhead labor and direct labor, and determined and submitted by a Certified Public Accountant (CPA). Submit CPA-prepared labor burden rates directly to the Construction Division for approval.

The Department will not consider fees and interest on requests for additional compensation and damages. Fees include, but are not limited to: preparation, attorney, printing, shipping, and various other fees.

If the Contractor requests compensation for damages and the damages are determined to be compensable, then standby equipment costs and project overhead compensation will be based on the duration of the compensable damage and will be limited as follows:

6.1. **Standby Equipment Costs**. Payment will be made in accordance with Section 9.7.1.4.3., "Standby Equipment Costs."

6.2. **Project Overhead**. Project overhead is defined as the administrative and supervisory expenses incurred at the work locations. When delay to project completion occurs, reimbursement for project overhead for the Contractor will be made using the following options:

- reimbursed at 6% (computed as daily cost by dividing 6% of the original Contract amount by the number of original Contract work days), or
- actual documented costs for the impacted period.

Project overhead for delays impacting subcontractors will be determined from actual documented costs submitted by the Contractor.

Time extensions and suspensions alone will not be justification for reimbursement for project overhead.

6.3. **Home Office Overhead**. The Department will not compensate the Contractor for home office overhead.

7. DISPUTE OR CLAIMS PROCEDURE

The dispute resolution policy promotes a cooperative attitude between the Engineer and Contractor. Emphasis is placed on resolving issues while they are still current, at the area office or the district office, and in an informal manner. Open sharing of information is encouraged by all parties involved so the information provided completely and accurately reflects the issues and facts. If information is not shared, decisions may be limited to relying on the documentation that is available for review.

It is the Department's goal to have a dispute settled in the District before elevating it to the Contract Claim Committee (CCC) as a claim. The Construction Division can assist in the resolution of a dispute with a Contractor when requested by the District. The Contractor may request that a District ask for assistance of the Construction Division; however, the request for a recommendation prepared by the Construction Division to settle a dispute must come from the District.

If a dispute cannot be resolved, initiate the Contract claim procedure by submitting a claim to the District Engineer, the Director of the Construction Division, or the CCC.

The Department's Contract claim procedure has been established in accordance with Title 43 of the Texas Administrative Code, Part 1, Chapter 9, Subchapter A, Rule §9.2, *Contract Claim Procedure*. Detailed instructions for submitting a claim and its components can be found on the Department's website.

If a claim has been submitted and the Contractor wishes to resume negotiations with the District, notify the CCC in writing of the intent to resume negotiations at the District level and request review of the claim be suspended by the CCC pending the outcome of the negotiations.

File a claim after completion of the Contract or when required for orderly performance of the Contract. For a claim resulting from enforcement of a warranty period, file the claim no later than one year after expiration of the warranty period. For all other claims, file the claim no later than the date the Department issues notice to the Contractor that they are in default, the date the Department terminates the Contract, or one year after the date of final acceptance of the Contract. It is the Contractor's responsibility to submit requests in a timely manner.

Item 5
Control of the Work

1. AUTHORITY OF ENGINEER

The Engineer has the authority to observe, test, inspect, approve, and accept the work. The Engineer decides all questions about the quality and acceptability of materials, work performed, work progress, Contract interpretations, and acceptable Contract fulfillment. The Engineer has the authority to enforce and make effective these decisions.

The Engineer acts as a referee in all questions arising under the terms of the Contract. The Engineer's decisions will be final and binding.

The Engineer may pursue actions against the Contractor, including but not limited to the withholding of estimates and suspending the work, for noncompliance of the Contract.

The Engineer may suspend the work without suspending working day charges for noncompliance of the Contract.

2. PLANS AND WORKING DRAWINGS

When required, provide working drawings to supplement the plans with all necessary details not included on the Contract plans. Prepare and furnish working drawings in a timely manner and obtain approval, if required, before the beginning of the associated work. For all working drawing submittal requirements, the Engineer may allow electronic and other alternative submission procedures. Have a licensed professional engineer sign, seal, and date the working drawings as indicated in Table 1.

Prepare working drawings using United States standard measures in the English language. The routing of submittals for review and approval will be established at the preconstruction conference. The Contractor is responsible for the accuracy, coordination, and conformity of the various components and details of the working drawings. Department approval of the Contractor's working drawings will not relieve the Contractor of any responsibility under the Contract. The work performed under this Article will not be measured or paid for directly but will be subsidiary to pertinent Items.

Table 1
Signature and Approval Requirements for Working Drawings

Working Drawings For		Requires Licensed Professional Engineer's Signature, Seal, and Date	Requires Departmental Approval
1. Alternate or optional designs submitted by Contractor		Yes	Yes
2. Supplementary shop and fabrication drawings for structural Items		No unless required on the plans	See applicable Item
3. Contractor-proposed temporary facilities that affect the public safety, not included on the plans		Yes	Yes
4. Form and falsework details	Bridges, retaining walls, and other major structures	Yes unless otherwise shown on the plans	No[1]
	Minor structures	No unless otherwise shown on the plans	No
5. Erection drawings		Yes	No[1,2]
6. Contractor-proposed major modifications to traffic control plan		Yes	Yes

1. The Engineer may require that the Contractor have a licensed professional engineer certify that the temporary works are constructed according to the sealed drawings.
2. Approval is required for items spanning over live traffic or where safety of the traveling public is affected, in the opinion of the Engineer.

Submit shop drawings electronically for the fabrication of structural items as documented in the *Guide to Electronic Shop Drawing Submittal* available on the internet at ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e_submit_guide.pdf and as directed for other items required by the Contract. References to 11 × 17-in. sheets in individual specifications for structural items imply electronic computer aided design sheets.

3. CONFORMITY WITH PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS

Furnish materials and perform work in reasonably close conformity with the lines, grades, cross-sections, dimensions, details, gradations, physical and chemical characteristics of materials, and other requirements shown in the Contract. Reasonably close conformity limits will be as defined in the respective Items of the Contract or, if not defined, as determined by the Engineer. Obtain approval before deviating from the plans and approved working drawings. Do not perform work beyond the lines and grades shown on the plans or any extra work without the Engineer's authority. Work performed beyond the lines and grades shown on the plans or any extra work performed without authority is considered unauthorized and excluded from pay consideration. The Department will not pay for material rejected due to improper fabrication, excess quantity, or any other reasons within the Contractor's control.

3.1. **Acceptance of Defective or Unauthorized Work**. When work fails to meet Contract requirements, but is adequate to serve the design purpose, the Engineer will decide the extent to which the work will be accepted and remain in place. The Engineer will document the basis of acceptance by a letter and may adjust the Contract price.

3.2. **Correction of Defective or Unauthorized Work**. When work fails to meet Contract requirements and is inadequate to serve the design purpose it will be considered defective. Correct, or remove and replace, the work at the Contractor's expense, as directed.

The Department has the authority to correct or to remove and replace defective or unauthorized work. The cost may be deducted from any money due or to become due to the Contractor.

4. COORDINATION OF PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS

The specifications, accompanying plans, special provisions, change orders, and supplemental agreements are intended to work together and be interpreted as a whole.

Numerical dimensions govern over scaled dimensions. Special provisions govern over plans (including general notes), which govern over standard specifications and special specifications. Job-specific plan sheets govern over standard plan sheets.

However, in the case of conflict between plans (including general notes) and specifications regarding responsibilities for hazardous materials and traffic control in Items 1 through 9, "General Requirements and Conditions and Item 502, "Barricades, Signs, and Traffic Handling," special provisions govern over standard specifications and special specifications, which govern over the plans.

Notify the Engineer promptly of any omissions, errors, or discrepancies discovered so that necessary corrections and interpretations can be made. Failure to promptly notify the Engineer will constitute a waiver of all claims for misunderstandings or ambiguities that result from the errors, omissions, or discrepancies discovered.

5. COOPERATION OF CONTRACTOR

Cooperate with the Engineer. Respond promptly to instructions from the Engineer. Provide all information necessary for the successful completion of the Contract.

Designate in writing a competent, English-speaking Superintendent employed by the Contractor. The Superintendent must be experienced with the work being performed and capable of reading and understanding the Contract. Ensure the Superintendent is available at all times and able to receive instructions from the Engineer or authorized Department representatives and to act for the Contractor. The Engineer may suspend work without suspending working day charges if a Superintendent is not available or does not meet the above criteria.

At the written request of the Engineer, immediately remove from the project any employee or representative of the Contractor or a subcontractor who, in the opinion of the Engineer, does not perform work in a proper and skillful manner or who is disrespectful, intemperate, disorderly, uncooperative, or otherwise objectionable. Do not reinstate these individuals without the written consent of the Engineer.

Furnish suitable machinery, equipment, and construction forces for the proper prosecution of the work. Provide adequate lighting to address quality requirements and inspection of nighttime work.

6. COOPERATING WITH UTILITIES

Use established safety practices when working near utilities. Consult with the appropriate utilities before beginning work. Notify the Engineer immediately of utility conflicts. The Engineer will decide whether to adjust utilities or adjust the work to eliminate or lessen the conflict. Unless otherwise shown on the plans, the Engineer will make necessary arrangements with the utility owner when utility adjustments are required.

Use work procedures that protect utilities or appurtenances that remain in place during construction. Cooperate with utilities to remove and rearrange utilities to avoid service interruption or duplicate work by the utilities. Allow utilities access to the right of way.

Immediately notify the appropriate utility of service interruptions resulting from damage due to construction activities. Cooperate with utilities until service is restored. Maintain access to fire hydrants when necessary.

7. COOPERATION BETWEEN CONTRACTORS

Cooperate and coordinate with other Contractors working within the limits or adjacent to the limits.

8. COOPERATION WITH RAILROADS

Plan and prosecute portions of the work involving a railway to avoid interference with or hindrance to the railroad company.

If the work is on railroad right of way, do not interfere with the operation of the railroad company's trains or other property.

8.1. **Railroad Coordination Meeting.** When shown on the plans or directed by the Engineer, schedule and attend a railroad coordination meeting with the Engineer before beginning work or as agreed (may be a part of the preconstruction conference described in Article 4.2., "Preconstruction Conference"). Prepare a list of attendees and invite personnel that includes but is not limited to Department, Contractor, subcontractor, and railroad representatives.

Provide the invite to the railroad representatives at least 21 calendar days before the railroad coordination meeting.

8.2. **Project-Specific Information.** Refer to project-specific plan sheets in the Contract for specific information concerning the work to be completed by both the Contractor and the railroad within railroad right of way; railroad right of way locations impacted by construction; percentage of contract work at each location; train movements at each location; and requirements for railroad insurance, flagging, and Right of Entry (ROE) Agreements.

8.3. **Right of Entry Agreement by the Department.** When shown on the plans, the process for obtaining a fully executed ROE Agreement is as follows:

- The Department will send the unexecuted ROE Agreement to the Contractor with the unexecuted Contract.
- Partially execute the ROE Agreement and return it to the Department with the partially executed Contract and required insurance.
- The Department will coordinate with the railroad company regarding the further execution of the ROE Agreement and associated fees. The Department will pay any ROE Agreement fees directly to the railroad company.
- Once the Department has received the fully-executed ROE Agreement from the railroad company, the Department will forward the fully-executed ROE Agreement to the Contractor.

8.4. **Right of Entry Agreement by the Contractor.** When shown on the plans, contact the railroad company to obtain the ROE Agreement before beginning work on the Contract.

Provide the required insurance to the Department before beginning work on the Contract.

Execute the ROE Agreement and pay any associated fees to the railroad company. Provide a copy of the fully-executed ROE Agreement to the Department.

9. CONSTRUCTION SURVEYING

Use Method C unless otherwise specified in the Contract. Upon request, the Engineer will allow the Contractor to copy available earthwork cross-sections, computer printouts or data files, and other information necessary to establish and control work. Maintain the integrity of control points. Preserve all control points, stakes, marks, and right of way markers. Assume cost and responsibility of replacing disturbed control points, stakes, marks, and right of way markers damaged by the Contractor's or its subcontractor operations.

If the Department repairs disturbed control points, stakes, marks, or right of way markers, the cost of repair may be deducted from money due or to become due to the Contractor. Replace right of way markers under the direction of a RPLS. This work performed under this Article will not be measured or paid for directly but will be considered subsidiary to pertinent Items.

The Engineer reserves the right to make measurements and surveys to determine the accuracy of the work and determine pay quantities. The Engineer's measurements and surveys do not relieve the Contractor's responsibility for accuracy of work. Allow the Engineer adequate time to verify the surveying.

9.1. **Method A**. The Engineer will set control points for establishing lines, slopes, grades, and centerlines and for providing both vertical and horizontal control.

At a minimum, provide a controlling pair of monument points at both the beginning and end of construction project for projects less than 2 mi. in length. For projects greater than 2 mi. in length, monuments will be set in pairs of 2 at a minimum of 2 mi. based on the overall length of the project. Use these control points as reference to perform the work.

Furnish materials, equipment, and qualified workforce necessary for the construction survey work. Place construction points, stakes, and marks at intervals sufficient to control work to established tolerances. Place construction stakes at intervals of no more than 100 ft., or as directed. Place stakes and marks so as not to interfere with normal maintenance operations.

9.2. **Method B**. The Engineer will set adequate control points, stakes, and marks to establish lines, slopes, grades, and centerlines. Furnish additional work, stakes, materials, and templates necessary for marking and maintaining points and lines.

9.3. **Method C**. Set adequate control points, stakes, and marks to establish lines, slopes, grades, and centerlines.

10. INSPECTION

Inspectors are authorized representatives of the Engineer. Inspectors are authorized to examine all work performed and materials furnished, including preparation, fabrication, and material manufacture. Inspectors inform the Contractor of failures to meet Contract requirements. Inspectors may reject work or materials and may suspend work until any issues can be referred to and decided by the Engineer. Inspectors cannot alter, add, or waive Contract provisions, issue instructions contrary to the Contract, act as foremen for the Contractor, or interfere with the management of the work. Inspection or lack of inspection will not relieve the Contractor from obligation to provide materials or perform the work in accordance with the Contract.

Provide safe access to all parts of the work and provide information and assistance to the Engineer to allow a complete and detailed inspection. Give the Engineer sufficient notice to inspect the work. Work performed without suitable inspection, as determined by the Engineer, may be ordered removed and replaced at Contractor's expense. Remove or uncover portions of finished work as directed. Once inspected, restore work to Contract requirements. If the uncovered work is acceptable, the costs to uncover, remove, and replace or make good the parts removed will be paid for in accordance with Article 4.4., "Changes in the Work." If the work is unacceptable, assume all costs associated with repair or replacement, including the costs to uncover, remove, and replace or make good the parts removed.

When a government entity, utility, railroad company, or other entity accepts or pays a portion of the Contract, that organization's representatives may inspect the work but cannot direct the Contractor. The right of inspection does not make that entity a party to the Contract and does not interfere with the rights of the parties to the Contract.

11. FINAL CLEANUP

Upon completion of the work, remove litter, debris, objectionable material, temporary structures, excess materials, and equipment from the work locations. Clean and restore property damaged by the Contractor's operations during the prosecution of the work. Leave the work locations in a neat and presentable condition.

Remove from the right of way cofferdams, construction buildings, material and fabrication plants, temporary structures, excess materials, and debris resulting from construction. Where work is in a stream, remove debris to the ground line of the bed of the stream. Leave stream channels and rights of way in a neat and presentable condition. Clean structures to the flow line or the elevation of the outfall channel, whichever is higher. Dispose of all excess material in accordance with federal, state, and local regulations.

The work performed under this Article will not be paid for directly but will be considered subsidiary to Items of the Contract.

12. FINAL ACCEPTANCE

12.1. **Routine Maintenance Contracts**. The Engineer will perform final acceptance and notify the Contractor of acceptance. The Engineer may use final acceptance procedures shown for construction Contracts.

12.2. **Construction Contracts**. Final acceptance is made when all work is complete and the Engineer, in writing, accepts all work for the work locations in the Contract. Final acceptance relieves the Contractor from further Contract responsibilities.

12.2.1. **Work Completed**. Work completed must include work for vegetative establishment and maintenance, test, and performance periods and work to meet the requirements of Article 5.11., "Final Cleanup."

12.2.2. **Final Inspection**. After all work is complete, the Engineer in charge of the work will request a final inspection by the Engineer authorized to accept the work.

The final inspection will be made as soon as possible and not later than 10 calendar days after the request. No working day charges will be made between the date of request and final inspection.

After the final inspection, if the work is satisfactory, the Engineer will notify the Contractor in writing of the final acceptance of the work. If the final inspection finds any work to be unsatisfactory, the Engineer will identify in writing all deficiencies in the work requiring correction. Correct the deficiencies identified. Working day charges will resume if these deficiencies are not corrected within 7 calendar days, unless otherwise authorized by the Engineer. Upon correction, the Engineer will make an inspection to verify that all deficiencies were corrected satisfactorily. The Engineer will provide written notice of the final acceptance.

12.2.3. **Final Measurement**. Final measurements and pay quantity adjustments may be made after final acceptance.

12.2.4. **Removal of Traffic Control Devices**. Remove construction traffic control devices and advance warning signs upon final acceptance or as directed.

12.3. **Multiple Work Orders**. For Contracts with multiple work orders, final acceptance may be made upon completion of the work for each work order, in accordance with Section 5.12.1., "Routine Maintenance Contracts."

Item 6
Control of Materials

1. SOURCE CONTROL

Use only materials that meet Contract requirements. Unless otherwise specified or approved, use new materials for the work. Secure the Engineer's approval of the proposed source of materials to be used before their delivery. Materials can be approved at a supply source or staging area but may be inspected in accordance with Article 6.4., "Sampling, Testing, and Inspection."

1.1. **Buy America**. Comply with the latest provisions of Buy America as listed at 23 CFR 635.410. Use steel or iron materials manufactured in the United States except when:

- the cost of materials, including delivery, does not exceed 0.1% of the total Contract cost or $2,500, whichever is greater,
- the Contract contains an alternate item for a foreign source steel or iron product and the Contract is awarded based on the alternate item, or
- the materials are temporarily installed.

Submit a notarized original of the FORM D-9-USA-1 (Department Form 1818) with the proper attachments for verification of compliance.

Manufacturing is any process that modifies the chemical content, physical shape or size, or final finish of a product. Manufacturing begins with initial melting and mixing and continues through fabrication (cutting, drilling, welding, bending, etc.) and coating (paint, galvanizing, epoxy, etc.).

1.2. **Buy Texas**. For construction or maintenance Contracts without federal funds, buy materials produced in Texas when the materials are available at a comparable price and in a comparable period of time. Provide documentation of purchases or a description of good-faith efforts on request.

2. MATERIAL QUALITY

Correct or remove materials that fail to meet Contract requirements or that do not produce satisfactory results. Reimburse the Department for cost incurred if additional sampling and testing is required by a change of source.

Materials not meeting Contract requirements will be rejected, unless the Engineer approves corrective actions. Upon rejection, immediately remove and replace rejected materials.

If the Contractor does not comply with this Article, the Department may remove and replace defective material. The cost of testing, removal, and replacement will be deducted from the payments due to the Contractor.

3. MANUFACTURER WARRANTIES

Transfer to the Department warranties and guarantees required by the Contract or received as part of normal trade practice.

4. SAMPLING, TESTING, AND INSPECTION

Incorporate into the work only material that has been inspected, tested, and accepted by the Department. Remove, at the Contractor's expense, materials from the work locations that are used without prior testing and approval or written permission of the Engineer.

The material requirements and standard test methods in effect at the time the proposed Contract is advertised govern. Unless otherwise noted, the Department will perform testing at its expense. In addition to facilities and equipment required by the Contract, furnish facilities and calibrated equipment required for tests to control the manufacture of construction items. If requested, provide a complete written statement of the origin, composition, and manufacture of materials.

All materials used are subject to inspection or testing at any time during preparation or use. Material which has been tested and approved at a supply source or staging area may be inspected or tested before or during incorporation into the work, and rejected if it does not meet Contract requirements. Copies of test results are available upon request. Do not use material that, after approval, becomes unfit for use.

Unless otherwise noted in the Contract, all testing must be performed within the United States and witnessed by the Engineer. If materials or processes require testing outside the contiguous 48 United States, reimburse the Department for inspection expenses.

5. PLANT INSPECTION AND TESTING

The Engineer may but is not obligated to inspect materials at the acquisition or manufacturing source. Material samples will be obtained and tested for compliance with quality requirements. Materials produced under Department inspection are for Department use only unless released in writing by the Engineer.

If inspection is at the plant, meet the following conditions unless otherwise specified:

- cooperate fully and assist the Engineer during the inspection,
- ensure the Engineer has full access to all parts of the plant used to manufacture or produce materials,
- provide a facility at the plant for use by the Engineer as an office or laboratory,
- provide and maintain adequate safety measures and restroom facilities, and
- furnish and calibrate scales, measuring devices, and other necessary equipment.

The Engineer may provide inspection for periods other than daylight hours if:

- continuous production of materials for Department use is necessary due to the production volume being handled at the plant, and
- the lighting is adequate to allow satisfactory inspection.

6. STORAGE OF MATERIALS

Store and handle materials to preserve their quality and fitness for the work. Store materials so that they can be easily inspected and retested. Place materials under cover, on wooden platforms, or on other hard, clean surfaces as necessary or when directed.

Obtain approval to store materials on the right of way. Storage space off the right of way is at the Contractor's expense.

7. DEPARTMENT-FURNISHED MATERIAL

The Department will supply materials as shown on the plans. The cost of handling and placing materials supplied by the Department will not be paid for directly but will be subsidiary to the Item in which they are used. Assume responsibility for materials upon receipt.

8. USE OF MATERIALS FOUND ON THE RIGHT OF WAY

Material found in the excavation areas and meeting the Department's specifications may be used in the work. This material will be paid for at the Contract bid price for excavation and under the Item for which the material is used.

Do not excavate or remove any material from within the right of way that is not within the limits of the excavation without written permission. If excavation is allowed within a right of way project-specific location, replace the removed material with suitable material at no cost to the Department as directed.

9. RECYCLED MATERIALS

The Department will not allow hazardous wastes, as defined in 30 TAC 335, proposed for recycling. Use nonhazardous recyclable materials (NRMs) only if the specification for the Item does not disallow or restrict use. Determine if NRMs are regulated under 30 TAC 312, 330, 332, 334, or 335, and comply with all general prohibitions and requirements. Use NRMs in accordance with DMS-11000, "Evaluating and Using Nonhazardous Recyclable Materials Guidelines," and furnish all documentation in the manner prescribed by the Department.

10. HAZARDOUS MATERIALS

Comply with the requirements of Article 7.12., "Responsibility for Hazardous Materials."

The Department is responsible for testing, removing, and disposing of hazardous materials not introduced by the Contractor, except for paint removal associated with Item 446, "Field Cleaning and Painting Steel," Item 776, "Metal Rail Repair," and Item 784, "Steel Member Repair." The plans will indicate locations where paint on steel is suspected to contain hazardous materials. The Engineer may suspend work wholly or in part during the testing, removing, or disposing of hazardous materials, except in the case where hazardous materials are introduced by the Contractor.

Use materials that are free of hazardous materials. Notify the Engineer immediately if materials are suspected to contain hazardous materials. If materials delivered to the project by the Contractor are suspected to contain hazardous materials, have an approved commercial laboratory test the materials for contamination. Remove, remediate, and dispose of any of these materials found to be contaminated. The work required to comply with this section will be at the Contractor's expense. Working day charges will not be suspended and extensions of working days will not be granted for activities related to handling hazardous material introduced by the Contractor.

10.1. **Painted Steel Requirements**. Paint containing hazardous materials will be removed as shown on the plans.

10.1.1. **Paint Removed by Third Party.** The Department will provide a third party to remove paint containing hazardous materials where paint must be removed to perform work when dismantling steel under Item 496, "Removing Structures."

10.1.2. **Paint Removed by the Contractor.** This work may only be performed by a firm or company with one of the following certifications unless otherwise shown on the plans:

- SSPC-QP2 Category A certification for lead painting operations, or
- Certified Lead Firm by the Texas Department of State Health Services.

Maintain certifications for the duration of the Contract. Provide copies of audits and certification to the Engineer.

Comply with worker and public safety regulations including but not limited to 29 CFR Parts 1910, 1925, and 1926. Monitor permissible exposure limits in accordance with OSHA requirements.

Remove paint containing hazardous materials from designated areas shown on the plans or as directed by the Engineer. Comply with access limitations shown on the plans.

Provide power hand tools, equipped with high-efficiency particulate air filter vacuums to mechanically remove paint unless otherwise approved.

Contain, collect, store, transport, and dispose of all waste generated by cleaning operation in accordance with local, state and federal requirements including 40 CFR 302. Properly characterize and dispose of all wastes. Manage wastes in accordance with regulatory requirements and dispose in a facility authorized to accept such wastes. Provide copies of disposal manifests to the Engineer.

Refer to Item 446, "Field Cleaning and Painting Steel" for measurement and payment.

10.2. **Removal and Disposal of Painted Steel.** Painted steel will be disposed of at a steel recycling or smelting facility unless otherwise shown on the plans. If the paint contains hazardous materials, maintain and make available to the Engineer invoices and other records obtained from the facility showing the received weight of the steel and the facility name.

Refer to Item 496, "Removing Structures" and Item 497, "Sale of Salvageable Material" for measurement and payment.

10.3. **Asbestos Requirements.** The plans will indicate locations or elements where asbestos containing materials (ACM) are present. Notify the Engineer of proposed dates of demolition or removal of structural elements with ACM at least 60 days before beginning work.

The Department of State Health Services (DSHS), Asbestos Programs Branch, is responsible for administering the requirements of the National Emissions Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M and the Texas Asbestos Health Protection Rules (TAHPR). Based on EPA guidance and regulatory background information, bridges are considered to be a regulated "facility" under NESHAP. Therefore, federal standards for demolition and renovation apply.

The Department is required to notify the DSHS at least 10 working days (by postmarked date) before initiating demolition or renovation of each structure or load bearing member shown on the plans. If the actual demolition or renovation date is changed or delayed, notify the Engineer in writing of the revised dates in sufficient time to allow for the Department's notification to DSHS to be postmarked at least 10 days in advance of the actual work.

Failure to provide the above information may require the temporary suspension of work under Article 8.4., "Temporary Suspension of Work or Working Day Charges," due to reasons under the control of the Contractor. The Department retains the right to determine the actual advance notice needed for the change in date to address post office business days and staff availability.

10.3.1. **Asbestos Removed by Third Party.** At locations where unknown ACM is discovered, the Department will arrange for abatement by a third party.

10.3.2. **Asbestos Removed by the Contractor.** Maintain certification as Asbestos Abatement Contractor by the Texas Department of State Health Services for the duration of the Contract. Provide copies of audits and certification to the Engineer.

10.4. **Work Performed by a Third Party.** When the work for removal of paint or asbestos abatement is to be provided by a third party, coordinate and cooperate with the third party and the Department. Continue other work detailed in the plans not directly involved in the paint removal or asbestos abatement work. Provide notice to the Department regarding the progress of the work to allow the Department sufficient time to schedule the third party work.

11. SURPLUS MATERIALS

Take ownership of surplus materials unless otherwise shown on the plans or directed. Remove and dispose of materials in accordance with federal, state, and local regulations. If requested, provide an appropriate level of documentation to verify proper disposal. When materials are disposed of on private property, provide written authorization from the property owner for the use of the property for this purpose upon request.

Item 7
Legal Relations and Responsibilities

1. ETHICS

Honor the Department's ethics policy. The Department's ethics policy has been established in accordance with Title 43 of the Texas Administrative Code, Part 1, Chapter 10. A complete copy of the Department's ethics policy can be found on the Department's website.

By entering into Contract, the Contractor certifies that the Contractor has read and understands the Department's ethics policy.

Failure to honor this policy may result in action by the Department, which includes but is not limited to verbal warning, removal of project personnel, termination of the Contract, and sanctions under the Texas Administrative Code.

2. SAFETY

2.1. **Safety Point of Contact.** Designate in writing, a Contractor Safety Point of Contact (CSPOC). The Department will assign a Department employee for their point of contact designated as DSPOC. The CSPOC will ensure that the Contractor's and Subcontractor's employees' use the appropriate personal protection equipment (hard hats, safety vests, protective toe footwear, etc.).

The CSPOC will ensure that crew leaders and foremen (including subcontractors) have attended the required training.

2.2. **Safety Preconstruction Meeting.** In cooperation with the Engineer, schedule and attend a safety preconstruction meeting (may be a part of the preconstruction conference in Article 4.2., "Preconstruction Conference"). Attendees for this safety preconstruction meeting will be:

- the Contractor,
- subcontractors,
- Department,
- local law enforcement, and
- other personnel that play an active role on the project.

2.3. **Safety Contingency.** In order to improve the effectiveness of traffic handling and enhancing safety during the course of this project, a safety contingency fund may have been included in the project budget for traffic control plan adjustments and other safety-related improvements.

Costs associated with the adjustments or improvements will be paid for in accordance with Article 9.7., "Payment for Extra Work and Force Account Method." Article 9.7., "Payment for Extra Work and Force Account Method" is not intended to be used in lieu of bid items established by the Contract.

2.4. **Public Safety and Convenience.** Ensure the safety and convenience of the public and property as provided in the Contract and as directed. Keep existing roadways open to traffic or construct and maintain detours and temporary structures for safe public travel. Manage construction to minimize disruption to traffic. Maintain the roadway in a good and passable condition, including proper drainage and provide for ingress and egress to adjacent property.

Store all equipment not in use in a manner and at locations that will not interfere with the safe passage of traffic.

If the Engineer determines that any of the requirements of this Article have not been met, the Engineer may take corrective action. This will not change the legal responsibilities set forth in the Contract. The cost to the Department for this work will be deducted from any money due or to become due to the Contractor.

2.5. **Use of Blue Warning Lights**. Texas Transportation Code 547.105 authorizes the use of warning lights to promote safety and provides an effective means of gaining the travelling public's attention as they drive in areas where construction crews are present. In order to influence the public to move over when high risk construction activities are taking place, minimize the utilization of blue warning lights. These lights must be used only while performing work on or near the travel lanes or shoulder where the travelling public encounters construction crews that are not protected by a standard work zone set up such as a lane closure, shoulder closure, or one-way traffic control. Refrain from leaving the warning lights engaged while travelling from one work location to another or while parked on the right of way away from the pavement or a work zone.

2.6. **Barricades, Signs, and Traffic Handling**. Comply with the requirements of Item 502 "Barricades, Signs, and Traffic Handling," and as directed. Provide traffic control devices that conform to the details shown on the plans, the TMUTCD, and the Department's Compliant Work Zone Traffic Control Device List (CWZTCDL) maintained by the Traffic Operations Division. In cases of disagreement between these documents, the CWXTDL governs over the plans, and the TMUTCD governs over both the CWZTDL and the plans. When authorized or directed, provide additional signs or traffic control devices not required by the plans.

If an unexpected situation arises that causes the Contractor to believe that the traffic control should be changed, make all reasonable efforts to promptly contact the Engineer. Take prudent actions until the Engineer can be contacted.

The Engineer will make an inspection of the traffic control devices. Comply with the results of the inspection in the prescribed time frame.

The work performed and materials furnished in accordance with this section and Item 502 have no bearing on the prosecution of Items 1 through 9, "General Requirements and Covenants" of the Contract. This includes, but is not limited to installing, relocating, and removing project limit advance warning signs.

2.6.1. **Contractor Responsible Person and Alternate.** Designate in writing, a Contractor's Responsible Person (CRP) and an alternate to be the representative of the Contractor who is responsible for taking or directing corrective measures regarding the traffic control. The CRP or alternate must be accessible by phone 24 hr. per day and able to respond when notified. The CRP and alternate must comply with the requirements of Section 7.2.6.5., "Training."

2.6.2. **Flaggers.** Designate in writing, a flagger instructor who will serve as a flagging supervisor and is responsible for training and assuring that all flaggers are qualified to perform flagging duties. Before beginning work, provide a list of flaggers certified to perform flagging duties.

Provide flaggers as directed. Flaggers must be courteous and able to effectively communicate with the public. When directing traffic, flaggers must dress appropriately, wear high-visibility safety apparel, use flags, signs, stop-slow paddles, and other hand-signaling devices, and follow the flagging procedures in the TMUTCD. Comply with the requirements of Section 7.2.6.5., "Training."

2.6.3. **Law Enforcement Personnel.** Provide uniformed law enforcement personnel with patrol vehicles as directed. Document the work zone traffic services provided in the manner prescribed by the Department. Law enforcement personnel providing work zone traffic services must be trained for the service they perform. Comply with Section 7.2.6.5., "Training."

2.6.4. **Other Work Zone Personnel.** Workers involved with traffic control, including the maintenance of the traffic control, must comply with the requirements of Section 7.2.6.5., "Training."

2.6.5. **Training.** Workers involved with the traffic control must be trained using Department-approved training, except in the case of Section 7.2.6.4, "Other Work Zone Personnel" who may be trained using Contractor-developed Training in lieu of Department-approved Training.

Provide a copy of the certification of completion to the Engineer, except in the case of Contractor-developed Training. Ensure the certification of completion includes the following:

- name of provider and course title,
- name of participant,
- date of completion, and
- date of expiration.

For Contractor developed-Training, maintain a log of attendees. Make the log available upon request. Ensure the log is legible and includes the following:

- print name and signature of participant,
- name and title of trainer, and
- date of training.

3. LAWS TO BE OBSERVED

Comply with all federal, state, and local laws, ordinances, and regulations that affect the performance of the work. The Contractor is not required to comply with city electrical ordinances not included in this Contract. Indemnify and save harmless the State and its representatives against any claim arising from violation by the Contractor of any law, ordinance, or regulation.

This Contract is between the Department and the Contractor only. No person or entity may claim third-party beneficiary status under this Contract or any of its provisions, nor may any non-party sue for personal injuries or property damage under this Contract.

4. PERMITS, LICENSES, AND TAXES

Procure all permits and licenses; pay all charges, fees, and taxes; and give all notices necessary and incidental to the due and lawful prosecution of work, except for permits provided by the Department and as specified in Article 7.7., "Preservation of Cultural and Natural Resources and the Environment."

5. PATENTED DEVICES, MATERIAL, AND PROCESSES

Indemnify and save harmless the State from any claims for infringement from the Contractor's use of any patented design, device, material, process, trademark, or copyright selected by the Contractor and used in connection with the work. Indemnify and save harmless the State against any costs, expenses, or damages that it may be obliged to pay, by reason of this infringement, at any time during the prosecution or after the completion of the work.

6. PERSONAL LIABILITY OF PUBLIC OFFICIALS

Department employees are agents and representatives of the State and will incur no liability, personal or otherwise, in carrying out the provisions of the Contract or in exercising any power or authority granted under the Contract.

7. PRESERVATION OF CULTURAL AND NATURAL RESOURCES AND THE ENVIRONMENT

7.1. **Cultural Resources**. Cease all work immediately if a site, building, or location of historical, archeological, educational, or scientific interest is discovered within the right of way. The site, building, or location will be investigated and evaluated by the Department.

7.2. **Texas Pollutant Discharge Elimination System (TPDES) Permits and Storm Water Pollution Prevention Plans (SWP3)**. The Department will file the Notice of Intent (NOI) and the Notice of Termination (NOT) for work shown on the plans in the right of way. Adhere to all requirements of the SWP3.

7.3. **Work in Waters of the United States**. For work in the right of way, the Department will obtain any required Section 404 permits from the U.S. Army Corps of Engineers before work begins. Adhere to all agreements, mitigation plans, and standard best management practices required by the permit. When Contractor-initiated changes in the construction method changes the impacts to waters of the U.S., obtain new or revised Section 404 permits.

7.4. **Work in Navigable Waters of the United States**. For work in the right of way, the Department will obtain any required Section 9 permits from the U.S. Coast Guard before work begins. Adhere to the stipulations of the permits and associated best management practices. When Contractor-initiated changes in the construction method changes the impacts to navigable waters of the U.S., obtain new or revised Section 9 permits.

7.5. **Work Over the Recharge or Contributing Zone of Protected Aquifers**. Make every reasonable effort to minimize the degradation of water quality resulting from impacts relating to work over the recharge or contributing zones of protected aquifers, as defined and delineated by the TCEQ. Use best management practices and perform work in accordance with Contract requirements.

7.6. **Project-Specific Locations**. For all project-specific locations (PSLs) on or off the right of way (material sources, waste sites, parking areas, storage areas, field offices, staging areas, haul roads, etc.), signing the Contract certifies compliance with all applicable laws, rules, and regulations pertaining to the preservation of cultural resources, natural resources, and the environment as issued by the following or other agencies:

- Occupational Safety and Health Administration,
- Texas Commission on Environmental Quality,
- Texas Department of Transportation,
- Texas Historical Commission,
- Texas Parks and Wildlife Department,
- Texas Railroad Commission,
- U.S. Army Corps of Engineers,
- U.S. Department of Energy,
- U.S. Department of Transportation,
- U.S. Environmental Protection Agency,
- U.S. Federal Emergency Management Agency, and
- U.S. Fish and Wildlife Service.

All subcontractors must also comply with applicable environmental laws, rules, regulations, and requirements in the Contract. Maintain documentation of certification activities including environmental consultant reports, Contractor documentation on certification decisions and contacts, and correspondence with the resource agencies. Provide documentation upon request.

Obtain written approval from the Engineer for all PSLs in the right of way not specifically addressed on the plans. Prepare an SWP3 for all Contractor facilities, such as asphalt or concrete plants located within Department right of way. Comply with all TCEQ permit requirements for portable facilities, such as concrete batch plants, rock crushers, asphalt plants, etc. Address all environmental issues, such as Section 404

permits, wetland delineation, endangered species consultation requirements, or archeological and historic site impacts. Obtain all permits and clearances in advance.

7.7. **Contractor Responsibility**. If the Contractor initiates changes to the Contract and the Department approves the changes, the Contractor is responsible for obtaining clearances and coordinating with the appropriate regulatory agencies.

8. AGRICULTURAL IRRIGATION

Regulate the sequence of work and make provisions as necessary to provide for agricultural irrigation or drainage during the work. Meet with the service provider or land owner to determine the proper time and sequence when irrigation demands will permit shutting-off water flows to perform work.

Unless otherwise provided on the plans, the work performed under this Article will not be measured or paid for directly but will be subsidiary to pertinent Items.

9. SANITARY PROVISIONS

Provide and maintain adequate, neat, and sanitary toilet accommodations for employees, including State employees, in compliance with the requirements and regulations of the Texas Department of Health or other authorities having jurisdiction.

10. ABATEMENT AND MITIGATION OF EXCESSIVE OR UNNECESSARY NOISE

Minimize noise throughout all phases of the Contract. Exercise particular and special efforts to avoid the creation of unnecessary noise impact on adjacent noise sensitive receptors in the placement of non-mobile equipment such as air compressors, generators, pumps, etc. Place mobile and stationary equipment to cause the least disruption of normal adjacent activities.

All equipment associated with the work must be equipped with components to suppress excessive noise and these components must be maintained in their original operating condition considering normal depreciation. Noise-attenuation devices installed by the manufacturer such as mufflers, engine covers, insulation, etc. must not be removed nor rendered ineffectual nor be permitted to remain off the equipment while the equipment is in use.

11. USING EXPLOSIVES

Do not endanger life or property. When required by the plans or requested, provide a written blasting plan. The Department retains the right to reject the blasting plan. Store all explosives securely and clearly mark all storage places with "DANGER – EXPLOSIVES." Store, handle, and use explosives and highly flammable material in compliance with federal, state, and local laws, ordinances, and regulations. Assume liability for property damage, injury, or death resulting from the use of explosives.

Give at least a 48-hr. advance notice to the appropriate railroad representative before doing any blasting work involving the use of electric blasting caps within 200 ft. of any railroad track.

12. RESPONSIBILITY FOR HAZARDOUS MATERIALS

Comply with the requirements of Article 6.10., "Hazardous Materials". Indemnify and save harmless the State and its agents and employees from all suits, actions, or claims and from all liability and damages for any injury or damage to any person or property arising from the generation or disposition of hazardous materials introduced by the Contractor on any work done by the Contractor on State-owned or controlled sites. Indemnify and save harmless the State and its representatives from any liability or responsibility arising out of the Contractor's generation or disposition of any hazardous materials obtained, processed, stored,

shipped, etc., on sites not owned or controlled by the State. Reimburse the State for all payments, fees, or restitution the State is required to make as a result of the Contractor's actions.

13. RESTORING SURFACES OPENED BY PERMISSION

Do not authorize anyone to make an opening in the highway for utilities, drainage, or any other reason without written permission from the Engineer. Repair all openings as directed. Payment for repair of surfaces opened by permission will be made in accordance with pertinent Items or Article 4.4., "Changes in the Work." Costs associated with openings made with Contractor authorization but without Department approval will not be paid.

14. PROTECTING ADJACENT PROPERTY

Protect adjacent property from damage. If any damage results from an act or omission on the part of or on behalf of the Contractor, take corrective action to restore the damaged property to a condition similar or equal to that existing before the damage was done.

15. RESPONSIBILITY FOR DAMAGE CLAIMS

Indemnify and save harmless the State and its agents and employees from all suits, actions, or claims and from all liability and damages for any injury or damage to any person or property due to the Contractor's negligence in the performance of the work and from any claims arising or amounts recovered under any laws, including workers' compensation and the Texas Tort Claims Act. Indemnify and save harmless the State and assume responsibility for all damages and injury to property of any character occurring during the prosecution of the work resulting from any act, omission, neglect, or misconduct on the Contractor's part in the manner or method of executing the work; from failure to properly execute the work; or from defective work or material.

Pipelines and other underground installations that may or may not be shown on the plans may be located within the right of way. Indemnify and save harmless the State from any suits or claims resulting from damage by the Contractor's operations to any pipeline or underground installation. Make available the scheduled sequence of work to the respective utility owners so that they may coordinate and schedule adjustments of their utilities that conflict with the proposed work.

If the Contractor asserts any claim or brings any type of legal action (including an original action, third-party action, or cross-claim) against any member of the Commission or individual employee of the Department for any cause of action or claim for alleged negligence arising from the Contract, the Contractor will be ineligible to bid on any proposed Contract with the Department during the pendency of the claim or legal action.

16. HAULING AND LOADS ON ROADWAYS AND STRUCTURES

Comply with federal and state laws concerning legal gross and axle weights. Except for the designated Interstate system, vehicles with a valid yearly overweight tolerance permit may haul materials to the work locations at the permitted load. Provide copies of the yearly overweight tolerance permits to the Engineer upon request. Construction equipment is not exempt from oversize or overweight permitting requirements on roadways open to the traveling public.

Protect existing bridges and other structures that will remain in use by the traveling public during and after the completion of the Contract. Construction traffic on roadways, bridges, and culverts within the limits of the work, including any structures under construction that will remain in service during and after completion of the Contract is subject to legal size and weight limitations.

Additional temporary fill may be required by the Engineer for hauling purposes for the protection of certain structures. This additional fill will not be paid for directly but will be subsidiary to pertinent Items.

Replace or restore to original condition any structure damaged by the Contractor's operations.

The Engineer may allow equipment with oversize or non-divisible overweight loads to operate without a permit within the work locations on pavement structures not open to the traveling public. Submit Contractor-proposed changes to traffic control plans for approval, in accordance with Item 502, "Barricades, Signs, and Traffic Handling." The following sections further address overweight allowances. The Department will make available to the Contractor any available plans and material reports for existing structures.

16.1. **Overweight Construction Traffic Crossing Structures**. The Engineer may allow crossing of a structure not open to the public within the work locations, when divisible or non-divisible loads exceed legal weight limitations, including limits for load-posted bridges. Obtain written permission to make these crossings. Submit for approval a structural analysis by a licensed professional engineer indicating that the excessive loads should be allowed. Provide a manufacturer's certificate of equipment weight that includes the weight distribution on the various axles and any additional parts such as counterweights, the configuration of the axles, or other information necessary for the analysis. Submit the structural analysis and supporting documentation sufficiently in advance of the move to allow for review by the Engineer. Permission may be granted if the Engineer finds that no damage or overstresses in excess of those normally allowed for occasional overweight loads will result to structures that will remain in use after Contract completion. Provide temporary matting or other protective measures as directed.

Schedule loads so that only one vehicle is on any span or continuous unit at any time. Use barricades, fences, or other positive methods to prevent other vehicular access to structures at any time the overweight load is on any span or continuous unit.

16.2. **Construction Equipment Operating on Structures**. Cranes and other construction equipment used to perform construction operations that exceed legal weight limits may be allowed on structures. Before any operation that may require placement of equipment on a structure, submit for approval a detailed structural analysis prepared by a licensed professional engineer.

Submit the structural analysis and supporting documentation sufficiently in advance of the use to allow for review by the Engineer. Include all axle loads and configurations, spacing of tracks or wheels, tire loads, outrigger placements, center of gravity, equipment weight, and predicted loads on tires and outriggers for all planned movements, swings, or boom reaches. The analysis must demonstrate that no overstresses will occur in excess of those normally allowed for occasional overweight loads.

16.3. **Loads on Structures**. Do not store or stockpile material on bridge structures without written permission. If required, submit a structural analysis and supporting documentation by a licensed professional engineer for review by the Engineer. Permission may be granted if the Engineer finds that no damage or overstresses in excess of those normally allowed for occasional overweight loads will result to structures that will remain in use after Contract completion. Provide temporary matting or other protective measures as directed.

16.4. **Hauling Divisible Overweight Loads on Pavement Within the Work Locations**. The Engineer may allow divisible overweight loads on pavement structures within the work locations not open to the traveling public. Obtain written approval before hauling the overweight loads. Include calculations to demonstrate that there will be no damage or overstress to the pavement structure.

17. CONTRACTOR'S RESPONSIBILITY FOR WORK

Until final acceptance of the Contract, take every precaution against injury or damage to any part of the work by the action of the elements or by any other cause, whether arising from the execution or from the non-execution of the work. Protect all materials to be used in the work at all times, including periods of suspension.

When any roadway or portion of the roadway is in suitable condition for travel, it may be opened to traffic as directed. Opening of the roadway to traffic does not constitute final acceptance.

Repair damage to all work until final acceptance. Repair damage to existing facilities in accordance with the Contract or as directed by the Engineer. Repair damage to existing facilities or work caused by Contractor operations at the Contractor's expense. Repair work for damage that was not due to the Contractor's operations will not be paid for except as provided below.

17.1. **Reimbursable Repair**. Except for damage to appurtenances listed in Section 7.17.2.1., "Unreimbursed Repair," the Contractor will be reimbursed for repair of damage caused by:

- motor vehicle, watercraft, aircraft, or railroad-train incident,
- vandalism, or
- Acts of God, such as earthquake, tidal wave, tornado, hurricane, or other cataclysmic phenomena of nature.

17.2. **Appurtenances**.

17.2.1. **Unreimbursed Repair**. Except for destruction (not reusable) due to Acts of God, reimbursement will not be made for repair of damage to the following temporary appurtenances, regardless of cause:

- signs,
- barricades,
- changeable message signs, and
- other work zone traffic control devices.

Crash cushion attenuators and guardrail end treatments are reimbursed in accordance with Section 7.17.2.2., "Reimbursed Repair."

Where the Contractor retains replaced appurtenances after completion of the project, the Department will limit the reimbursement to the cost that is above the salvage value at the end of the project.

17.2.2. **Reimbursed Repair**. Reimbursement will be made for repair of damage due to the causes listed in Section 7.17.1, "Reimbursable Repair."

17.3. **Roadways and Structures**. Until final acceptance, the Contractor is responsible for all work constructed under the Contract. The Department will not reimburse the Contractor for repair work to new construction, unless the failure or damage is due to one of the causes listed in Section 7.17.1, "Reimbursable Repair."

The Department will be responsible for the cost for repair of damage to existing roadways and structures not caused by the Contractor's operations.

17.4. **Detours**. The Contractor will be responsible for the cost of maintenance of detours constructed under the Contract, unless the failure or damage is due to one of the causes listed in Section 7.17.1., "Reimbursable Repair." The Engineer may consider failures beyond the Contractor's control when determining reimbursement for repairs to detours constructed. The Department will be responsible for the cost of maintenance of existing streets and roadways used for detours or handling traffic.

17.5. **Relief from Maintenance**. The Engineer may relieve the Contractor from responsibility of maintenance as outlined in this Section. This relief does not release the Contractor from responsibility for defective materials or work or constitute final acceptance.

17.5.1. **Isolated Work Locations**. For isolated work locations, when all work is completed, including work for Article 5.11., "Final Cleanup," the Engineer may relieve the Contractor from responsibility for maintenance.

17.5.2. **Work Except for Vegetative Establishment and Test Periods**. When all work for all or isolated work locations has been completed, including work for Article 5.11., "Final Cleanup," with the exception of vegetative establishment and maintenance periods and test and performance periods, the Engineer may relieve the Contractor from responsibility for maintenance of completed portions of work.

17.5.3. **Work Suspension**. When all work is suspended for an extended period of time, the Engineer may relieve the Contractor from responsibility for maintenance of completed portions of work during the period of suspension.

17.5.4. **When Directed by the Engineer**. The Engineer may relieve the Contractor from the responsibility for maintenance when directed.

17.6. **Basis of Payment**. When reimbursement for repair work is allowed and performed, payment will be made in accordance with pertinent Items or Article 4.4., "Changes in the Work."

18. ELECTRICAL REQUIREMENTS

18.1. **Definitions**.

18.1.1. **Electrical Work.** Electrical work is work performed for:

- Item 610, "Roadway Illumination Assemblies,"
- Item 614, "High Mast Illumination Assemblies,"
- Item 616, "Performance Testing of Lighting Systems,"
- Item 617, "Temporary Roadway Illumination,"
- Item 618, "Conduit,"
- Item 620, "Electrical Conductors,"
- Item 621, "Tray Cable,"
- Item 622, "Duct Cable,"
- Item 628, "Electrical Services,"
- Item 680, "Highway Traffic Signals,"
- Item 681, "Temporary Traffic Signals,"
- Item 684, "Traffic Signal Cables,"
- Item 685, "Roadside Flashing Beacon Assemblies,"
- other Items that involve either the distribution of electrical power greater than 50 volts or the installation of conduit and duct banks,
- the installation of conduit and wiring associated with Item 624, "Ground Boxes" and Item 656, "Foundations for Traffic Control Devices," and
- the installation of the conduit system for communication and fiber optic cable.

Electrical work does not include the installation of communications or fiber optic cable, or the connections for low voltage and inherently power limited circuits such as electronic or communications equipment. Assembly and placement of poles, structures, cabinets, enclosures, manholes, or other hardware will not be considered electrical work as long as no wiring, wiring connections, or conduit work is done at the time of assembly and placement.

18.1.2. **Specialized Electrical Work**. Specialized electrical work is work that includes the electrical service and feeders, sub-feeders, branch circuits, controls, raceways, and enclosures for the following:

- pump stations,
- moveable bridges,
- ferry slips,
- motor control centers,
- facilities required under Item 504, "Field Office and Laboratory,"
- rest area or other public buildings,
- weigh-in-motion stations,
- electrical services larger than 200 amps,
- electrical services with main or branch circuit breaker sizes not shown in the Contract, and
- any 3-phase electrical power.

18.1.3. **Certified Person**. A certified person is a person who has passed the test from the Department's course TRF450, "TxDOT Roadway Illumination and Electrical Installations," or other courses as approved by the Traffic Operations Division. Submit a current and valid TRF certification upon request. Texas A&M Engineering Extension Service (TEEX) certifications for "TxDOT Electrical Systems" course will not be accepted.

18.1.4. **Licensed Electrician**. A licensed electrician is a person with a current and valid unrestricted master electrical license, or unrestricted journeyman electrical license that is supervised or directed by an unrestricted master electrician. An unrestricted master electrician need not be on the work locations at all times electrical work is being done, but the unrestricted master electrician must approve work performed by the unrestricted journeyman. Licensed electrician requirements by city ordinances do not apply to on state system work.

The unrestricted journeyman and unrestricted master electrical licenses must be issued by the Texas Department of Licensing and Regulation or by a city in Texas with a population of 50,000 or greater that issues licenses based on passing a written test and demonstrating experience.

The Engineer may accept other states' electrical licenses. Submit documentation of the requirements for obtaining that license. Acceptance of the license will be based on sufficient evidence that the license was issued based on:

- passing a test based on the NEC similar to that used by Texas licensing officials, and
- sufficient electrical experience commensurate with general standards for an unrestricted master and unrestricted journeyman electrician in the State of Texas.

18.2. **Work Requirements**. The qualifications required to perform electrical work and specialized electrical work are listed in Table 2.

Table 2
Work Requirements

Type of Work	Qualifications to Perform Work
Electrical work with plans	Licensed electrician, certified person, or workers directly supervised by a licensed electrician or certified person
Electrical work without plans	Licensed electrician or workers directly supervised by a licensed electrician
Specialized electrical work	Licensed electrician or workers directly supervised by a licensed electrician
Replace lamps, starting aids, and changing fixtures	Licensed electrician, certified person, or workers directly supervised by a licensed electrician or certified person
Conduit in precast section with approved working drawings	Inspection by licensed electrician or certified person
Conduit in cast-in-place section	Inspection by licensed electrician or certified person
All other electrical work (troubleshooting, repairs, component replacement,	Licensed electrician or workers directly supervised by a licensed electrician

"Directly supervised by a licensed electrician" means that a licensed electrician is physically present during all electrical work. "Directly supervised by a licensed electrician or certified person" means that a licensed electrician or certified person is physically present during all electrical work.

A non-certified person may install conduit in cast-in-place concrete sections if the work is verified by a certified person before concrete placement.

When the plans specify IMSA certification, the requirements of Table 2 will still apply to the installation of the conduit, ground boxes, electrical services, pole grounding, and electrical conductors installed under Item 620, "Electrical Conductors."

19. PAYROLLS

Ensure that employees, contract labor, and any subcontractor's employees are paid at least the predetermined wage rates shown on the Contract.

Payroll records must contain the information required by law. As an option, form WH-347, "Payroll" is provided by the U.S. Department of Labor.

Maintain payroll and related records during the course of the Contract and preserve these records for a period of 3 years following the completion of the Contract or as required by law.

19.1 **Minimum Wage Requirements for Federally Funded Contracts**. Comply with the requirements of FHWA-1273, "Required Contract Provisions Federal-Aid Construction Contracts."

Submit payroll records to the Engineer in the manner prescribed by the Department.

19.2 **Minimum Wage Requirements for State Funded Contracts**. Comply with the requirements of 29 USC 206 unless otherwise shown in the Contract.

Upon request, submit payroll records to the Engineer in the manner prescribed by the Department.

Item 8
Prosecution and Progress

1. PROSECUTION OF WORK

Begin work within 30 calendar days (7 calendar days for routine maintenance Contracts) after the authorization date to begin work. Prosecute the work continuously to completion within the working days specified. Unless otherwise shown on the plans, work may be prosecuted in concurrent phases if no changes are required to the traffic control plan or if a revised traffic control plan is approved. Notify the Engineer at least 24 hr. before beginning work or before beginning any new operation. Do not start new operations to the detriment of work already begun. Minimize interference to traffic.

For Contracts with callout work and work orders, begin work in the right of way within the specified time and continuously prosecute the work until completion.

2. SUBCONTRACTING

Do not sublet any portion of a construction Contract without the Engineer's written approval. A subcontract does not relieve any responsibility under the Contract and bonds. Ensure that all subcontracted work complies with all governing labor provisions.

The Contractor certifies by signing the Contract that the Contractor will not enter into any subcontract with a subcontractor that is debarred or suspended by the Commission, Department, or any federal agency.

For federally funded contracts, ensure the required federal documents are physically attached to each subcontract agreement including all tiered subcontract agreements.

For all DBE subcontracts including all tiered DBE subcontracts, submit a copy of the executed subcontract agreement.

Upon request, submit a copy of the executed non-DBE subcontracts including all tiered non-DBE subcontracts..

2.1. **Construction Contracts and Federally Funded Maintenance Contracts**. Perform work with own organization on at least 30% of the total original Contract cost (25% if the Contractor is a Small Business Enterprise on a wholly State or local funded Contract), excluding any specialty items as determined by the Engineer. Specialty items are those that require highly specialized knowledge, abilities, or equipment not usually available in the contracting firm expected to bid on the proposed Contract as a whole.

Specialty items will be shown on the plans or as determined by the Engineer. Bid cost of specialty items performed by subcontractors will be deducted from the total original Contract cost before computing the required amount of work to be performed by the Contractor's own organization.

The term "perform work with own organization" includes only:

- workers employed and paid directly by the Contractor or wholly owned subsidiary;
- equipment owned by the Contractor or wholly owned subsidiary;
- rented or leased equipment operated by the Contractor's employees or wholly owned subsidiary's employees;
- materials incorporated into the work if the majority of the value of the work involved in incorporating the material is performed by the Contractor's own organization, including a wholly owned subsidiary's organization; and

- labor provided by staff leasing firms licensed under Chapter 91 of the Texas Labor Code for nonsupervisory personnel if the Contractor or wholly owned subsidiary maintains direct control over the activities of the leased employees and includes them in the weekly payrolls.

When staff leasing firms provide materials or equipment, they are considered subcontractors. In these instances, submit staff leasing firms for approval as a subcontractor.

Copies of cancelled checks and certified statements may be required to verify compliance with the requirements of this Section.

2.2. **State Funded Maintenance Contracts.** The requirements for performing work with the Contractor's own organization as stated in Section 8.2.1, "Construction Contracts and Federally Funded Maintenance Contracts" do not apply to wholly State funded maintenance Contracts.

2.3. **Payments to Subcontractors.** Report payments for DBE subcontracts including tiered DBE subcontracts in the manner as prescribed by the Department by the 20th day of each month.

2.3.1 **Payment Records.** Make payment and related records, including but not limited to copies of cancelled checks, available for inspection by the Department. Retain payment records for a period of 3 years following the completion of the Contract.

2.4. **Payrolls.** Comply with Article 7.19., "Payrolls."

3. COMPUTATION OF CONTRACT TIME FOR COMPLETION

The number of working days is established by the Contract. For Contracts with work orders, the number of working days is established in each work order. Working day charges will begin when work begins as prescribed in Article 8.1., "Prosecution of Work." Working day charges will continue in accordance with the Contract.

Upon request, the Engineer will provide the conceptual time determination schedule to the Contractor for informational purposes only. The schedule assumes generic resources, production rates, sequences of construction and average weather conditions based on historic data. The Department will not adjust the number of working days and milestones, if any, due to differences in opinion regarding any assumptions made in the preparation of the schedule or for errors, omissions, or discrepancies found in the Department's conceptual time determination schedule.

3.1. **Working Day Charges.** Working days will be charged in accordance with Section 8.3.1.4., "Standard Workweek," unless otherwise shown on the plans. Working days will be computed and charged in accordance with one of the following:

3.1.1. **Five-Day Workweek.** Working days will be charged Monday through Friday, excluding national holidays, regardless of weather conditions or material availability. The Contractor has the option of working on Saturdays. Provide sufficient advance notice to the Engineer when scheduling work on Saturdays. Work on Sundays and national holidays will not be permitted without written permission of the Engineer. If work requiring an Inspector to be present is performed on a Saturday, Sunday, or national holiday, and weather and other conditions permit the performance of work for 7 hr. between 7:00 A.M. and 6:00 P.M., a working day will be charged.

3.1.2. **Six-Day Workweek.** Working days will be charged Monday through Saturday, excluding national holidays, regardless of weather conditions or material availability. Work on Sundays and national holidays will not be permitted without written permission of the Engineer. If work requiring an Inspector to be present is performed on a Sunday or a national holiday, and weather or other conditions permit the performance of work for 7 hr. between 7:00 A.M. and 6:00 P.M., a working day will be charged.

3.1.3. **Seven-Day Workweek**. Working days will be charged Monday through Sunday, excluding national holidays, regardless of weather conditions or material availability. Work on national holidays will not be permitted without written permission of the Engineer. If work is performed on any of these holidays requiring an Inspector to be present, and weather or other conditions permit the performance of work for 7 hr. between 7:00 A.M. and 6:00 P.M., a working day will be charged.

3.1.4. **Standard Workweek**. Working days will be charged Monday through Friday, excluding national or state holidays, if weather or other conditions permit the performance of the principal unit of work underway, as determined by the Engineer, for a continuous period of at least 7 hr. between 7:00 A.M. and 6:00 P.M., unless otherwise shown in the Contract. The Contractor has the option of working on Saturdays or state holidays. Provide sufficient advance notice to the Engineer when scheduling work on Saturdays. Work on Sundays and national holidays will not be permitted without written permission of the Engineer. If work requiring an Inspector to be present is performed on a Saturday, Sunday, or holiday, and weather or other conditions permit the performance of work for 7 hr. between 7:00 A.M. and 6:00 P.M., a working day will be charged.

3.1.5. **Calendar Day**. Working days will be charged Sunday through Saturday, including all holidays, regardless of weather conditions, material availability, or other conditions not under the control of the Contractor.

3.1.6. **Other**. Working days will be charged as shown on the plans.

3.2. **Restricted Work Hours**. Restrictions on Contractor work hours and the related definition for working day charges are as prescribed in this Article unless otherwise shown on the plans.

3.3. **Nighttime Work**. Nighttime work is allowed only when shown on the plans or directed or allowed by the Engineer. Nighttime work is defined as work performed from 30 min. after sunset to 30 min. before sunrise.

3.3.1. **Five-, Six-, and Seven-Day Workweeks**. Nighttime work that extends past midnight will be assigned to the following day for the purposes of approval for allowing work on Sundays or national holidays.

3.3.2. **Standard Workweek**.

3.3.2.1. **Nighttime Work Only**. When nighttime work is allowed or required and daytime work is not allowed, working day charges will be made when weather and other conditions permit the performance of the principal unit of work underway, as determined by the Engineer, for a continuous period of at least 7 hr. for the nighttime period, as defined in Section 8.3.3., "Nighttime Work," unless otherwise shown in the Contract.

3.3.2.2. **Nighttime Work and Daytime Work Requiring Inspector**. When nighttime work is performed or required and daytime work is allowed, working day charges will be made when weather and other conditions permit the performance of the principal unit of work underway, as determined by the Engineer, for a continuous period of at least 7 hr. for the nighttime period, as defined in Section 8.3.3., "Nighttime Work," or for a continuous period of at least 7 hr. for the alternative daytime period unless otherwise shown in the Contract. Only one day will be charged for each 24-hr. time period. When the Engineer agrees to restrict work hours to the nighttime period only, working day charges will be in accordance with Section 8.3.3.2.1., "Nighttime Work Only."

3.4. **Time Statements**. The Engineer will furnish the Contractor a monthly time statement. Review the monthly time statement for correctness. Report protests in writing, no later than 30 calendar days after receipt of the time statement, providing a detailed explanation for each day protested. Not filing a protest within 30 calendar days will indicate acceptance of the working day charges and future consideration of that statement will not be permitted.

4. TEMPORARY SUSPENSION OF WORK OR WORKING DAY CHARGES

The Engineer may suspend the work, wholly or in part, and will provide notice and reasons for the suspension in writing. Suspend and resume work only as directed in writing.

When part of the work is suspended, the Engineer may suspend working day charges only when conditions not under the control of the Contractor prohibit the performance of critical activities. When all of the work is suspended for reasons not under the control of the Contractor, the Engineer will suspend working day charges.

5. PROJECT SCHEDULES

Prepare, maintain, and submit project schedules. Project schedules are used to convey the Contractor's intended work plan to the Department. Prepare project schedules with a level of effort sufficient for the work being performed.

The work performed under this Article will not be measured or paid for directly but will be subsidiary to pertinent Items.

5.1. **Project Scheduler.** Designate an individual who will develop and maintain the progress schedule. The project scheduler will be prepared to discuss, in detail, the proposed sequence of work and methods of operation, and how that information will be communicated through the progress schedule at the preconstruction meeting. This individual will also attend the project meetings and make site visits to prepare, develop, and maintain the progress schedules.

5.2. **Progress Schedule.** Before starting work, prepare and submit a progress schedule based on the sequence of work and traffic control plan shown in the Contract. Prepare the progress schedule as a bar chart or critical path method (CPM) as shown on the plans. Include all planned work activities and sequences and show Contract completion within the number of working days specified. Incorporate major material procurements, known utility relocations, and other activities that may affect the completion of the Contract in the progress schedule. Show a beginning date, ending date, and duration in whole working days for each activity. Do not use activities exceeding 20 working days, unless agreed upon with the Engineer. Show an estimated production rate per working day for each work activity, unless agreed upon with the Engineer.

5.3. **Schedule Format.** Format all project schedules according to the following:

- begin the project schedule on the date of the start of Contract time or start of activities affecting work on the project,
- show the sequence and interdependence of activities required for complete performance of the work. If using a CPM schedule, show a predecessor and a successor for each activity, and
- ensure all work sequences are logical and show a coordinated plan of the work.

CPM schedules must also include:

- clearly and accurately identify the critical path as the longest continuous path,
- provide a legend for all abbreviations, run date, data date, project start date, and project completion date in the title block of each schedule submittal, and
- through the use of calendars, incorporate seasonal weather conditions into the schedule for work (e.g., earthwork, concrete paving, structures, asphalt, drainage, etc.) that may be influenced by temperature or precipitation. Also, incorporate non-work periods such as holidays, weekends, or other non-work days as identified in the Contract.

5.4. **Activity Format.** For each activity on the project schedule provide:

- a concise description of the work represented by the activity,
- an activity duration in whole working days, and
- code activities so that organized plots of the schedule may be produced.

CPM schedules must also include the quantity of work and estimated production rate for major items of work. Provide enough information for review of the work being performed.

5.5. **Schedule Types**.

5.5.1. **Bar Chart**. Seven calendar days before the preconstruction meeting, prepare and submit a hard copy of the schedule using the bar chart method.

5.5.1.1. **Progress Schedule Reviews**. Update the project schedule and submit a hard copy when changes to the schedule occur or when requested.

5.5.2. **Critical Path Method**. Prepare and submit the schedule using the CPM.

5.5.2.1. **Preliminary Schedule**. Seven calendar days before the preconstruction meeting, submit both the plotted and electronic copies of the project schedule showing activities beginning with the authorization date to begin work and including activities to be performed within the first 90 calendar days from the work start date.

5.5.2.2. **Baseline Schedule**. The baseline schedule will be considered the Contractor's plan to successfully construct the project within the timeframe and construction sequencing indicated in the Contract. Submit both plotted and electronic copies of the baseline schedule. Submit 2 plots of the schedule: one organized with the activities logically grouped using the activity coding; and the other plot showing only the critical path determined by the longest path, not based on critical float.

Develop and submit the baseline schedule for review within the first 45 calendar days from the work start date unless the time for submission is extended by the Engineer.

5.5.2.2.1. **Review**. Within 15 calendar days of receipt of the schedule, the Engineer will evaluate, and inform the Contractor if the schedule has been accepted. If the schedule is not accepted, the Engineer will provide comments to the Contractor for incorporation. Provide a revised schedule based on the Engineer's comments, or reasons for not doing so within 10 calendar days. The Engineer's review and acceptance of the project schedule is for conformance to the requirements of the Contract documents only and does not relieve the Contractor of any responsibility for meeting the interim milestone dates (if specified) or the Contract completion date. Review and acceptance does not expressly or by implication warrant, acknowledge, or admit the reasonableness of the logic or durations of the project schedule. If the Contractor fails to define any element of work, activity, or logic and the Engineer's review does not detect this omission or error, the Contractor is responsible for correcting the error or omission.

Submit an acceptable baseline schedule before the 90th calendar day from the work start date unless the time for submission is extended by the Engineer.

5.5.2.3. **Progress Schedule**. Maintain and submit the project schedule monthly for use by both the Contractor and the Engineer. Submit both the plotted and electronic copy as it will become an as-built record of the daily progress achieved on the project. If continuous progress of an activity is interrupted for any reason except non-work periods (such as holidays, weekend, or interference from temperature or precipitation), then the activity will show the actual finish date as that date of the start of the interruption and the activity will be broken into a subsequent activity (or activities, based on the number of interruptions) similarly numbered with successive alpha character as necessary. The original duration of the subsequent activity will be that of the remaining duration of the original activity. Relationships of the subsequent activity will match those of the original activity so that the integrity of the project schedule logic is maintained. Once established, the original durations and actual dates of all activities must remain unchanged. Revisions to the schedule may be made as necessary.

The project schedule must be revised when changes in construction phasing and sequencing occur or other changes that cause deviation from the original project schedule occur. Any revisions to the schedule must be listed in the monthly update narrative with the purpose of the revision and description of the impact on the project schedule's critical path and project completion date. Create the schedule revision using the latest update before the start of the revision.

Monthly updating of the project schedule will include updating of:

- the actual start dates for activities started,
- the actual finish dates for activities completed,
- the percentage of work completed and remaining duration for each activity started but not yet completed, and
- the calendars to show days actual work was performed on the various work activities.

The cut-off day for recording monthly progress will be the last day of each month. Submit the updated project schedule no later than the 20th calendar day of the following month. The Engineer will evaluate the updated schedule within 5 calendar days of receipt and inform the Contractor if it has or has not been accepted. If the schedule is not accepted, the Engineer will provide comments to the Contractor for incorporation. Provide a revised schedule based on the Engineer's comments, or reasons for not doing so within 5 calendar days.

Provide a brief narrative in a bulleted statement format for major items that have impacted the schedule. Notify the Engineer if resource-leveling is being used.

5.5.2.3.1. **Project Schedule Summary Report (PSSR)**. When shown on the plans, provide the PSSR instead of the narrative required in Section 8.5.5.2.3., "Progress Schedule." The PSSR includes a listing of major items that have impacted the schedule as well as a summary of progress in days ahead or behind schedule. Include an explanation of the project progress for the period represented on the form provided by the Department.

5.5.3. **Notice of Potential Time Impact**. Submit a notice of potential time impact when a Contract time extension or adjustment of milestone dates may be justified or when directed.

Failure to provide this notice in the timeframes outlined above will compromise the Department's ability to mitigate the impacts and the Contractor forfeits the right to request a time extension or adjustment of milestone dates unless the circumstances are such that the Contractor could not reasonably have had knowledge of the impact at the time.

5.5.4. **Time Impact Analysis**. When directed, provide a time impact analysis. A time impact analysis is an evaluation of the effects of impacts on the project. A time impact analysis consists of the following steps:

- **Step 1**. Establish the status of the project immediately before the impact.
- **Step 2**. Predict the effect of the impact on the schedule update used in Step 1.
- **Step 3**. Track the effects of the impact on the schedule during its occurrence.
- **Step 4**. Establish the status of the project after the impact's effect has ended and provide details identifying any mitigating actions or circumstances used to keep the project ongoing during the impact period.

Determine the time impact by comparing the status of the work before the impact (Step 1) to the prediction of the effect of the impact (Step 2), if requested, and to actual effects of the impact once it is complete (Step 4). Unless otherwise approved by the Engineer, steps 1, 3, and 4, must be completed before consideration of a Contract time extension or adjustment of a milestone date will be provided. Time extensions will only be considered when delays that affect milestone dates or the Contract completion date are beyond the Contractor's control. Submit Step 4 no later than 15 calendar days after the impact's effects have ended or when all the information on the effect has been realized.

Submit one electronic backup copy of the complete time impact analysis and a copy of the full project schedule incorporating the time impact analysis. If the project schedule is revised after the submittal of a time impact analysis, but before its approval, indicate in writing the need for any modification to the time impact analysis.

The Engineer will review the time impact analysis upon completion of step 4. If this review detects revisions or changes to the schedule that had not been performed and identified in a narrative, the Engineer may reject the time impact analysis. If the Engineer is in agreement with the time impact analysis, a change order may be issued to grant additional working days, or to adjust interim milestones. Once a change order has been executed, incorporate the time impact analysis into the project schedule. The time impact analysis may

also be used to support the settlement of disputes and claims. Compensation related to the time impact analysis may be provided at the completion of the analysis or the completion of the project to determine the true role the impact played on the final completion.

6. FAILURE TO COMPLETE WORK ON TIME

The time established for the completion of the work is an essential element of the Contract. If the Contractor fails to complete the work within the number of working days specified, working days will continue to be charged. Failure to complete the Contract, callout work, or a work order within the number of working days specified, including any approved additional working days, will result in liquidated damages for each working day charged over the number of working days specified. The dollar amount specified in the Contract will be deducted from any money due or to become due the Contractor for each working day the Contract, callout work, or work order remains incomplete. This amount will be assessed not as a penalty but as liquidated damages. The amount assessed for non-site-specific Contracts will be based on the estimated amount for each work order unless otherwise shown in the Contract. The amount assessed for each callout will be as specified in the Contract.

7. DEFAULT OF CONTRACT

7.1. **Declaration of Default.** The Engineer may declare the Contractor to be in default of the Contract if the Contractor:

- fails to begin the work within the number of days specified;
- fails to prosecute the work to assure completion within the number of days specified;
- is uncooperative, disruptive or threatening;
- fails to perform the work in accordance with the Contract requirements;
- neglects or refuses to remove and replace rejected materials or unacceptable work;
- discontinues the prosecution of the work without the Engineer's approval;
- makes an unauthorized assignment;
  fails to resume work that has been discontinued within a reasonable number of days after notice to do so;
- fails to conduct the work in an acceptable manner; or
- commits fraud or other unfixable conduct as determined by the Department.

If any of these conditions occur, the Engineer will give notice in writing to the Contractor and the Surety of the intent to declare the Contractor in default. If the Contractor does not proceed as directed within 10 days after the notice, the Department will provide written notice to the Contractor and the Surety to declare the Contractor to be in default of the Contract. If the Contractor provides the Department written notice of voluntary default of the Contract, the Department may waive the 10 day notice of intent to declare the Contractor in default and immediately provide written notice of default to the Contractor and the Surety. Working day charges will continue until completion of the Contract. The Department may suspend work in accordance with Section 8.4., "Temporary Suspension of Work or Working Day Charges," to investigate apparent fraud or other unfixable conduct before defaulting the Contractor. The Contractor may be subject to sanctions under the TAC.

The Department will determine the method used for the completion of the remaining work as follows:

- For Contracts without performance bonds, the Department will determine the most expeditious and efficient way to complete the work, and recover damages from the Contractor.
- For Contracts with performance bonds, the Department will require the Contractor's Surety to complete the remaining work in accordance with the terms of the original Contract. A completing Contractor will be considered a subcontractor of the Surety. The Department reserves the right to approve or reject proposed subcontractors. Work may resume after the Department receives and approves Certificates of Insurance as required in Section 3.4.3., "Insurance." Certificates of Insurance may be issued in the name of the completing Contractor. The Surety is responsible for making every effort to expedite the

resumption of work and completion of the Contract. The Department may complete the work using any or all materials at the work locations that it deems suitable and acceptable. Any costs incurred by the Department for the completion of the work under the Contract will be the responsibility of the Surety.

From the time of notification of the default until work resumes (either by the Surety or the Department), the Department will maintain traffic control devices and will do any other work it deems necessary, unless otherwise agreed upon by the Department and the Surety. All costs associated with this work will be deducted from money due to the Surety.

The Department will hold all money earned but not disbursed by the date of default. Upon resumption of the work after the default, all payments will be made to the Surety. All costs and charges incurred by the Department as a result of the default, including the cost of completing the work under the Contract, costs of maintaining traffic control devices, costs for other work deemed necessary, and any applicable liquidated damages or disincentives will be deducted from money due the Contractor for completed work. If these costs exceed the sum that would have been payable under the Contract, the Surety will be liable and pay the Department the balance of these costs in excess of the Contract price. In case the costs incurred by the Department are less than the amount that would have been payable under the Contract if the work had been completed by the Contractor, the Department will be entitled to retain the difference.

Comply with Article 8.2, "Subcontracting," and abide by the DBE commitments previously approved by the Department. Section 8.2.1., "Construction Contracts and Federally Funded Maintenance Contracts," is waived.

No markups as defined in Article 9.7., "Payment for Extra Work and Force Account Method," will be allowed for the Surety.

7.2. **Wrongful Default.** For consideration of wrong default, submit a written request to the Construction Division within 30 calendar days of receipt of notice of default.

The Construction Division will determine if the Contractor has been wrongfully defaulted and will proceed with one of the following actions:

- In the event that the Construction Division determines the default is proper, the default will remain in accordance with Section 8.7.1., "Declaration of Default." If the Contractor is in disagreement, the Contractor may file a claim in accordance with Article 4.7., "Dispute or Claims Procedure."
- In the event that the Construction Division determines it was a wrongful default, the Construction Division will terminate the Contract in the best interest of the State or the public in accordance with Article 8.8., "Termination of Contract."

8. TERMINATION OF CONTRACT

The Department may terminate the Contract in whole or in part whenever:

- the Contractor is prevented from proceeding with the work as a direct result of an executive order of the President of the United States or the Governor of the State,
- the Contractor is prevented from proceeding with the work due to a national emergency, or when the work to be performed under the Contract is stopped, directly or indirectly, because of the freezing or diversion of materials, equipment or labor as the result of an order or a proclamation of the President of the United States,
- the Contractor is prevented from proceeding with the work due to an order of any federal authority,
- the Contractor is prevented from proceeding with the work by reason of a preliminary, special, or permanent restraining court order where the issuance of the restraining order is primarily caused by acts or omissions of persons or agencies other than the Contractor, or
- the Department determines that termination of the Contract is in the best interest of the State or the public. This includes but is not limited to the discovery of significant hazardous material problems, right

of way acquisition problems, or utility conflicts that would cause substantial delays or expense to the Contract.

8.1. **Procedures and Submittals**. The Department will provide written notice to the Contractor of termination specifying the extent of the termination and the effective date. Upon notice, immediately proceed in accordance with the following:

- stop work as specified in the notice,
- place no further subcontracts or orders for materials, services, or facilities, except as necessary to complete a critical portion of the Contract, as approved by the Engineer,
- terminate all subcontracts to the extent they relate to the work terminated,
- complete performance of the work not terminated,
- settle all outstanding liabilities and termination settlement proposals resulting from the termination of the Contract,
- create an inventory report, including all acceptable materials and products obtained for the Contract that have not been incorporated in the work that was terminated (include in the inventory report a description, quantity, location, source, cost, and payment status for each of the acceptable materials and products), and
- take any action necessary, or that the Engineer may direct, for the protection and preservation of the materials and products related to the Contract that are in the possession of the Contractor and in which the Department has or may acquire an interest.

8.2. **Settlement Provisions**. Within 60 calendar days of the date of the notice of termination, submit a final termination settlement proposal, unless otherwise approved. The Engineer will prepare a change order that reduces the affected quantities of work and adds acceptable costs for termination. No claim for loss of anticipated profits will be considered. The Department will pay reasonable and verifiable termination costs including:

- all work completed at the unit bid price and partial payment for incomplete work,
- the percentage of Item 500, "Mobilization," equivalent to the percentage of work complete or actual cost that can be supported by cost records, whichever is greater,
- expenses necessary for the preparation of termination settlement proposals and support data;
- the termination and settlement of subcontracts,
- storage, transportation, restocking, and other costs incurred necessary for the preservation, protection, or disposition of the termination inventory, and
- other expenses acceptable to the Department.

Item 9
Measurement and Payment

1. MEASUREMENT OF QUANTITIES

The Engineer will measure all completed work using United States standard measures, unless otherwise specified.

1.1. **Linear Measurement.** Unless otherwise specified, all longitudinal measurements for surface areas will be made along the actual surface of the roadway and not horizontally. No deduction will be made for structures in the roadway having an area of 9 sq. ft. or less. For all transverse measurements for areas of base courses, surface courses, and pavements, the dimensions to be used in calculating the pay areas will be the neat dimensions and will not exceed those shown on the plans, unless otherwise directed.

1.2. **Volume Measurement.** Transport materials measured for payment by volume in approved hauling vehicles. Display a unique identification mark on each vehicle. Furnish information necessary to calculate the volume capacity of each vehicle. The Engineer may require verification of volume through weight measurement. Use body shapes that allow the capacity to be verified. Load and level the load to the equipment's approved capacity. Loads not hauled in approved vehicles may be rejected.

1.3. **Weight Measurement.** Transport materials measured for payment by weight or truck measure in approved hauling vehicles. Furnish certified measurements, tare weights, and legal gross weight calculations for all haul units. Affix a permanent, legible number on the truck and on the trailer to correspond with the certified information. Furnish certified weights of loaded haul units transporting material if requested.

The material will be measured at the point of delivery. The cost of supplying these volume and weight capacities is subsidiary to the pertinent Item. For measurement by the ton, in the field, provide measurements in accordance with Item 520, "Weighing and Measuring Equipment," except for Items where ton measurements are measured by standard tables.

The Engineer may reject loads and suspend hauling operations for overloading.

1.3.1. **Hauling on Routes Accessible to the Traveling Public.** For payment purposes on haul routes accessible to the traveling public, the net weight of the load will be calculated as follows:

- If the gross vehicle weight is less than the maximum allowed by state law, including applicable yearly weight tolerance permit, the net weight of the load will be determined by deducting the tare weight of the vehicle from the gross weight.
- If the gross vehicle weight is more than the maximum allowed by state law, including applicable yearly weight tolerance permit, the net weight of the load will be determined by deducting the tare weight of the vehicle from the maximum gross weight allowed.

1.3.2. **Hauling on Routes Not Accessible to the Traveling Public.** For payment purposes on haul routes that are not accessible to the traveling public where advance permission is obtained in writing from the Engineer.

- If the gross vehicle weight is less than the maximum allowed by the Engineer, including applicable yearly weight tolerance permit, the net weight of the load will be determined by deducting the tare weight of the vehicle from the gross weight.
- If the gross vehicle weight is more than the maximum allowed by the Engineer, the net weight of the load will be determined by deducting the tare weight of the vehicle from the maximum gross weight allowed.

2. PLANS QUANTITY MEASUREMENT

Plans quantities may or may not represent the exact quantity of work performed or material moved, handled, or placed during the execution of the Contract. The estimated bid quantities are designated as final payment quantities, unless revised by the governing specifications or this Article.

If the quantity measured as outlined under "Measurement" varies by more than 5% (or as stipulated under "Measurement" for specific Items) from the total estimated quantity for an individual Item originally shown in the Contract, an adjustment may be made to the quantity of authorized work done for payment purposes.

When quantities are revised by a change in design approved by the Department, by change order, or to correct an error on the plans, the plans quantity will be increased or decreased by the amount involved in the change, and the 5% variance will apply to the new plans quantity.

If the total Contract quantity multiplied by the unit bid price for an individual Item is less than $250 and the Item is not originally a plans quantity Item, then the Item may be paid as a plans quantity Item if the Engineer and Contractor agree in writing to fix the final quantity as a plans quantity.

For Contracts with callout work and work orders, plans quantity measurement requirements are not applicable.

3. ADJUSTMENT OF QUANTITIES

The party to the Contract requesting the adjustment will provide field measurements and calculations showing the revised quantity. When approved, this revised quantity will constitute the final quantity for which payment will be made. Payment for revised quantity will be made at the unit price bid for that Item, except as provided for in Article 4.4., "Changes in the Work."

4. SCOPE OF PAYMENT

Payment of the Contract unit price is full compensation for all materials, equipment, labor, tools, and supplies necessary to complete the Item of work under the Contract. Until final acceptance in accordance with Article 5.12., "Final Acceptance," assume liability for completing the work according to the plans and specifications and any loss or damage arising from the performance of the work or from the action of the elements, infringement of patent, trademark, or copyright, except as provided elsewhere in the Contract.

The Department will only pay for material incorporated into the work in accordance with the Contract. Payment of progress estimates will in no way affect the Contractor's obligation under the Contract to repair or replace any defective parts in the construction or to replace any defective materials used in the construction and to be responsible for all damages due to defects if the defects and damages are discovered on or before final inspection and acceptance of the work.

5. PROGRESS PAYMENTS

The Engineer will prepare a monthly estimate of the amount of work performed, including materials in place. Incomplete items of work may be paid at an agreed upon percentage approved by the Engineer. Payment of the monthly estimate is determined at the Contract item prices less any withholdings or deductions in accordance with the Contract. Progress payments may be withheld for failure to comply with the Contract.

6. PAYMENT FOR MATERIAL ON HAND (MOH)

If payment for MOH is desired, request compensation for the invoice cost of acceptable nonperishable materials that have not been used in the work before the request, and that have been delivered to the work location or are in acceptable storage places. Nonperishable materials are those that do not have a shelf life or whose characteristics do not materially change when exposed to the elements. Include only materials that

have been sampled, tested, approved, or certified, and are ready for incorporation into the work. Only materials which are completely constructed or fabricated on the Contractor's order for a specific Contract and are so marked and on which an approved test report has been issued are eligible. Payment for MOH may include the following types of items: concrete traffic barrier, precast concrete box culverts, concrete piling, reinforced concrete pipe, and illumination poles. Any repairs required after fabricated materials have been approved for storage will require approval of the Engineer before being made and will be made at the Contractor's expense. Include only those materials that have an invoice cost of at least $1,000 in the request for MOH payment.

For Contracts with callout work and work orders, payment for MOH will only be made for materials authorized for purchase by the work order or by written approval of the Engineer.

If the request is acceptable, the Engineer will include payment for MOH in a progress payment. Payment for MOH does not constitute acceptance of the materials. Payment will not exceed the actual cost of the material as established by invoice, or the total cost for the associated item less reasonable placement costs, whichever is less. Materials for which the Contractor does not have a paid invoice within 60 days will not be eligible for payment and will be removed from the estimate. Payment may be limited to a portion of the invoice cost or unit price if shown elsewhere in the Contract. Payment for precast products fabricated or constructed by the Contractor for which invoices or freight bills are not available may be made based on statements of actual cost.

Submit the request on forms provided by the Department. These forms may be electronically reproduced, provided they are in the same format and contain all the required information and certifications. Continue to submit monthly MOH forms until the total value of MOH is $0.

By submitting a request for MOH payment, the Contractor expressly authorizes the Department to audit MOH records, and to perform process reviews of the record-keeping system. If the Department determines noncompliance with any of the requirements of this provision, the Department may exclude payment for any or all MOH for the duration of the Contract.

Maintain all records relating to MOH payment until final acceptance. Provide these records to the Engineer upon request.

7. PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT METHOD

Payment for extra work directed, performed, and accepted will be made in accordance with Article 4.4., "Changes in the Work." Payment for extra work may be established by agreed unit prices or by Force Account Method.

Agreed unit prices are unit prices that include markups and are comparable to recent bid prices for the same character of work. These unit prices may be established without additional breakdown justification.

When using Force Account Method, determine an estimated cost for the proposed work and establish labor and equipment rates and material costs. Maintain daily records of extra work and provide copies of these records daily, signed by the Contractor's representative, for verification by the Department. Request payment for the extra work no later than the 10th day of the month following the month in which the work was performed. Include copies of all applicable invoices. If the extra work to be performed has an estimated cost of less than $10,000, submit for approval and payment an invoice of actual cost for materials, equipment, labor, tools, and incidentals necessary to complete the extra work.

7.1. **Markups**. Payment for extra work may include markups as compensation for the use of small tools, overhead expense, and profit.

7.1.1. **Labor**. Compensation will be made for payroll rates for each hour that the labor and foremen or others approved by the Engineer are actually engaged in the work. In no case will the rate of wages be less than the

minimum shown in the Contract for a particular category. An additional 25% of this sum will be paid as compensation for overhead, superintendence, profit, and small tools.

7.1.2. **Insurance and Taxes**. An additional 55% of the labor cost, excluding the 25% compensation provided in Section 9.7.1.1., "Labor," will be paid as compensation for labor insurance and labor taxes including the cost of premiums on non-project specific liability (excluding vehicular) insurance, workers compensation insurance, Social Security, unemployment insurance taxes, and fringe benefits.

7.1.3. **Materials**. Compensation will be made for materials associated with the work based on actual delivered invoice costs, less any discount. An additional 25% of this sum will be paid as compensation for overhead and profit.

7.1.4. **Equipment**. Payment will be made for the established equipment hourly rates for each hour that the equipment is involved in the work. An additional 15% of this sum will be paid as compensation for overhead and profit not included in the rates.

Transportation cost for mobilizing equipment will be included if the equipment is mobilized from an off-site location.

7.1.4.1. **Contractor-Owned Equipment**. For Contractor-owned machinery, trucks, power tools, or other equipment, use the FHWA rental rates found in the *Rental Rate Blue Book* multiplied by the regional adjustment factor and the rate adjustment factor to establish hourly rates. Use the rates in effect for each section of the *Rental Rate Blue Book* at the time of use.

If a rate has not been established for a particular piece of equipment in the *Rental Rate Blue Book*, the Engineer will allow a reasonable hourly rate. This price will include operating costs.

Payment for equipment will be made for the actual hours used in the work. The Department reserves the right to withhold payment for low production or lack of progress. Payment will not be made for time lost for equipment breakdowns, time spent to repair equipment, or time after equipment is no longer needed.

If equipment is used intermittently while dedicated solely to the work, payment will be made for the duration the equipment is assigned to the work but no more than 8 hr. will be paid during a 24-hr. day, nor more than 40 hr. per week, nor more than 176 hr. per month, except when time is computed using a 6-day or 7-day workweek. When using a 6-day workweek, no more than 8 hr. will be paid during a 24-hr. day, nor more than 48 hr. per week, nor more than 211 hr. per month. When using a 7-day workweek, no more than 8 hr. will be paid during a 24-hr. day, nor more than 56 hr. per week, nor more than 246 hr. per month.

7.1.4.2. **Equipment Not Owned by the Contractor**. For equipment rented from a third party not owned by the Contractor, payment will be made at the invoice daily rental rate for each day the equipment is needed for the work. The Department reserves the right to limit the daily rate to comparable FHWA rental rates found in the *Rental Rate Blue Book* multiplied by the regional adjustment factor and the rate adjustment factor. When the invoice specifies that the rental rate does not include fuel, lubricants, repairs, and servicing, the *Rental Rate Blue Book* hourly operating cost for each hour the equipment is operated will be added.

When the invoice specifies equipment operators as a component of the equipment rental, payment will be made at the invoice rate for each operator for each day the equipment is needed for the work.

7.1.4.3. **Standby Equipment Costs**. Payment for standby equipment will be made in accordance with Section 9.7.1.4., "Equipment," except that:

7.1.4.3.1. **Contractor-Owned Equipment**. For Contractor-owned machinery, trucks, power tools, or other equipment:

- Standby will be paid at 50% (to remove operating cost) of the FHWA rental rates found in the *Rental Rate Blue Book* multiplied by the regional adjustment factor and the rate adjustment factor.
- Standby costs will not be allowed during periods when the equipment would have otherwise been idle.

7.1.4.3.2. **Equipment Not Owned by the Contractor**. For equipment rented from a third party not owned by the Contractor:

- Standby will be paid at the invoice daily rental rate, excluding operating cost, which includes fuel, lubricants, repairs, and servicing. The Department reserves the right to limit the daily standby rate to comparable FHWA rental rates found in the *Rental Rate Blue Book* multiplied by the regional adjustment factor and the rate adjustment factor.
- Standby will be paid for equipment operators when included on the invoice and equipment operators are actually on standby.
- Standby costs will not be allowed during periods when the equipment would have otherwise been idle.

7.1.5. **Subcontracting**. An additional 5% of the actual invoice cost will be paid to the Contractor as compensation for administrative cost, superintendence, and profit.

7.1.6. **Law Enforcement Personnel**. An additional 5% of the actual invoice cost will be paid as compensation for administrative costs, superintendence, and profit.

7.1.7. **Railroad Flaggers**. An additional 5% of the actual invoice cost will be paid as compensation for administrative cost, superintendence, and profit.

7.1.8. **Bond Cost**. An additional 1% of the total compensation provided in Article 9.7., "Payment for Extra Work and Force Account Method," will be paid for the increase in bond.

8. RETAINAGE

The Department will not withhold retainage on the Contractor. The Contractor may withhold retainage on subcontractors in accordance with state and federal regulations.

9. PAYMENT PROVISIONS FOR SUBCONTRACTORS

For the purposes of this Article only, the term subcontractor includes suppliers and the term work includes materials provided by suppliers at a location approved by the Department.

These requirements apply to all tiers of subcontractors. Incorporate the provisions of this Article into all subcontract or material purchase agreements.

Pay subcontractors for work performed within 10 days after receiving payment from the Department.

Pay any retainage on a subcontractor's work within 10 days after satisfactory completion of all of the subcontractor's work. Completed subcontractor work includes vegetative establishment, test, maintenance, performance, and other similar periods that are the responsibility of the subcontractor.

For the purpose of this Section, satisfactory completion is accomplished when:

- the subcontractor has fulfilled the Contract requirements of both the Department and the subcontract for the subcontracted work, including the submittal of all information required by the Contract and the Department, and
- the work done by the subcontractor has been inspected, approved, and paid by the Department.

Provide a certification of prompt payment to certify that all subcontractors and suppliers were paid from the previous months payments and retainage was released for those whose work is complete. Submit the certification in the manner prescribed by the Department each month and the month following the month when final acceptance occurred.

The inspection and approval of a subcontractor's work does not eliminate the Contractor's responsibilities for the work as defined in Article 7.17., "Contractor's Responsibility for Work."

10. FINAL PAYMENT

When the Contract has been completed, all work has been approved, final acceptance has been made in accordance with Article 5.12., "Final Acceptance," and Contractor submittals have been received, the Engineer will prepare a final estimate for payment showing the total quantity of work completed and the money owed the Contractor. The final payment will reflect the entire sum due, less any sums previously paid.

Item 105

Removing Treated and Untreated Base and Asphalt Pavement

1. DESCRIPTION

Break, remove, and store or dispose of existing asphalt pavement, including surface treatments, and treated or untreated base materials.

2. CONSTRUCTION

Break material retained by the Department into pieces not larger than 24 in. unless otherwise shown on the plans. Remove existing asphalt pavement before disturbing stabilized base. Avoid contamination of the asphalt materials and damage to adjacent areas. Repair material damaged by operations outside the designated locations.

Stockpile materials designated salvageable at designated sites when shown on the plans or as directed. Prepare stockpile site by removing vegetation and trash and by providing for proper drainage. Material not designated to be salvaged will become the property of the Contractor. When this material is disposed of, do so in accordance with federal, state, and local regulations.

3. MEASUREMENT

This Item will be measured by the 100-ft. station along the baseline of each roadbed, by the square yard of existing treated or untreated base and asphalt pavement in its original position, or by the cubic yard of existing treated or untreated base and asphalt pavement in its original position, as calculated by the average end area method. Square yard and cubic yard measurement will be established by the widths and depths shown on the plans and the lengths measured in the field.

4. PAYMENT

The work performed in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Removing Treated and Untreated Base and Asphalt Pavement" of the depth specified. This price is full compensation for breaking the material, loading, hauling, unloading, stockpiling or disposing; repair to areas outside designated locations for removal; and equipment, labor, tools, and incidentals.

Item 110
Excavation

1. DESCRIPTION

Excavate areas as shown on the plans or as directed. Remove materials encountered to the lines, grades, and typical sections shown on the plans and cross-sections.

2. CONSTRUCTION

Accept ownership of unsuitable or excess material and dispose of material in accordance with local, state, and federal regulations at locations outside the right of way.

Maintain drainage in the excavated area to avoid damage to the roadway section. Correct any damage to the subgrade caused by weather at no additional cost to the Department.

Shape slopes to avoid loosening material below or outside the proposed grades. Remove and dispose of slides as directed.

2.1. **Rock Cuts**. Excavate to finish subgrade. Manipulate and compact subgrade in accordance with Section 132.3.4., "Compaction Methods," unless excavation is to clean homogenous rock at finish subgrade elevation. Use approved embankment material compacted in accordance with Section 132.3.4., "Compaction Methods," to replace undercut material at no additional cost if excavation extends below finish subgrade.

2.2. **Earth Cuts**. Excavate to finish subgrade. Scarify subgrade to a uniform depth at least 6 in. below finish subgrade elevation in areas where base or pavement structure will be placed on subgrade. Manipulate and compact subgrade in accordance with Section 132.3.4., "Compaction Methods."

Take corrective measures as directed if unsuitable material is encountered below subgrade elevations.

2.3. **Subgrade Tolerances**. Excavate to within 1/2 in. in cross-section and 1/2 in. in 16 ft. measured longitudinally for turnkey construction. Excavate to within 0.1 ft. in cross-section and 0.1 ft. in 16 ft. measured longitudinally for staged construction.

3. MEASUREMENT

This Item will be measured by the cubic yard in its original position as computed by the method of average end areas.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

Limits of measurement for excavation in retaining wall areas will be as shown on the plans.

Shrinkage or swelling factors will not be considered in determining the calculated quantities.

4. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Excavation (Roadway)," "Excavation (Channel),"

"Excavation (Special)," or "Excavation (Roadway and Channel)." This price is full compensation for authorized excavation; drying; undercutting subgrade and reworking or replacing the undercut material in rock cuts; hauling; disposal of material not used elsewhere on the project; scarification and compaction; and equipment, labor, materials, tools, and incidentals.

Drying required deeper than 6 in. below subgrade elevation will be paid for in accordance with Article 9.7., "Payment for Extra Work and Force Account Method." Excavation and replacement of unsuitable material below subgrade elevations will be performed and paid for in accordance with the applicable bid items. However, if Item 132, "Embankment," is not included in the Contract, payment for replacement of unsuitable material will be paid for in accordance with Article 9.7., "Payment for Extra Work and Force Account Method."

When a slide not due to the Contractor's negligence or operation occurs, payments for removal and disposal of the slide material will be in accordance with Article 9.7., "Payment for Extra Work and Force Account Method." Excavation in backfill areas of retaining walls will not be measured or paid for directly but will be subsidiary to pertinent Items.

Item 132
Embankment

1. DESCRIPTION

Furnish, place, and compact materials for construction of roadways, embankments, levees, dikes, or any designated section of the roadway where additional material is required.

2. MATERIALS

Furnish approved material capable of forming a stable embankment from required excavation in the areas shown on the plans or from sources outside the right of way. Provide one or more of the following types as shown on the plans:

- **Type A**. Granular material that is free from vegetation or other objectionable material and meets the requirements of Table 1.

Table 1
Testing Requirements

Property	Test Method	Specification Limit
Liquid limit	Tex-104-E	≤ 45
Plasticity index (PI)	Tex-106-E	≤ 15
Bar linear shrinkage	Tex-107-E	≥ 2

Perform the Linear Shrinkage test only as indicated in Tex-104-E.

- **Type B**. Materials such as rock, loam, clay, or other approved materials.
- **Type C**. Material meeting the specification requirements shown on the plans. Type C may be further designated as Type C1, C2, etc.
- **Type D**. Material from required excavation areas shown on the plans.

Meet the requirements of the pertinent retaining wall Items for retaining wall backfill material.

3. CONSTRUCTION

Meet the requirements of Item 7, "Legal Relations and Responsibilities," when off right of way sources are used. Notify the Engineer before opening a material source to allow for required testing. Complete preparation of the right of way in accordance with Item 100, "Preparing Right of Way," for areas to receive embankment.

Backfill tree-stump holes or other minor excavations with approved material and tamp. Restore the ground surface, including any material disked loose or washed out, to its original slope. Compact the ground surface by sprinkling in accordance with Item 204, "Sprinkling," and by rolling using equipment complying with Item 210, "Rolling," when directed.

Scarify and loosen the unpaved surface areas, except rock, to a depth of at least 6 in. unless otherwise shown on the plans. Bench slopes before placing material. Begin placement of material at the toe of slopes. Do not place trees, stumps, roots, vegetation, or other objectionable material in the embankment. Simultaneously recompact scarified material with the placed embankment material. Do not exceed the layer depth specified in Section 132.3.4., "Compaction Methods."

Construct embankments to the grade and sections shown on the plans. Construct the embankment in layers approximately parallel to the finished grade for the full width of the individual roadway cross-sections unless

otherwise shown on the plans. Ensure that each section of the embankment conforms to the detailed sections or slopes. Maintain the finished section, density, and grade until the project is accepted.

3.1. **Earth Embankments**. Earth embankment is mainly composed of material other than rock. Construct embankments in successive layers, evenly distributing materials in lengths suited for sprinkling and rolling.

Treat material with calcium-based additives in accordance with Section 260.2.3., "Flexible Base," when required. Obtain approval to incorporate rock and broken concrete produced by the construction project in the lower layers of the embankment. Place the rock and concrete outside the limits of the completed roadbed when the size of approved rock or broken concrete exceeds the layer thickness requirements in Section 132.3.4., "Compaction Methods." Cut and remove all exposed reinforcing steel from the broken concrete.

Move the material dumped in piles or windrows by blading or by similar methods and incorporate it into uniform layers. Featheredge or mix abutting layers of dissimilar material for at least 100 ft. to ensure there are no abrupt changes in the material. Break down clods or lumps of material and mix embankment until a uniform material is attained.

Apply water free of industrial wastes and other objectionable matter to achieve the uniform moisture content specified for compaction.

Roll and sprinkle each embankment layer in accordance with Section 132.3.4.1., "Ordinary Compaction," when ordinary compaction is specified. Compact the layer to the required density in accordance with Section 132.3.4.2., "Density Control," when density control is specified.

3.2. **Rock Embankments**. Rock embankment is mainly composed of rock. Construct rock embankments in successive layers for the full width of the roadway cross-section with a depth of 18 in. or less. Increase the layer depth for large rock sizes as approved. Do not exceed a depth of 2-1/2 ft. in any case. Fill voids created by the large stone matrix with smaller stones during the placement and filling operations.

Ensure the depth of the embankment layer is greater than the maximum dimension of any rock. Do not place rock greater than 2 ft. in its maximum dimension, unless otherwise approved. Construct the final layer with graded material so that the density and uniformity is in accordance with Section 132.3.4., "Compaction Methods." Break up exposed oversized material as approved.

Roll and sprinkle each embankment layer in accordance with Section 132.3.4.1., "Ordinary Compaction," when ordinary compaction is specified. Compact each layer to the required density in accordance with Section 132.3.4.2., "Density Control," when density control is specified. Proof-roll each rock layer as directed, where density testing is not possible, in accordance with Item 216, "Proof Rolling," to ensure proper compaction.

3.3. **Embankments Adjacent to Culverts and Bridges**. Compact embankments adjacent to culverts and bridges in accordance with Item 400, "Excavation and Backfill for Structures."

3.4. **Compaction Methods**. Begin rolling longitudinally at the sides and proceed toward the center, overlapping on successive trips by at least 1/2 the width of the roller. Begin rolling at the lower side and progress toward the high side on super elevated curves. Alternate roller trips to attain slightly different lengths. Compact embankments in accordance with Section 132.4.1., "Ordinary Compaction," or Section 132.3.4.2., "Density Control," as shown on the plans.

3.4.1. **Ordinary Compaction**. Use approved rolling equipment complying with Item 210, "Rolling," to compact each layer. Use specific equipment when required by the plans or the Engineer. Do not allow the loose depth of any layer to exceed 8 in., unless otherwise approved. Bring each layer to the moisture content directed before and during rolling operations. Compact each layer until there is no evidence of further consolidation. Maintain a level layer to ensure uniform compaction. Recompact and refinish the subgrade at no additional expense to the Department if the required stability or finish is lost for any reason.

3.4.2. **Density Control**. Compact each layer to the required density using equipment complying with Item 210, "Rolling." Determine the maximum lift thickness based on the ability of the compacting operation and equipment to meet the required density. Do not exceed layer thickness of 16 in. loose or 12 in. compacted material unless otherwise approved. Maintain a level layer to ensure uniform compaction.

The Engineer will use Tex-114-E to determine the maximum dry density (D_a) and optimum moisture content (W_{opt}). Meet the requirements for field density and moisture content in Table 2 unless otherwise shown on the plans.

Table 2
Field Density Control Requirements

Description	Density	Moisture Content
	Tex-115-E	
PI ≤ 15	≥ 98% D_a	
15 < PI ≤ 35	≥ 98% D_a and ≤ 102% D_a	≥ $W_{opt.}$
PI > 35	≥ 95% D_a and ≤ 100% D_a	≥ $W_{opt.}$

Each layer is subject to testing by the Engineer for density and moisture content. During compaction, the moisture content of the soil should not exceed the value shown on the moisture-density curve, above optimum, required to achieve:

- 98% dry density for soils with a PI greater than 15 but less than or equal to 35 or
- 95% dry density for soils with PI greater than 35.

Remove small areas of the layer to allow for density tests as required. Replace the removed material and recompact at no additional expense to the Department. Proof-roll in accordance with Item 216, "Proof Rolling," when shown on the plans or as directed. Correct soft spots as directed.

3.5. **Maintenance of Moisture and Reworking**. Maintain the density and moisture content once all requirements in Table 2 are met. Maintain the moisture content no lower than 4% below optimum for soils with a PI greater than 15. Rework the material to obtain the specified compaction when the material loses the required stability, density, moisture, or finish. Alter the compaction methods and procedures on subsequent work to obtain specified density as directed.

3.6. **Acceptance Criteria**.

3.6.1. **Grade Tolerances**.

3.6.1.1. **Staged Construction**. Grade to within 0.1 ft. in the cross-section and 0.1 ft. in 16 ft. measured longitudinally.

3.6.1.2. **Turnkey Construction**. Grade to within 1/2 in. in the cross-section and 1/2 in. in 16 ft. measured longitudinally.

3.6.2. **Gradation Tolerances**. Ensure no more than 1 of the 5 most recent gradation tests is outside the specified limits on any individual sieve by more than 5% when gradation requirements are shown on the plans.

3.6.3. **Density Tolerances**. Ensure no more than 1 of the 5 most recent density tests for compaction work is outside the specified density limits, and no test is outside the limits by more than 3 pcf.

3.6.4. **Plasticity Tolerances**. Ensure no more than 1 of the 5 most recent PI tests for material is outside the specified limit by more than 2 points.

4. MEASUREMENT

Embankment will be measured by the cubic yard. Measurement will be further defined for payment as follows:

4.1. **Final**. The cubic yard will be measured in its final position using the average end area method. The volume is computed between the original ground surface or the surface upon which the embankment is to be constructed and the lines, grades, and slopes of the embankment. In areas of salvaged topsoil, payment for embankment will be made in accordance with Item 160, "Topsoil." Shrinkage or swell factors will not be considered in determining the calculated quantities.

4.2. **Original**. The cubic yard will be measured in its original and natural position using the average end area method.

4.3. **Vehicle**. The cubic yard will be measured in vehicles at the point of delivery.

When measured by the cubic yard in its final position, this is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

Shrinkage or swell factors are the Contractor's responsibility. When shown on the plans, factors are for informational purposes only.

Measurement of retaining wall backfill in embankment areas is paid for as embankment unless otherwise shown on the plans. Limits of measurement for embankment in retaining wall areas are shown on the plans.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Embankment (Final)," "Embankment (Original)," or "Embankment (Vehicle)" of the compaction method and type specified. This price is full compensation for furnishing embankment; hauling; placing, compacting, finishing, and reworking; disposal of waste material; and equipment, labor, tools, and incidentals.

When proof rolling is directed, it will be paid for in accordance with Item 216, "Proof Rolling."

All sprinkling and rolling, except proof rolling, will not be paid for directly but will be considered subsidiary to this Item, unless otherwise shown on the plans.

Where subgrade is constructed under this Contract, correction of soft spots in the subgrade will be at the Contractor's expense. Where subgrade is not constructed under this Contract, correction of soft spots in the subgrade will be paid in accordance with Article 9.7., "Payment for Extra Work and Force Account Method."

Item 204
Sprinkling

1. DESCRIPTION

Apply water for dust control, earthwork, or base construction.

2. MATERIALS

Furnish water free of industrial wastes and other objectionable matter.

3. EQUIPMENT

Use sprinklers and spray bars equipped with positive and rapidly working cut-off valves.

4. CONSTRUCTION

Apply water at a uniform rate and in the required quantity, or as directed.

5. MEASUREMENT

This Item will be measured by the 1,000 gal. applied.

6. PAYMENT

Unless sprinkling is specified as a pay item, the work performed and materials furnished in accordance with this Item will not be paid for directly but will be subsidiary to pertinent Items.

When sprinkling is specified on the plans as a pay item, the work performed and water furnished will be paid for at the unit price bid for "Sprinkling (Base)," "Sprinkling (Earthwork)," or "Sprinkling (Dust Control)." This price is full compensation for furnishing and applying water; furnishing and operating sprinklers and measuring devices; and hauling, equipment, labor, fuel, materials, tools, and incidentals.

Item 210
Rolling

1. DESCRIPTION

Compact embankment, subgrade, base, surface treatments, broken concrete pavement, or asphalt pavement using rollers. Break up asphalt mats, pit run material, or base materials.

2. EQUIPMENT

Use any type of roller to meet the production rates and quality requirements of the Contract unless otherwise shown on the plans or directed. Use equipment that meets the requirements of Table 1 when specific types of equipment are required. The Engineer may allow the use of rollers that operate in one direction only when turning does not affect the quality of work or encroach on traffic.

Table 1
Roller Requirements[1]

Roller Type	Materials to be Compacted	Load (tons)	Contact Pressure	Roller Speed (mph)
Steel wheel	Embankment, subgrade, base, asphalt concrete	≥ 10	≥ 325 lb. per inch of wheel width	2–3
Tamping	Embankment, subgrade	–	125–550 psi per tamping foot	2–3
Heavy tamping	Embankment, subgrade	–	≥ 550 psi per tamping foot	2–3
Vibratory	Embankment, subgrade, base, asphalt concrete	Type A < 6 Type B > 6 Type C as shown on the plans	Per equipment specification and as approved	As approved
Light pneumatic	Embankment, subgrade, surface treatment	4.5–9.0	≥ 45 psi	2–6
	Asphalt Concrete			4–12
Medium pneumatic	Embankment, subgrade, base, surface treatment	12–25	≥ 80 psi, as directed	2–6
	Asphalt Concrete			4–12
Heavy pneumatic	Embankment, subgrade, base, previously broken concrete pavement, other pavements	≥ 25	≤ 150 psi	2–6
Grid	Embankment, breaking up existing asphalt mats or base	5–13	–	2–3

1. Unless otherwise specified in the Contract.

2.1. **Static Steel Wheel Rollers**. Furnish single, double, or triple steel wheel, self-propelled power rollers weighing at least 10 tons capable of operating in a forward and backward motion. Ensure all wheels are flat. The Contractor may use vibratory rollers in the static mode when static steel wheel rollers are required.

For single steel wheel rollers, pneumatic rear wheels are allowed for embankment, subgrade, and base. Provide rear wheels for triple steel wheel rollers with a minimum diameter of 48 in., a minimum width of 20 in., and a minimum compression of 325 lb. per inch of wheel width.

2.2. **Tamping Rollers**. Furnish self-propelled rollers with at least one self-cleaning metal tamping drum capable of operating in a forward or backward motion with a minimum effective rolling width of 5 ft. Mount drums in a frame so that each drum moves independently of the other for rollers with more than one drum. Operate rollers in static or vibratory mode.

2.2.1. **Tamping Roller (Minimum Requirement)**. Provide tamping feet that exert a static load of 125 to 550 psi and project at least 3 in. from the surface of the drum for all tamping rollers except for heavy tamping rollers.

2.2.2. **Heavy Tamping Roller**. Provide tamping rollers that have:

- 2 metal tamping drums, rolls, or shells, each with a 60-in. minimum diameter and a 5-ft. minimum width, or
- 1 rear and 2 forward drums, each with a 60-in. minimum diameter. Arrange drums so that the rear drum compacts the space between the 2 forward drums and the minimum overall rolling width is 10 ft.

Equip drums with tamping feet that:

- project at least 7 in. from the drum surface,
- have an area of 7 to 21 sq. in.,
- are self-cleaning,
- exert a static load of at least 550 psi, and
- are spaced at 1 tamping foot per 0.65 to 0.70 square feet of drum area.

2.3. **Vibratory Rollers**. Furnish self-propelled rollers with at least one drum equipped to vibrate. Select and maintain amplitude and frequency settings per manufacturer's specifications to deliver maximum compaction without material displacement or shoving, as approved. Furnish the equipment manufacturer's specifications concerning settings and controls for amplitude and frequency. Operate rollers at speeds that will produce at least 10 blows per foot unless otherwise shown on the plans or approved. Pneumatic rear wheels are allowed for embankment, subgrade, and base. Equip each vibrating drum with:

- separate frequency and amplitude controls,
- controls to manually start and stop vibration, and
- a mechanism to continuously clean the face of the drum.

For asphalt-stabilized base and asphalt concrete pavement, furnish a roller that also has the ability to:

- automatically reverse the direction of the rotating eccentric weight,
- stop vibration before the motion of the roller stops, and
- thoroughly moisten the drum with water or approved asphalt release agent.

2.3.1. **Drum (Type A)**. Furnish a roller with a static weight less than 6 tons and a vibratory drum.

2.3.2. **Drum (Type B)**. Furnish a roller with a minimum static weight of 6 tons and a vibratory drum.

2.3.3. **Drum (Type C)**. Furnish a roller as shown on the plans.

2.4. **Pneumatic Tire Rollers**. Pneumatic tire rollers consist of rubber tire wheels on axles mounted in a frame with either a loading platform or body suitable for ballast loading. Arrange the rear tires to cover the gaps between adjacent tires of the forward group. Furnish rollers capable of forward and backward motion.

Compact asphalt pavements and surface treatments with a roller equipped with smooth-tread tires. Compact without damaging the surface. Moisten the wheels with water or an approved asphalt release agent when necessary.

Select and maintain the operating load and tire air pressure within the range of the manufacturer's charts or tabulations to attain maximum compaction throughout the lift, as approved. Furnish the manufacturer's chart or tabulations showing the contact areas and contact pressures for the full range of tire inflation pressures and for the full range of loadings for the particular tires furnished. Maintain individual tire inflation pressures within 5 psi of each other. Provide uniform compression under all tires.

2.4.1. **Light Pneumatic Tire**. Furnish a unit:

- with at least 9 pneumatic tires,
- with an effective rolling width of approximately 5 ft.,
- capable of providing a total uniform load of 4.5 to 9 tons, and
- with tires capable of maintaining a minimum ground contact pressure of 45 psi.

2.4.2. **Medium Pneumatic Tire**. Furnish a unit:

- with at least 7 pneumatic tires,
- with an effective rolling width of approximately 7 ft.,
- capable of providing a total uniform load of 12 to 25 tons, and
- with tires capable of maintaining a minimum ground contact pressure of 80 psi or 90 psi as directed.

2.4.3. **Heavy Pneumatic Tire**. Furnish a unit:

- with at least 4 pneumatic-tired wheels mounted on axles carrying no more than 2 wheels,
- with wheels arranged to carry approximately equal loads on uneven surfaces,
- with a width between 8 and 10 ft. that can turn 180° in the crown width,
- capable of providing a total uniform load of at least 25 tons,
- with tires capable of maintaining a maximum ground contact pressure of 150 psi, and
- with liquid-filled tires inflated to such a level that liquid will flow from the valve stem when the stem is in the uppermost position.

2.5. **Grid Rollers**. Furnish rollers that have 2 cylindrical cages with a minimum diameter of 66 in. and a minimum width of 32 in. Mount cages in a rigid frame with weight boxes. Use a cage surface of cast or welded steel fabric grid with bars 1-1/2 in. wide, spaced on 5-in. centers in each direction, that undulate approximately 1 in. between the high and low points.

Furnish rollers capable of providing a total load of 5 to 13 tons and capable of being operated in a forward or backward motion.

2.6. **Alternate Equipment**. The Contractor may use alternate compaction equipment that produces results equivalent to the specified equipment as approved. Discontinue the use of the alternate equipment and furnish the specified equipment if the desired results are not achieved.

3. CONSTRUCTION

Perform this work in accordance with the applicable Items using equipment and roller speeds specified in Table 1. Use only rubber-tired equipment to push or pull compaction equipment on base courses. Use equipment that does not damage material being rolled.

4. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items.

Item 216
Proof Rolling

1. DESCRIPTION

Proof-roll earthwork, base, or both to locate unstable areas.

2. EQUIPMENT

2.1. **Specified Equipment.** Furnish rollers that weigh at least 25 tons when loaded. The maximum acceptable load is 50 tons. Provide rollers that meet the requirements of Section 210.2.4., "Pneumatic Tire Rollers."

2.2. **Alternative Equipment.** The Contractor may use alternate compaction equipment that produces results equivalent to the specified equipment in the same period of time as approved. Discontinue the use of the alternative equipment and furnish the specified equipment if the desired results are not achieved.

3. CONSTRUCTION

Perform proof rolling as directed. Adjust the load and tire inflation pressures within the range of the manufacturer's charts or tabulations, as directed. Make at least 2 coverages with the proof roller. Offset each trip of the roller by at most one tire width. Operate rollers at a speed between 2 and 6 mph, as directed. Correct unstable or nonuniform areas, if found, in accordance with the applicable Item.

4. MEASUREMENT

Rolling will be measured by the hour operated on surfaces being tested.

5. PAYMENT

The work performed and equipment furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Proof Rolling." This price is full compensation for furnishing and operating equipment and for labor, materials, tools, and incidentals.

Item 247
Flexible Base

1. DESCRIPTION

Construct a foundation course composed of flexible base.

2. MATERIALS

Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications. Notify the Engineer of the proposed material sources and of changes to material sources. The Engineer may sample and test project materials at any time before compaction throughout the duration of the project to assure specification compliance. Use Tex-100-E material definitions.

2.1. **Aggregate.** Furnish aggregate of the type and grade shown on the plans and meeting the requirements of Table 1. Each source must meet Table 1 requirements for liquid limit, plasticity index, and wet ball mill for the grade specified. Do not use additives, such as but not limited to lime, cement, or fly ash to modify aggregates to meet the requirements of Table 1 unless shown on the plans.

Table 1
Material Requirements

Property	Test Method	Grade 1–2	Grade 3	Grade 4[2]	Grade 5
Master gradation sieve size (cumulative % retained)	Tex-110-E			As shown on the plans	
2-1/2"		0	0		0
1-3/4"		0–10	0–10		0–5
7/8"		10–35	–		10–35
3/8"		30–65	–		35–65
#4		45–75	45–75		45–75
#40		65–90	50–85		70–90
Liquid Limit, % Max	Tex-104-E	40	40	As shown on the plans	35
Plasticity Index, Max[1]	Tex-106-E	10	12	As shown on the plans	10
Plasticity index, Min[1]		As shown on the plans	As shown on the plans	As shown on the plans	As shown on the plans
Wet ball mill, % Max	Tex-116-E	40	–	As shown on the plans	40
Wet ball mill, % Max increase passing the #40 sieve		20	–	As shown on the plans	20
Min compressive strength, psi	Tex-117-E			As shown on the plans	
lateral pressure 0 psi		35	–		–
lateral pressure 3 psi		–	–		90
lateral pressure 15 psi		175	–		175

1. Determine plastic index in accordance with Tex-107-E (linear shrinkage) when liquid limit is unattainable as defined in Tex-104-E.
2. Grade 4 may be further designated as Grade 4A, Grade 4B, etc.

2.1.1. **Material Tolerances.** The Engineer may accept material if no more than 1 of the 5 most recent gradation tests has an individual sieve outside the specified limits of the gradation.

When target grading is required by the plans, no single failing test may exceed the master grading by more than 5 percentage points on sieves No. 4 and larger or 3 percentage points on sieves smaller than No. 4.

The Engineer may accept material if no more than 1 of the 5 most recent plasticity index tests is outside the specified limit. No single failing test may exceed the allowable limit by more than 2 points.

2.1.2. **Material Types**. Do not use fillers or binders unless approved. Furnish the type specified on the plans in accordance with the following:

2.1.2.1. **Type A**. Crushed stone produced and graded from oversize quarried aggregate that originates from a single, naturally occurring source. Do not use gravel or multiple sources.

2.1.2.2. **Type B**. Crushed or uncrushed gravel. Blending of 2 or more sources is allowed.

2.1.2.3. **Type C**. Crushed gravel with a minimum of 60% of the particles retained on a No. 4 sieve with 2 or more crushed faces as determined by Tex-460-A, Part I. Blending of 2 or more sources is allowed.

2.1.2.4. **Type D**. Type A material or crushed concrete. Crushed concrete containing gravel will be considered Type D material. Crushed concrete must meet the requirements in Section 247.2.1.3.2., "Recycled Material (Including Crushed Concrete) Requirements," and be managed in a way to provide for uniform quality. The Engineer may require separate dedicated stockpiles in order to verify compliance.

2.1.2.5. **Type E**. Caliche, iron ore or as otherwise shown on the plans.

2.1.3. **Recycled Material**. Recycled asphalt pavement (RAP) and other recycled materials may be used when shown on the plans. Request approval to blend 2 or more sources of recycled materials.

2.1.3.1. **Limits on Percentage**. Do not exceed 20% RAP by weight, when RAP is allowed, unless otherwise shown on the plans. The percentage limitations for other recycled materials will be as shown on the plans.

2.1.3.2. **Recycled Material (Including Crushed Concrete) Requirements**.

2.1.3.2.1. **Contractor-Furnished Recycled Materials**. Provide recycled materials that have a maximum sulfate content of 3,000 ppm when tested in accordance with Tex-145-E. When the Contractor furnishes the recycled materials, including crushed concrete, the final product will be subject to the requirements of Table 1 for the grade specified. Certify compliance with DMS-11000, "Evaluating and Using Nonhazardous Recyclable Materials Guidelines," for Contractor furnished recycled materials. In addition, recycled materials must be free from reinforcing steel and other objectionable material and have at most 1.5% deleterious material when tested in accordance with Tex-413-A. For RAP, do not exceed a maximum percent loss from decantation of 5.0% when tested in accordance with Tex-406-A. Test RAP without removing the asphalt.

2.1.3.2.2. **Department-Furnished Required Recycled Materials**. When the Department furnishes and requires the use of recycled materials, unless otherwise shown on the plans:

- Department-required recycled material will not be subject to the requirements in Table 1,
- Contractor-furnished materials are subject to the requirements in Table 1 and this Item,
- the final product, blended, will be subject to the requirements in Table 1, and
- for final product, unblended (100% Department-furnished required recycled material), the liquid limit, plasticity index, wet ball mill, and compressive strength is waived.

Crush Department-furnished RAP so that 100% passes the 2 in. sieve. The Contractor is responsible for uniformly blending to meet the percentage required.

2.1.3.2.3. **Department-Furnished and Allowed Recycled Materials**. When the Department furnishes and allows the use of recycled materials or allows the Contractor to furnish recycled materials, the final blended product is subject to the requirements of Table 1 and the plans.

2.1.3.3. **Recycled Material Sources**. Department-owned recycled material is available to the Contractor only when shown on the plans. Return unused Department-owned recycled materials to the Department stockpile location designated by the Engineer unless otherwise shown on the plans.

The use of Contractor-owned recycled materials is allowed when shown on the plans. Contractor-owned surplus recycled materials remain the property of the Contractor. Remove Contractor-owned recycled materials from the project and dispose of them in accordance with federal, state, and local regulations before project acceptance. Do not intermingle Contractor-owned recycled material with Department-owned recycled material unless approved.

2.2. **Water**. Furnish water free of industrial wastes and other objectionable matter.

2.3. **Material Sources**. Expose the vertical faces of all strata of material proposed for use when non-commercial sources are used. Secure and process the material by successive vertical cuts extending through all exposed strata, when directed.

3. EQUIPMENT

Provide machinery, tools, and equipment necessary for proper execution of the work.

3.1. Provide rollers in accordance with Item 210, "Rolling." Provide proof rollers in accordance with Item 216, "Proof Rolling," when required.

3.2. When ride quality measurement is required, provide a high speed or lightweight inertial profiler certified at the Texas A&M Transportation Institute. Provide equipment certification documentation. Display a current decal on the equipment indicating the certification expiration date.

4. CONSTRUCTION

Construct each layer uniformly, free of loose or segregated areas, and with the required density and moisture content. Provide a smooth surface that conforms to the typical sections, lines, and grades shown on the plans or as directed.

Stockpile base material temporarily at an approved location before delivery to the roadway. Build stockpiles in layers no greater than 2 ft. thick. Stockpiles must have a total height between 10 and 16 ft. unless otherwise shown on the plans. After construction and acceptance of the stockpile, loading from the stockpile for delivery is allowed. Load by making successive vertical cuts through the entire depth of the stockpile.

Do not add or remove material from temporary stockpiles that require sampling and testing before delivery unless otherwise approved. Charges for additional sampling and testing required as a result of adding or removing material will be deducted from the Contractor's estimates.

Haul approved flexible base in clean trucks. Deliver the required quantity to each 100-ft. station or designated stockpile site as shown on the plans. Prepare stockpile sites as directed. When delivery is to the 100-ft. station, manipulate in accordance with the applicable Items.

4.1. **Preparation of Subgrade or Existing Base**. Remove or scarify existing asphalt concrete pavement in accordance with Item 105, "Removing Treated and Untreated Base and Asphalt Pavement," when shown on the plans or as directed. Shape the subgrade or existing base to conform to the typical sections shown on the plans or as directed.

When new base is required to be mixed with existing base, deliver, place, and spread the new flexible base in the required amount per station. Manipulate and thoroughly mix the new base with existing material to provide a uniform mixture to the specified depth before shaping.

Proof roll the roadbed in accordance with Item 216, "Proof Rolling," before pulverizing or scarifying when shown on the plans or directed. Correct soft spots as directed.

4.2. **Placing**. Spread and shape flexible base into a uniform layer with an approved spreader the same day as delivered unless otherwise approved. Construct layers to the thickness shown on the plans. Maintain the

shape of the course. Control dust by sprinkling, as directed. Correct or replace segregated areas as directed, at no additional expense to the Department.

Place successive base courses and finish courses using the same construction methods required for the first course.

4.3. **Compaction**. Compact using density control unless otherwise shown on the plans. Multiple lifts are permitted when shown on the plans or approved. Bring each layer to the moisture content directed. When necessary, sprinkle the material in accordance with Item 204, "Sprinkling."

Begin rolling longitudinally at the sides and proceed towards the center, overlapping on successive trips by at least 1/2 the width of the roller unit. Begin rolling at the low side and progress toward the high side on superelevated curves. Offset alternate trips of the roller. Operate rollers at a speed between 2 and 6 mph as directed.

Rework, recompact, and refinish material that fails to meet or that loses required moisture, density, stability, or finish requirements before the next course is placed or the project is accepted. Continue work until specification requirements are met. Perform the work at no additional expense to the Department.

Before final acceptance, the Engineer will select the locations of tests and measure the flexible base depth in accordance with Tex-140-E. Correct areas deficient by more than 1/2 in. in thickness by scarifying, adding material as required, reshaping, recompacting, and refinishing at the Contractor's expense.

4.3.1. **Ordinary Compaction**. Roll with approved compaction equipment as directed. Correct irregularities, depressions, and weak spots immediately by scarifying the areas affected, adding or removing approved material as required, reshaping, and recompacting.

4.3.2. **Density Control**. Compact to at least 100% of the maximum dry density determined by Tex-113-E, unless otherwise shown on the plans. Maintain moisture during compaction within ±2 percentage points of the optimum moisture content as determined by Tex-113-E. Measure the moisture content of the material in accordance with Tex-115-E or Tex-103-E during compaction daily and report the results the same day to the Engineer, unless otherwise shown on the plans or directed. Do not achieve density by drying the material after compaction.

The Engineer will determine roadway density and moisture content of completed sections in accordance with Tex-115-E. The Engineer may accept the section if no more than 1 of the 5 most recent density tests is below the specified density and the failing test is no more than 3 pcf below the specified density.

4.4. **Finishing**. After completing compaction, clip, skin, or tight-blade the surface with a maintainer or subgrade trimmer to a depth of approximately 1/4 in. Remove loosened material and dispose of it at an approved location. Seal the clipped surface immediately by rolling with a pneumatic tire roller until a smooth surface is attained. Add small increments of water as needed during rolling. Shape and maintain the course and surface in conformity with the typical sections, lines, and grades as shown on the plans or as directed.

Correct grade deviations greater than 1/4 in. in 16 feet measured longitudinally or greater than 1/4 in. over the entire width of the cross-section in areas where surfacing is to be placed. Correct by loosening and adding, or removing material. Reshape and re-compact in accordance with Section 247.4.3., "Compaction."

4.5. **Curing**. Cure the finished section until the moisture content is at least 2 percentage points below optimum or as directed before applying the next successive course or prime coat.

4.6. **Ride Quality**. This section applies to the final travel lanes that receive a 1 or 2 course surface treatment for the final surface, unless otherwise shown on the plans. Measure ride quality of the base course after placement of the prime coat and before placement of the surface treatment, unless otherwise approved. Use a certified profiler operator from the Department's MPL. When requested, furnish the Engineer documentation for the person certified to operate the profiler.

Provide all profile measurements to the Engineer in electronic data files within 3 days after placement of the prime coat using the format specified in Tex-1001-S. The Engineer will use Department software to evaluate longitudinal profiles to determine areas requiring corrective action. Correct 0.1-mi.sections having an average international roughness index (IRI) value greater than 100.0 in. per mile to an IRI value of 100.0 in. per mile or less for each wheelpath, unless otherwise shown on the plans.

Re-profile and correct sections that fail to maintain ride quality until placement of the next course, as directed. Correct re-profiled sections until specification requirements are met, as approved. Perform this work at no additional expense to the Department.

5. MEASUREMENT

Flexible base will be measured as follows:

- **Flexible Base (Complete In Place)**. The ton, square yard, or any cubic yard method.
- **Flexible Base (Roadway Delivery)**. The ton or any cubic yard method.
- **Flexible Base (Stockpile Delivery)**. The ton, cubic yard in vehicle, or cubic yard in stockpile.

Measurement by the cubic yard in final position and square yard is a plans quantity measurement. The quantity to be paid for is the quantity shown in the proposal unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

Measurement is further defined for payment as follows.

5.1. **Cubic Yard in Vehicle**. By the cubic yard in vehicles of uniform capacity at the point of delivery.

5.2. **Cubic Yard in Stockpile**. By the cubic yard in the final stockpile position by the method of average end areas.

5.3. **Cubic Yard in Final Position**. By the cubic yard in the completed and accepted final position. The volume of base course is computed in place by the method of average end areas between the original subgrade or existing base surfaces and the lines, grades, and slopes of the accepted base course as shown on the plans.

5.4. **Square Yard**. By the square yard of surface area in the completed and accepted final position. The surface area of the base course is based on the width of flexible base as shown on the plans.

5.5. **Ton**. By the ton of dry weight in vehicles as delivered. The dry weight is determined by deducting the weight of the moisture in the material at the time of weighing from the gross weight of the material. The Engineer will determine the moisture content in the material in accordance with Tex-103-E from samples taken at the time of weighing.

When material is measured in trucks, the weight of the material will be determined on certified scales, or the Contractor must provide a set of standard platform truck scales at a location approved by the Engineer. Scales must conform to the requirements of Item 520, "Weighing and Measuring Equipment."

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for the types of work shown below. No additional payment will be made for thickness or width exceeding that shown on the typical section or provided on the plans for cubic yard in the final position or square yard measurement.

Sprinkling and rolling, except proof rolling, will not be paid for directly but will be subsidiary to this Item unless otherwise shown on the plans. When proof rolling is shown on the plans or directed, it will be paid for in accordance with Item 216, "Proof Rolling."

Where subgrade is constructed under this Contract, correction of soft spots in the subgrade will be at the Contractor's expense. Where subgrade is not constructed under this Contract, correction of soft spots in the subgrade will be paid in accordance with pertinent Items or Article 4.4., "Changes in the Work."

6.1. **Flexible Base (Complete In Place)**. Payment will be made for the type and grade specified. For cubic yard measurement, "In Vehicle," "In Stockpile," or "In Final Position" will be specified. For square yard measurement, a depth will be specified. This price is full compensation for furnishing materials, temporary stockpiling, assistance provided in stockpile sampling and operations to level stockpiles for measurement, loading, hauling, delivery of materials, spreading, blading, mixing, shaping, placing, compacting, reworking, finishing, correcting locations where thickness is deficient, curing, furnishing scales and labor for weighing and measuring, and equipment, labor, tools, and incidentals.

6.2. **Flexible Base (Roadway Delivery)**. Payment will be made for the type and grade specified. For cubic yard measurement, "In Vehicle," "In Stockpile," or "In Final Position" will be specified. The unit price bid will not include processing at the roadway. This price is full compensation for furnishing materials, temporary stockpiling, assistance provided in stockpile sampling and operations to level stockpiles for measurement, loading, hauling, delivery of materials, furnishing scales and labor for weighing and measuring, and equipment, labor, tools, and incidentals.

6.3. **Flexible Base (Stockpile Delivery)**. Payment will be made for the type and grade specified. For cubic yard measurement, "In Vehicle" or "In Stockpile" will be specified. The unit price bid will not include processing at the roadway. This price is full compensation for furnishing and disposing of materials, preparing the stockpile area, temporary or permanent stockpiling, assistance provided in stockpile sampling and operations to level stockpiles for measurement, loading, hauling, delivery of materials to the stockpile, furnishing scales and labor for weighing and measuring, and equipment, labor, tools, and incidentals.

Item 260
Lime Treatment (Road-Mixed)

1. DESCRIPTION

Mix and compact lime, water, and subgrade or base (with or without asphaltic concrete pavement) in the roadway.

2. MATERIALS

Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications. Notify the Engineer of the proposed material sources and of changes to material sources. Obtain verification from the Engineer that the specification requirements are met before using the sources. The Engineer may sample and test project materials at any time before compaction. Use Tex-100-E for material definitions.

2.1. **Lime**. Furnish lime that meets the requirements of DMS-6350 "Lime and Lime Slurry," and DMS-6330, "Pre-Qualification of Lime Sources." Use hydrated lime, commercial lime slurry, quicklime, or carbide lime slurry as shown on the plans. Do not use quicklime when sulfates are present in quantities greater than 3,000 ppm. When furnishing quicklime, provide it in bulk.

2.2. **Subgrade**. The Engineer will determine the sulfate content of the existing subgrade in accordance with Tex-145-E and organic content in accordance with Tex-148-E before lime treatment begins. Suspend operations when material to be treated has a sulfate content greater than 7,000 ppm or an organic content greater than 1.0% and proceed as directed.

2.3. **Flexible Base**. Unless otherwise shown on the plans, furnish base material that meets the requirements of Item 247, "Flexible Base," for the type and grade shown on the plans, before the addition of lime.

2.4. **Water**. Furnish water free of industrial wastes and other objectionable material.

2.5. **Asphalt**. When asphalt or emulsion is permitted for curing purposes, furnish materials that meet the requirements of Item 300, "Asphalts, Oils, and Emulsions," as shown on the plans or as directed.

2.6. **Mix Design**. The Engineer will determine the target lime content and optimum moisture content in accordance with Tex-121-E or prior experience with the project materials. The Contractor may propose a mix design developed in accordance with Tex-121-E. The Engineer will use Tex-121-E to verify the Contractor's proposed mix design before acceptance. Reimburse the Department for subsequent mix designs or partial designs necessitated by changes in the material or requests by the Contractor. Limit the amount of recycled asphalt pavement to no more than 50% of the mix unless otherwise shown on the plans or directed.

3. EQUIPMENT

Provide machinery, tools, and equipment necessary for proper execution of the work. Provide rollers in accordance with Item 210, "Rolling." Provide proof rollers in accordance with Item 216, "Proof Rolling," when required.

3.1. **Storage Facility**. Store quicklime and dry hydrated lime in closed, weatherproof containers.

3.2. **Slurry Equipment**. Use slurry tanks equipped with agitation devices to slurry hydrated lime or quicklime on the project or other approved location. The Engineer may approve other slurrying methods.

3.3. Provide a pump for agitating the slurry when the distributor truck is not equipped with an agitator. Equip the distributor truck with a sampling device in accordance with Tex-600-J, Part I, when using commercial lime slurry or carbide lime slurry.

3.4. **Hydrated Lime Distribution Equipment**. Provide equipment to spread lime evenly across the area to be treated. Provide equipment with a rotary vane feeder to spread lime, when shown on the plans.

3.5. **Pulverization Equipment**. Provide pulverization equipment that:

- cuts and pulverizes material uniformly to the proper depth with cutters that plane to a uniform surface over the entire width of the cut,
- provides a visible indication of the depth of cut at all times, and
- uniformly mixes the materials.

4. CONSTRUCTION

Construct each layer uniformly, free of loose or segregated areas, and with the required density and moisture content. Provide a smooth surface that conforms to the typical sections, lines, and grades shown on the plans or as directed.

4.1. **Preparation of Subgrade or Existing Base for Treatment**. Before treating, remove existing asphalt pavement in accordance with Item 105, "Removing Treated and Untreated Base and Asphalt Pavement," when shown on the plans or as directed. Shape existing material in accordance with applicable bid items to conform to typical sections shown on the plans and as directed.

Unless otherwise approved, proof roll the roadbed in accordance with Item 216, "Proof Rolling," before pulverizing or scarifying existing material. Correct soft spots as directed.

When material is imported from a borrow source, notify the Engineer of the location of the borrow source well in advance to allow time for testing and approval to avoid delay to the project. Stockpile as directed. The Engineer will test the borrow source and determine the sulfate and organic contents. When the borrow source has a sulfate content greater than 3,000 ppm or an organic content greater than 1.0%, proceed as directed.

When new base material is required to be mixed with existing base, deliver, place, and spread the new material in the required amount per station. Manipulate and thoroughly mix new base with existing material to provide a uniform mixture to the specified depth before shaping.

4.2. **Pulverization**. Pulverize or scarify existing material after shaping so that 100% passes a 2-1/2 in. sieve. If the material cannot be uniformly processed to the required depth in a single pass, excavate and windrow the material to expose a secondary grade to achieve processing to plan depth.

4.3. **Application of Lime**. Uniformly apply lime using dry or slurry placement as shown on the plans or as directed. Add lime at the percentage determined in Section 260.2.6., "Mix Design." Apply lime only on an area where mixing can be completed during the same working day.

Start lime application only when the air temperature is at least 35°F and rising or is at least 40°F. The temperature will be taken in the shade and away from artificial heat. Suspend application when the Engineer determines that weather conditions are unsuitable.

Minimize dust and scattering of lime by wind. Do not apply lime when wind conditions, in the opinion of the Engineer, cause blowing lime to become dangerous to traffic or objectionable to adjacent property owners. When pebble grade quicklime is placed dry, mix the material and lime thoroughly at the time of lime application. Use of quicklime can be dangerous. Inform users of the recommended precautions for handling and storage.

4.3.1. **Dry Placement**. Before applying lime, bring the prepared roadway to approximately 2 percentage points above optimum moisture content. When necessary, sprinkle in accordance with Item 204, "Sprinkling." Distribute the required quantity of hydrated lime or pebble grade quicklime with approved equipment. Only hydrated lime may be distributed by bag. Do not use a motor grader to spread hydrated lime.

4.3.2. **Slurry Placement**. Provide slurry free of objectionable materials, at or above the minimum dry solids content, and with a uniform consistency that will allow ease of handling and uniform application. Deliver commercial lime slurry or carbide lime slurry to the jobsite, or use hydrated lime or quicklime to prepare lime slurry at the jobsite or other approved location, as specified. When dry quicklime is applied as slurry, use 80% of the amount shown on the plans.

Distribute slurry uniformly by making successive passes over a measured section of roadway until the specified lime content is reached. Uniformly spread the residue from quicklime slurry over the length of the roadway being processed, unless otherwise directed.

4.4. **Mixing**. Begin mixing within 6 hr. of application of lime. Hydrated lime exposed to the open air for 6 hr. or more between application and mixing, or that experiences excessive loss due to washing or blowing, will not be accepted for payment.

Thoroughly mix the material and lime using approved equipment. When treating subgrade, bring the moisture content above the optimum moisture content to insure adequate chemical reaction of the lime and subgrade materials. Allow the mixture to mellow for 1 to 4 days, as directed. When pebble grade quicklime is used, allow the mixture to mellow for 2 to 4 days, as directed. Sprinkle the treated materials during the mixing and mellowing operation, as directed, to achieve adequate hydration and proper moisture content. When the material to be treated has a sulfate content greater than 3,000 ppm but less than or equal to 7,000 ppm, mellow for a minimum of 7 days. Maintain in a continuously moist condition by sprinkling in accordance with Item 204, "Sprinkling." After mellowing, resume mixing until a homogeneous, friable mixture is obtained. After mixing, the Engineer may sample the mixture at roadway moisture and test in accordance with Tex-101-E, Part III, to determine compliance with the gradation requirements in Table 1.

Table 1
Gradation Requirements (Minimum % Passing)

Sieve Size	Base	Subgrade
1-3/4"	100	100
3/4"	85	85
#4	–	60

4.5. **Compaction**. Compact the mixture using density control, unless otherwise shown on the plans. Multiple lifts are permitted when shown on the plans or approved. Bring each layer to the moisture content directed. Sprinkle the treated material in accordance with Item 204, "Sprinkling" or aerate the treated material to adjust the moisture content during compaction so that it is no more than 1.0 percentage points below optimum and 2.0 percentage points above optimum as determined by Tex-121-E. Measure the moisture content of the material in accordance with Tex-115-E or Tex-103-E during compaction daily and report the results the same day, unless otherwise shown on the plans or directed.

Begin rolling longitudinally at the sides and proceed toward the center, overlapping on successive trips by at least 1/2 the width of the roller unit. On superelevated curves, begin rolling at the low side and progress toward the high side. Offset alternate trips of the roller. Operate rollers at a speed between 2 and 6 mph as directed.

Before final acceptance, the Engineer will select the locations of tests in each unit and measure the treated depth in accordance with Tex-140-E. Correct areas deficient by more than 1/2 in. in thickness or more than 1/2% in target lime content by adding lime as required, reshaping, recompacting, and refinishing at the Contractor's expense.

Rework, recompact, and refinish material that fails to meet or that loses required moisture, density, stability, or finish before the next course is placed or the project is accepted. Continue work until specification

requirements are met. Rework in accordance with Section 260.4.6., "Reworking a Section." Perform the work at no additional expense to the Department.

4.5.1. **Ordinary Compaction**. Roll with approved compaction equipment, as directed. Correct irregularities, depressions, and weak spots immediately by scarifying the areas affected, adding or removing treated material as required, reshaping, and recompacting.

4.5.2. **Density Control**. The Engineer will determine roadway density and moisture content of completed sections in accordance with Tex-115-E. The Engineer may accept the section if no more than 1 of the 5 most recent density tests is below the specified density and the failing test is no more than 3 pcf below the specified density.

4.5.2.1. **Subgrade**. Compact to at least 95% of the maximum density determined in accordance with Tex-121-E, unless otherwise shown on the plans.

4.5.2.2. **Base**. Compact the bottom course to at least 95% of the maximum density determined in accordance with Tex-121-E, unless otherwise shown on the plans. Compact subsequent courses treated under this Item to at least 98% of the maximum density determined in accordance with Tex-121-E, unless otherwise shown on the plans.

4.6. **Reworking a Section**. When a section is reworked within 72 hr. after completion of compaction, rework the section to provide the required density. When a section is reworked more than 72 hr. after completion of compaction, add additional lime at 25% of the percentage determined in Section 260.2.6., "Mix Design." Reworking includes loosening, adding material or removing unacceptable material if necessary, mixing as directed, compacting, and finishing. When density control is specified, determine a new maximum density of the reworked material in accordance with Tex-121-E, and compact to at least 95% of this density.

4.7. **Finishing**. Immediately after completing compaction of the final course, clip, skin, or tight-blade the surface of the lime-treated material with a maintainer or subgrade trimmer to a depth of approximately 1/4 in. Remove loosened material and dispose of at an approved location. Roll the clipped surface immediately with a pneumatic tire roller until a smooth surface is attained. Add small amounts of water as needed during rolling. Shape and maintain the course and surface in conformity with the typical sections, lines, and grades shown on the plans or as directed.

Finish grade of constructed subgrade to within 0.1 ft. in the cross-section and 0.1 ft. in 16 ft. measured longitudinally.

Correct grade deviations of constructed base greater than 1/4 in. in 16 ft. measured longitudinally or greater than 1/4 in. over the entire width of the cross-section in areas where surfacing is to be placed. Remove excess material, reshape, and roll with a pneumatic-tire roller. Correct as directed if material is more than 1/4 in. low. Do not surface patch. The 72-hr. time limit required for completion of placement, compaction, and finishing does not apply to finishing required just before applying the surface course.

4.8. **Curing**. Cure for the minimum number of days shown in Table 2 by sprinkling in accordance with Item 204, "Sprinkling," or by applying an asphalt material at a rate of 0.05 to 0.20 gal. per square yard as directed. Maintain moisture during curing. Upon completion of curing, maintain the moisture content in accordance with Section 132.3.5., "Maintenance of Moisture and Reworking," for subgrade and Section 247.4.5., "Curing" for bases before placing subsequent courses. Do not allow equipment on the finished course during curing except as required for sprinkling, unless otherwise approved. Apply seals or additional courses within 14 calendar days of final compaction.

Table 2
Minimum Curing Requirements before Placing Subsequent Courses[1]

Untreated Material	Curing (Days)
PI ≤ 35	2
PI > 35	5

1. Subject to the approval of the Engineer. Proof rolling may be required as an indicator of adequate curing.

5. MEASUREMENT

5.1. **Lime**. When lime is furnished in trucks, the weight of lime will be determined on certified scales, or the Contractor must provide a set of standard platform truck scales at a location approved by the Engineer. Scales must conform to the requirements of Item 520, "Weighing and Measuring Equipment."

When lime is furnished in bags, indicate the manufacturer's certified weight. Bags varying more than 5% from that weight may be rejected. The average weight of bags in any shipment, as determined by weighing 10 bags taken at random, must be at least the manufacturer's certified weight.

5.1.1. **Hydrated Lime**.

5.1.1.1. **Dry**. Lime will be measured by the ton (dry weight).

5.1.1.2. **Slurry**. Lime slurry will be measured by the ton (dry weight) of the hydrated lime used to prepare the slurry at the jobsite.

5.1.2. **Commercial Lime Slurry**. Lime slurry will be measured by the ton (dry weight) as calculated from the minimum percent dry solids content of the slurry, multiplied by the weight of the slurry in tons delivered.

5.1.3. **Quicklime**.

5.1.3.1. **Dry**. Lime will be measured by the ton (dry weight) of the quicklime.

5.1.3.2. **Slurry**. Lime slurry will be measured by the ton (dry weight) of the quicklime used to prepare the slurry multiplied by a conversion factor of 1.28 to give the quantity of equivalent hydrated lime, which will be the basis of payment.

5.1.4. **Carbide Lime Slurry**. Lime slurry will be measured by the ton (dry weight) as calculated from the minimum percent dry solids content of the slurry, multiplied by the weight of the slurry in tons delivered.

5.2. **Lime Treatment**. Lime treatment will be measured by the square yard of surface area. The dimensions for determining the surface area are established by the widths shown on the plans and the lengths measured at placement.

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid in accordance with Section 260.6.1., "Lime," and Section 260.6.2., "Lime Treatment."

Furnishing and delivering new base will be paid for in accordance with Section 247.6.2., "Flexible Base (Roadway Delivery)." Mixing, spreading, blading, shaping, compacting, and finishing new or existing base material will be paid for in accordance with Section 260.6.2., "Lime Treatment." Removal and disposal of existing asphalt concrete pavement will be paid for in accordance with pertinent Items or Article 4.4., "Changes in the Work."

Sprinkling and rolling, except proof rolling, will not be paid for directly but will be subsidiary to this Item, unless otherwise shown on the plans. When proof rolling is shown on the plans or directed by the Engineer, it will be paid for in accordance with Item 216, "Proof Rolling."

Where subgrade is constructed under this Contract, correction of soft spots in the subgrade or existing base will be at the Contractor's expense. Where subgrade is not constructed under this Contract, correction of soft spots in the subgrade or existing base will be paid for in accordance with pertinent Items or Article 4.4., "Changes in the Work."

Where subgrade to be treated under this Contract has sulfates greater than 7,000 ppm, work will be paid for in accordance with Article 4.4., "Changes in the Work."

Asphalt used solely for curing will not be paid for directly but will be subsidiary to this Item. Asphalt placed for curing and priming will be paid for under Item 310, "Prime Coat."

6.1. **Lime**. Lime will be paid for at the unit price bid for "Lime" of one of the following types:

- Hydrated Lime (Dry),
- Hydrated Lime (Slurry),
- Commercial Lime Slurry,
- Quicklime (Dry),
- Quicklime (Slurry), or
- Carbide Lime Slurry.

This price is full compensation for materials, delivery, equipment, labor, tools, and incidentals.

Lime used for reworking a section in accordance with Section 260.4.6., "Reworking a Section," will not be paid for directly but will be subsidiary to this Item.

6.2. **Lime Treatment**. Lime treatment will be paid for at the unit price bid for "Lime Treatment (Existing Material)," "Lime Treatment (New Base)," or "Lime Treatment (Mixing Existing Material and New Base)," for the depth specified. No payment will be made for thickness or width exceeding that shown on the plans. This price is full compensation for shaping existing material, loosening, mixing, pulverizing, spreading, applying lime, compacting, finishing, curing, curing materials, blading, shaping and maintaining shape, replacing mixture, disposing of loosened materials, processing, hauling, preparing secondary subgrade, water, equipment, labor, tools, and incidentals.

Item 300
Asphalts, Oils, and Emulsions

1. DESCRIPTION

Provide asphalt cements, cutback and emulsified asphalts, performance-graded asphalt binders, and other miscellaneous asphalt materials as specified on the plans.

2. MATERIALS

Provide asphalt materials that meet the stated requirements when tested in accordance with the referenced Department, AASHTO, and ASTM test methods. Provide asphalt materials that have been preapproved for use by the Construction Division in accordance with Tex-545-C, "Asphalt Binder Quality Program," unless otherwise shown on the plans.

Acronyms used in this Item are defined in Table 1.

Table 1
Acronyms

Acronym	Definition
Test Procedure Designations	
Tex	Department
T or R	AASHTO
D	ASTM
Polymer Modifier Designations	
P	polymer-modified
SBR or L	styrene-butadiene rubber (latex)
SBS	styrene-butadiene-styrene block co-polymer
TR	tire rubber (from ambient temperature grinding of truck and passenger tires)
AC	asphalt cement
AE	asphalt emulsion
AE-P	asphalt emulsion prime
A-R	asphalt-rubber
C	cationic
EAP&T	emulsified asphalt prime and tack
H-suffix	harder residue (lower penetration)
HF	high float
MC	medium-curing
MS	medium-setting
PCE	prime, cure, and erosion control
PG	performance grade
RC	rapid-curing
RS	rapid-setting
S-suffix	stockpile usage
SCM	special cutback material
SS	slow-setting

2.1. **Asphalt Cement**. Provide asphalt cement that is homogeneous, water-free, and nonfoaming when heated to 347°F, and meets the requirements in Table 2.

Table 2
Asphalt Cement

Property	Test Procedure	Viscosity Grade									
		AC-0.6		AC-1.5		AC-3		AC-5		AC-10	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity	T 202										
140°F, poise		40	80	100	200	250	350	400	600	800	1,200
275°F, poise		0.4	–	0.7	–	1.1	–	1.4	–	1.9	–
Penetration, 77°F, 100g, 5 sec.	T 49	350	–	250	–	210	–	135	–	85	–
Flash point, C.O.C., °F	T 48	425	–	425	–	425	–	425	–	450	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–	99.0	–	99.0	–
Spot test	Tex-509-C	Neg.		Neg.		Neg.		Neg.		Neg.	
Tests on residue from Thin-Film Oven Test:	T 179										
Viscosity, 140°F, poise	T 202	–	180	–	450	–	900	–	1,500	–	3,000
Ductility,[1] 77°F 5 cm/min., cm	T 51	100	–	100	–	100	–	100	–	100	–

1. If AC-0.6 or AC-1.5 ductility at 77°F is less than 100 cm, material is acceptable if ductility at 60°F is more than 100 cm.

2.2. **Polymer-Modified Asphalt Cement**. Provide polymer-modified asphalt cement that is smooth, homogeneous, and meets the requirements of Table 3. Supply samples of the base asphalt cement and polymer additives if requested.

Table 3
Polymer-Modified Asphalt Cement

Property	Test Procedure	Polymer-Modified Viscosity Grade											
		AC-5 w/2% SBR		AC-10 w/2% SBR		AC-15P		AC-20XP		AC-10-2TR		AC-20-5TR	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Polymer		SBR		SBR		SBS		SBS		TR		TR	
Polymer content, % (solids basis)	Tex-533-C	2.0	–	2.0	–	3.0	–	–	–	2.0	–	5.0	–
Dynamic shear, G*/sin δ, 64°C, 10 rad/s, kPa	T 315	–	–	–	–	–	–	1.0	–	–	–	1.0	–
Dynamic shear, G*/sin δ, 58°C, 10 rad/s, kPa	T 315	–	–	–	–	–	–	–	–	1.0	–	–	–
Viscosity													
140°F, poise	T 202	700	–	1,300	–	1,500	–	2,000	–	1,000	–	2,000	–
275°F, poise	T 202	–	7.0	–	8.0	–	8.0	–	–	–	8.0	–	10.0
Penetration, 77°F, 100 g, 5 sec.	T 49	120	–	80	–	100	150	75	115	95	130	75	115
Ductility, 5cm/min., 39.2°F, cm	T 51	70	–	60	–	–	–	–	–	–	–	–	–
Elastic recovery, 50°F, %	Tex-539-C	–	–	–	–	55	–	55	–	30	–	55	–
Softening point, °F	T 53	–	–	–	–	–	–	120	–	110	–	120	–
Polymer separation, 48 hr.	Tex-540-C	None		None		None		None		None		None	
Flash point, C.O.C., °F	T 48	425	–	425	–	425	–	425	–	425	–	425	–
Tests on residue from RTFOT aging and pressure aging:	Tex-541-C and R 28												
Creep stiffness	T 313												
S, -18°C, MPa		–	–	–	–	–	300	–	300	–	300	–	300
m-value, -18°C		–	–	–	–	0.300	–	0.300	–	0.300	–	0.300	–

2.3. **Cutback Asphalt.** Provide cutback asphalt that meets the requirements of Tables 4, 5, and 6 for the specified type and grade. Supply samples of the base asphalt cement and polymer additives if requested.

Table 4
Rapid-Curing Cutback Asphalt

Property	Test Procedure	Type–Grade					
		RC-250		RC-800		RC-3000	
		Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	250	400	800	1,600	3,000	6,000
Water, %	D95	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	80	–	80	–	80	–
Distillation test:	T 78						
Distillate, percentage by volume of total distillate to 680°F							
to 437°F		40	75	35	70	20	55
to 500°F		65	90	55	85	45	75
to 600°F		85	–	80	–	70	–
Residue from distillation, volume %		70	–	75	–	82	–
Tests on distillation residue:							
Viscosity, 140°F, poise	T 202	60	240	60	240	60	240
Ductility, 5 cm/min., 77°F, cm	T 51	100	–	100	–	100	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–
Spot test	Tex-509-C	Neg.		Neg.		Neg.	

Table 5
Medium-Curing Cutback Asphalt

Property	Test Procedure	Type–Grade							
		MC-30		MC-250		MC-800		MC-3000	
		Min	Max	Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	30	60	250	500	800	1,600	3,000	6,000
Water, %	D95	–	0.2	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	95	–	122	–	140	–	149	–
Distillation test:	T 78								
Distillate, percentage by volume of total distillate to 680°F									
to 437°F		–	35	–	20	–	–	–	–
to 500°F		30	75	5	55	–	40	–	15
to 600°F		75	95	60	90	45	85	15	75
Residue from distillation, volume %		50	–	67	–	75	–	80	–
Tests on distillation residue:									
Viscosity, 140°F, poise	T 202	30	120	30	120	30	120	30	120
Ductility, 5 cm/min., 77°F, cm	T 51	100	–	100	–	100	–	100	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–	99.0	–
Spot test	Tex-509-C	Neg.		Neg.		Neg.		Neg.	

Table 6
Special-Use Cutback Asphalt

Property	Test Procedure	Type–Grade					
		MC-2400L		SCM I		SCM II	
		Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	2,400	4,800	500	1,000	1,000	2,000
Water, %	D95	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	150	–	175	–	175	–
Distillation test:	T 78						
Distillate, percentage by volume of total distillate to 680°F							
to 437°F		–	–	–	–	–	–
to 500°F		–	35	–	0.5	–	0.5
to 600°F		35	80	20	60	15	50
Residue from distillation, volume %		78	–	76	–	82	–
Tests on distillation residue:							
Polymer		SBR		–		–	
Polymer content, % (solids basis)	Tex-533-C	2.0	–	–	–	–	–
Penetration, 100 g, 5 sec., 77°F	T 49	150	300	180	–	180	–
Ductility, 5 cm/min., 39.2°F, cm	T 51	50	–	–	–	–	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–

2.4. **Emulsified Asphalt**. Provide emulsified asphalt that is homogeneous, does not separate after thorough mixing, and meets the requirements for the specified type and grade in Tables 7, 8, 9, and 10.

Table 7
Emulsified Asphalt

Property	Test Procedure	Type–Grade									
		Rapid-Setting		Medium-Setting				Slow-Setting			
		HFRS-2		MS-2		AES-300		SS-1		SS-1H	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol	T 72										
77°F, sec.		–	–	–	–	75	400	20	100	20	100
122°F, sec.		150	400	100	300	–	–	–	–	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1
Miscibility	T 59	–		–		–		Pass		Pass	
Cement mixing, %	T 59	–	–	–	–	–	–	–	2.0	–	2.0
Coating ability and water resistance:	T 59										
Dry aggregate/after spray		–		–		Good/Fair		–		–	
Wet aggregate/after spray		–		–		Fair/Fair		–		–	
Demulsibility, 35 ml of 0.02 N $CaCl_2$, %	T 59	50	–	–	30	–	–	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	1	–	1	–	1
Freezing test, 3 cycles[1]	T 59	–		Pass		–		Pass		Pass	
Distillation test:	T 59										
Residue by distillation, % by wt.		65	–	65	–	65	–	60	–	60	–
Oil distillate, % by volume of emulsion		–	0.5	–	0.5	–	5	–	0.5	–	0.5
Tests on residue from distillation:											
Penetration, 77°F, 100 g, 5 sec.	T 49	100	140	120	160	300	–	120	160	70	100
Solubility in trichloroethylene, %	T 44	97.5	–	97.5		97.5	–	97.5	–	97.5	–
Ductility, 77°F, 5 cm/min., cm	T 51	100	–	100		–	–	100	–	80	–
Float test, 140°F, sec.	T 50	1,200	–	–		1,200	–	–	–	–	–

1. Applies only when the Engineer designates material for winter use.

Table 8
Cationic Emulsified Asphalt

Property	Test Procedure	Type–Grade											
		Rapid-Setting				Medium-Setting				Slow-Setting			
		CRS-2		CRS-2H		CMS-2		CMS-2S		CSS-1		CSS-1H	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol													
77°F, sec.	T 72	–	–	–	–	–	–	–	–	20	100	20	100
122°F, sec.		150	400	150	400	100	300	100	300	–	–	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1
Cement mixing, %	T 59	–	–	–	–	–	–	–	–	–	2.0	–	2.0
Coating ability and water resistance:													
Dry aggregate/after spray	T 59	–		–		Good/Fair		Good/Fair		–		–	
Wet aggregate/after spray		–		–		Fair/Fair		Fair/Fair		–		–	
Demulsibility, 35 ml of 0.8% Sodium dioctyl sulfosuccinate, %	T 59	70	–	70	–	–	–	–	–	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	1	–	1	–	1	–	1
Particle charge	T 59	Positive		Positive		Positive		Positive		Positive		Positive	
Distillation test:													
Residue by distillation, % by wt.	T 59	65	–	65	–	65	–	65	–	60	–	60	–
Oil distillate, % by volume of emulsion		–	0.5	–	0.5	–	7	–	5	–	0.5	–	0.5
Tests on residue from distillation:													
Penetration, 77°F, 100 g, 5 sec.	T 49	120	160	70	110	120	200	300	–	120	160	70	110
Solubility in trichloroethylene, %	T 44	97.5	–	97.5	–	97.5	–	97.5	–	97.5	–	97.5	–
Ductility, 77°F, 5 cm/min., cm	T 51	100	–	80	–	100	–	–	–	100	–	80	–

Table 9
Polymer-Modified Emulsified Asphalt

Property	Test Procedure	Type–Grade											
		Rapid-Setting				Medium-Setting				Slow-Setting			
		RS-1P		HFRS-2P		AES-150P		AES-300P		AES-300S		SS-1P	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol	T 72												
77°F, sec.		–	–	–	–	75	400	75	400	75	400	30	100
122°F, sec.		50	200	150	400	–	–	–	–	–	–	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1
Miscibility	T 59	–		–		–		–		–		Pass	
Coating ability and water resistance:	T 59												
Dry aggregate/after spray		–		–		Good/Fair		Good/Fair		Good/Fair		–	
Wet aggregate/after spray		–		–		Fair/Fair		Fair/Fair		Fair/Fair		–	
Demulsibility, 35 ml of 0.02 N $CaCl_2$, %	T 59	60	–	50	–	–	–	–	–	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	1	–	1	–	1	–	1
Breaking index, g	Tex-542-C	–	80	–	–	–	–	–	–	–	–	–	–
Distillation test:[1]	T 59												
Residue by distillation, % by wt.		65	–	65	–	65	–	65	–	65	–	60	–
Oil distillate, % by volume of emulsion		–	3	–	0.5	–	3	–	5	–	7	–	0.5
Tests on residue from distillation:													
Polymer content, wt. % (solids basis)	Tex-533-C	–	–	3.0	–	–	–	–	–	–	–	3.0	–
Penetration, 77°F, 100 g, 5 sec.	T 49	225	300	90	140	150	300	300	–	300	–	100	140
Solubility in trichloroethylene, %	T 44	97.0	–	97.0	–	97.0	–	97.0	–	97.0	–	97.0	–
Viscosity, 140°F, poise	T 202	–	–	1,500	–	–	–	–	–	–	–	1,300	–
Float test, 140°F, sec.	T 50	–	–	1,200	–	1,200	–	1,200	–	1,200	–	–	–
Ductility,[2] 39.2°F, 5 cm/min., cm	T 51	–	–	50	–	–	–	–	–	–	–	50	–
Elastic recovery,[2] 50°F, %	Tex-539-C	55	–	55	–	–	–	–	–	–	–	–	–
Tests on RTFO curing of distillation residue	Tex-541-C												
Elastic recovery, 50°F, %	Tex-539-C	–	–	–	–	50	–	50	–	30	–	–	–

1. Exception to T 59: Bring the temperature on the lower thermometer slowly to 350°F ±10°F. Maintain at this temperature for 20 min. Complete total distillation in 60 min. (±5 min.) from the first application of heat.
2. HFRS-2P must meet one of either the ductility or elastic recovery requirements.

Table 10
Polymer-Modified Cationic Emulsified Asphalt

Property	Test Procedure	Type-Grade											
		Rapid-Setting						Medium-Setting				Slow-Setting	
		CRS-1P		CRS-2P		CHFRS-2P		CMS-1P[3]		CMS-2P[3]		CSS-1P	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol	T 72												
77°F, sec.		–	–	–	–	–	–	20	100	–	–	20	100
122°F, sec.		50	150	150	400	100	400	–	–	50	400	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1
Demulsibility, 35 ml of 0.8% Sodium dioctyl sulfosuccinate, %	T 59	60	–	70	–	60	–	–	–	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	1	–	–	–	–	–	1
Breaking index, g	Tex-542-C	–	80	–	–	–	–	–	–	–	–	–	–
Particle charge	T 59	Positive		Positive		Positive		Positive		Positive		Positive	
Distillation test:[1]	T 59												
Residue by distillation, % by weight		65	–	65	–	65	–	65	–	65	–	62	–
Oil distillate, % by volume of emulsion		–	3	–	0.5	–	0.5	–	0.5	–	0.5	–	0.5
Tests on residue from distillation:													
Polymer content, wt. % (solids basis)	Tex-533-C	–	–	3.0	–	3.0	–	–	–	–	–	3.0	–
Penetration, 77°F, 100 g, 5 sec.	T 49	225	300	90	150	80	130	40	–	40	–	55	90
Viscosity, 140°F, poise	T 202	–	–	1,300	–	1,300	–	–	5,000	–	5,000	–	–
Solubility in trichloroethylene, %	T 44	97.0	–	97.0	–	95.0	–	–	–	–	–	97.0	–
Softening point, °F	T 53	–	–	–	–	130	–	–	–	–	–	135	–
Ductility, 77°F, 5 cm/min., cm	T 51	–	–	–	–	–	–	–	–	–	–	70	–
Float test, 140°F, sec.	T 50	–	–	–	–	1,800	–	–	–	–	–		
Ductility,[2] 39.2°F, 5 cm/min., cm	T 51	–	–	50	–	–	–	–	–	–	–	–	–
Elastic recovery,[2] 50°F, %	Tex-539-C	45	–	55	–	55	–	45	–	45	–	–	–
Tests on rejuvenating agent:													
Viscosity, 140°F, cSt	T 201	–	–	–	–	–	–	50	175	50	175	–	–
Flash point, C.O.C., °F	T 48	–	–	–	–	–	–	380	–	380	–	–	–
Saturates, % by weight	D2007	–	–	–	–	–	–	–	30	–	30	–	–
Solubility in n-pentane, % by weight	D2007	–	–	–	–	–	–	99	–	99	–	–	–
Tests on rejuvenating agent after TFO or RTFO:	T 240 or T 179												
Weight Change, %		–	–	–	–	–	–	–	6.5	–	6.5	–	–
Viscosity Ratio		–	–	–	–	–	–	–	3.0	–	3.0	–	–
Tests on latex:[4]													
Tensile strength, die C dumbbell, psi	D412[5]	–	–	–	–	–	–	500	–	500	–	–	–
Change in mass after immersion in rejuvenating agent, %	D471	–	–	–	–	–	–	–	40[6]	–	40[6]	–	–

1. Exception to T 59: Bring the temperature on the lower thermometer slowly to 350°F (±0°F). Maintain at this temperature for 20 min. Complete total distillation in 60 min. (±5 min.) from the first application of heat.
2. CRS-2P must meet one of either the ductility or elastic recovery requirements.
3. With all precertification samples of CMS-1P or CMS-2P, submit certified test reports showing that the rejuvenating agent and latex meet the stated requirements. Submit samples of these raw materials if requested by the Engineer.
4. Preparation of latex films: Use any substrate which produces a film of uniform cross-section. Apply latex using a drawdown tool that will deliver enough material to achieve desired residual thickness. Cure films for 14 days at 75°F and 50% relative humidity.
5. Cut samples for tensile strength determination using a crosshead speed of 20 in./min.
6. Specimen must remain intact after exposure and removal of excess rejuvenating agent.

2.5. **Specialty Emulsions**. Provide specialty emulsion that is either asphalt-based or resin-based and meets the requirements of Table 11.

Table 11
Specialty Emulsions

Property	Test Procedure	Type–Grade					
		Medium-Setting				Slow-Setting	
		AE–P		EAP&T		PCE[1]	
		Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol	T 72						
77°F, sec.		–	–	–	–	10	100
122°F, sec.		15	150	–	–	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1
Miscibility[2]	T 59	–		Pass		Pass	
Demulsibility, 35 ml of 0.10 N $CaCl_2$, %	T 59	–	70	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	–
Particle size,[5] % by volume < 2.5 μm	Tex-238-F[3]	–	–	90	–	90	–
Asphalt emulsion distillation to 500°F followed by Cutback asphalt distillation of residue to 680°F:	T 59 & T 78						
Residue after both distillations, % by wt.		40	–	–	–	–	–
Total oil distillate from both distillations, % by volume of emulsion		25	40	–	–	–	–
Residue by distillation, % by wt.	T 59	–	–	60	–	–	–
Residue by evaporation,[4] % by wt.	T 59	–	–	–	–	60	–
Tests on residue after all distillation(s):							
Viscosity, 140°F, poise	T 202	–	–	800	–	–	–
Kinematic viscosity,[5] 140°F, cSt	T 201	–	–	–	–	100	350
Flash point C.O.C., °F	T 48	–	–	–	–	400	–
Solubility in trichloroethylene, %	T 44	97.5	–	–	–	–	–
Float test, 122°F, sec.	T 50	50	200	–	–	–	–

Supply with each shipment of PCE:
a copy of a lab report from an approved analytical lab, signed by a lab official, indicating the PCE formulation does not meet any characteristics of a Resource Conservation Recovery Act (RCRA) hazardous waste;
a certification from the producer that the formulation supplied does not differ from the one tested and that no listed RCRA hazardous wastes or Polychlorinated Biphenyls (PCBs) have been mixed with the product; and
a Material Safety Data Sheet.
Exception to T 59: In dilution, use 350 ml of distilled or deionized water and a 1,000-ml beaker.
Use Tex-238-F, beginning at "Particle Size Analysis by Laser Diffraction," with distilled or deionized water as a medium and no dispersant, or use another approved method.
Exception to T 59: Leave sample in the oven until foaming ceases, then cool and weigh.
PCE must meet either the kinematic viscosity requirement or the particle size requirement.

2.6. **Recycling Agent**. Recycling agent and emulsified recycling agent must meet the requirements in Table 12. Additionally, recycling agent and residue from emulsified recycling agent, when added in the specified proportions to the recycled asphalt, must meet the properties specified on the plans.

Table 12
Recycling Agent and Emulsified Recycling Agent

Property	Test Procedure	Recycling Agent		Emulsified Recycling Agent	
		Min	Max	Min	Max
Viscosity, Saybolt Furol, 77°F, sec.	T 72	–	–	15	100
Sieve test, %	T 59	–	–	–	0.1
Miscibility[1]	T 59	–		No coagulation	
Residue by evaporation,[2] % by wt.	T 59	–	–	60	–
Tests on recycling agent or residue from evaporation:					
Flash point, C.O.C., °F	T 48	400	–	400	–
Kinematic viscosity,	T 201				
140°F, cSt		75	200	75	200
275°F, cSt		–	10.0	–	10.0

1. Exception to T 59: Use 0.02 N CaCl2 solution in place of water.
2. Exception to T 59: Maintain sample at 300°F until foaming ceases, then cool and weigh.

2.7. **Crumb Rubber Modifier**. Crumb rubber modifier (CRM) consists of automobile and truck tires processed by ambient temperature grinding.

CRM must be:

- free from contaminants including fabric, metal, and mineral and other nonrubber substances;
- free-flowing; and
- nonfoaming when added to hot asphalt binder.

Ensure rubber gradation meets the requirements of the grades in Table 13 when tested in accordance with Tex-200-F, Part I, using a 50-g sample.

Table 13
CRM Gradations

Sieve Size	Grade A		Grade B		Grade C		Grade D	Grade E
(% Passing)	Min	Max	Min	Max	Min	Max		
#8	100	–	–	–	–	–		
#10	95	100	100	–	–	–		
#16	–	–	70	100	100	–	As shown on	As
#30	–	–	25	60	90	100	the plans	approved
#40	–	–	–	–	45	100		
#50	0	10	–	–	–	–		
#200	–	–	0	5	–	–		

2.8. **Crack Sealer.** Provide polymer-modified asphalt-emulsion crack sealer meeting the requirements of Table 14. Provide rubber-asphalt crack sealer meeting the requirements of Table 15.

Table 14
Polymer-Modified Asphalt-Emulsion Crack Sealer

Property	Test Procedure	Min	Max
Rotational viscosity, 77°F, cP	D2196, Method A	10,000	25,000
Sieve test, %	T 59	–	0.1
Storage stability, 1 day, %	T 59	–	1
Evaporation	Tex-543-C		
Residue by evaporation, % by wt.		65	–
Tests on residue from evaporation:			
Penetration, 77°F, 100 g, 5 sec.	T 49	35	75
Softening point, °F	T 53	140	–
Ductility, 39.2°F, 5 cm/min., cm	T 51	100	–

Table 15
Rubber-Asphalt Crack Sealer

Property	Test Procedure	Class A		Class B	
		Min	Max	Min	Max
CRM content, Grade A or B, % by wt.	Tex-544-C	22	26	–	–
CRM content, Grade B, % by wt.	Tex-544-C	–	–	13	17
Virgin rubber content,[1] % by wt.		–	–	2	–
Flash point,[2] C.O.C., °F	T 48	400	–	400	–
Penetration,[3] 77°F, 150 g, 5 sec.	T 49	30	50	30	50
Penetration,[3] 32°F, 200 g, 60 sec.	T 49	12	–	12	–
Softening point, °F	T 53	–	–	170	–
Bond Test, non-immersed, 0.5 in specimen, 50% extension, 20°F[4]	D5329	–		Pass	

1. Provide certification that the Min % virgin rubber was added.
2. Agitate the sealing compound with a 3/8- to 1/2-in. (9.5- to 12.7-mm) wide, square-end metal spatula to bring the material on the bottom of the cup to the surface (i.e., turn the material over) before passing the test flame over the cup. Start at one side of the thermometer, move around to the other, and then return to the starting point using 8 to 10 rapid circular strokes. Accomplish agitation in 3 to 4 sec. Pass the test flame over the cup immediately after stirring is completed.
3. Exception to T 49: Substitute the cone specified in D217 for the penetration needle.
4. Allow no crack in the crack sealing materials or break in the bond between the sealer and the mortar blocks over 1/4 in. deep for any specimen after completion of the test.

2.9. **Asphalt-Rubber Binders.** Provide asphalt-rubber (A-R) binders that are mixtures of asphalt binder and CRM, which have been reacted at elevated temperatures. Provide A-R binders meeting D6114 and containing a minimum of 15% CRM by weight. Provide Types I or II, containing CRM Grade C, for use in hot-

mixed aggregate mixtures. Provide Types II or III, containing CRM Grade B, for use in surface treatment binder. Ensure binder properties meet the requirements of Table 16.

Table 16
A-R Binders

Property	Test Procedure	Binder Type					
		Type I		Type II		Type III	
		Min	Max	Min	Max	Min	Max
Apparent viscosity, 347°F, cP	D2196, Method A	1,500	5,000	1,500	5,000	1,500	5,000
Penetration, 77°F, 100 g, 5 sec.	T 49	25	75	25	75	50	100
Penetration, 39.2°F, 200 g, 60 sec.	T 49	10	–	15	–	25	–
Softening point, °F	T 53	135	–	130	–	125	–
Resilience, 77°F, %	D5329	25	–	20	–	10	–
Flash point, C.O.C., °F	T 48	450	–	450	–	450	–
Tests on residue from Thin-Film Oven Test:	T 179						
Retained penetration ratio, 39.2°F, 200 g, 60 sec., % of original	T 49	75	–	75	–	75	–

2.10. **Performance-Graded Binders.** Provide PG binders that are smooth and homogeneous, show no separation when tested in accordance with Tex-540-C, and meet the requirements of Table 17.

Separation testing is not required if:

- a modifier is introduced separately at the mix plant either by injection in the asphalt line or mixer,
- the binder is blended on site in continuously agitated tanks, or
- binder acceptance is based on field samples taken from an in-line sampling port at the hot-mix plant after the addition of modifiers.

Table 17
Performance-Graded Binders

Property and Test Method	Performance Grade																			
	PG 58			PG 64				PG 70				PG 76				PG 82				
	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28		
Average 7-day max pavement design temperature, °C[1]	< 58			< 64				< 70				< 76				< 82				
Min pavement design temperature, °C[1]	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28		
Original Binder																				
Flash point, T 48, Min, °C	230																			
Viscosity, T 316:[2,3] Max, 3.0 Pa·s, test temperature, °C	135																			
Dynamic shear, T 315:[4] G*/sin(δ), Min, 1.00 kPa, Max, 2.00 kPa,[7] Test temperature @ 10 rad/sec., °C	58			64				70				76				82				
Elastic recovery, D6084, 50°F, % Min	–	–	30	–	–	30	50	–	30	50	60	30	50	60	70	50	60	70		
Rolling Thin-Film Oven (Tex-541-C)																				
Mass loss, Tex-541-C, Max, %	1.0																			
Dynamic shear, T 315: G*/sin(δ), Min, 2.20 kPa, Max, 5.00 kPa,[7] Test temperature @ 10 rad/sec., °C	58			64				70				76				82				
Pressure Aging Vessel (PAV) Residue (R 28)																				
PAV aging temperature, °C	100																			
Dynamic shear, T 315: G*/sin(δ), Max, 5,000 kPa Test temperature @ 10 rad/sec., °C	25	22	19	28	25	22	19	28	25	22	19	28	25	22	19	28	25	22		
Creep stiffness, T 313:[5,6] *S*, max, 300 MPa, *m*-value, Min, 0.300 Test temperature @ 60 sec., °C	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18		
Direct tension, T 314:[6] Failure strain, Min, 1.0% Test temperature @ 1.0 mm/min., °C	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18	-24	-6	-12	-18		

1. Pavement temperatures are estimated from air temperatures using an algorithm contained in a Department-supplied computer program, may be provided by the Department, or by following the procedures outlined in AASHTO MP 2 and PP 28.
2. This requirement may be waived at the Department's discretion if the supplier warrants that the asphalt binder can be adequately pumped, mixed, and compacted at temperatures that meet all applicable safety, environmental, and constructability requirements. At test temperatures where the binder is a Newtonian fluid, any suitable standard means of viscosity measurement may be used, including capillary (T 201 or T 202) or rotational viscometry (T 316).
3. Viscosity at 135°C is an indicator of mixing and compaction temperatures that can be expected in the lab and field. High values may indicate high mixing and compaction temperatures. Additionally, significant variation can occur from batch to batch. Contractors should be aware that variation could significantly impact their mixing and compaction operations. Contractors are therefore responsible for addressing any constructability issues that may arise.
4. For quality control of unmodified asphalt binder production, measurement of the viscosity of the original asphalt binder may be substituted for dynamic shear measurements of G*/sin(δ) at test temperatures where the asphalt is a Newtonian fluid. Any suitable standard means of viscosity measurement may be used, including capillary (T 201 or T 202) or rotational viscometry (T 316).
5. Silicone beam molds, as described in AASHTO TP 1-93, are acceptable for use.
6. If creep stiffness is below 300 MPa, direct tension test is not required. If creep stiffness is between 300 and 600 MPa, the direct tension failure strain requirement can be used instead of the creep stiffness requirement. The m-value requirement must be satisfied in both cases.
7. Maximum values for unaged and RTFO aged dynamic shear apply only to materials used as substitute binders, as described in specification items, 340, 341, and 344.

3. EQUIPMENT

Provide all equipment necessary to transport, store, sample, heat, apply, and incorporate asphalts, oils, and emulsions.

4. CONSTRUCTION

Typical Material Use. Use materials shown in Table 18, unless otherwise determined by the Engineer.

Table 18
Typical Material Use

Material Application	Typically Used Materials
Hot-mixed, hot-laid asphalt mixtures	PG binders, A-R binders Types I and II
Surface treatment	AC-5, AC-10, AC-5 w/2% SBR, AC-10 w/2% SBR, AC-15P, AC-20XP, AC-10-2TR, AC-20-5TR, HFRS-2, MS-2, CRS-2, CRS-2H, HFRS-2P,CRS-2P, CHFRS-2P, A-R binders Types II and III
Surface treatment (cool weather)	RS-1P, CRS-1P, RC-250, RC-800, RC-3000, MC-250, MC-800, MC-3000, MC-2400L
Precoating	AC-5, AC-10, PG 64-22, SS-1, SS-1H, CSS-1, CSS-1H
Tack coat	PG Binders, SS-1H, CSS-1H, EAP&T
Fog seal	SS-1, SS-1H, CSS-1, CSS-1H
Hot-mixed, cold-laid asphalt mixtures	AC-0.6, AC-1.5, AC-3, AES-300, AES-300P, CMS-2, CMS-2S
Patching mix	MC-800, SCM I, SCM II, AES-300S
Recycling	AC-0.6, AC-1.5, AC-3, AES-150P, AES-300P, recycling agent, emulsified recycling agent
Crack sealing	SS-1P, polymer mod AE crack sealant, rubber asphalt crack sealers (Class A, Class B)
Microsurfacing	CSS-1P
Prime	MC-30, AE-P, EAP&T, PCE
Curing membrane	SS-1, SS-1H, CSS-1, CSS-1H, PCE
Erosion control	SS-1, SS-1H, CSS-1, CSS-1H, PCE

4.1. **Storage and Application Temperatures**. Use storage and application temperatures in accordance with Table 19. Store and apply materials at the lowest temperature yielding satisfactory results. Follow the manufacturer's instructions for any agitation requirements in storage. Manufacturer's instructions regarding recommended application and storage temperatures supersede those of Table 19.

Table 19
Storage and Application Temperatures

Type–Grade	Application		Storage Maximum (°F)
	Recommended Range (°F)	Maximum Allowable (°F)	
AC-0.6, AC-1.5, AC-3	200–300	350	350
AC-5, AC-10	275–350	350	350
AC-5 w/2% SBR, AC-10 w/2% SBR, AC-15P, AC-20-5TR	300–375	375	360
RC-250	125–180	200	200
RC-800	170–230	260	260
RC-3000	215–275	285	285
MC-30, AE-P	70–150	175	175
MC-250	125–210	240	240
MC-800, SCM I, SCM II	175–260	275	275
MC-3000, MC-2400L	225–275	290	290
HFRS-2, MS-2, CRS-2, CRS-2H, HFRS-2P, CRS-2P, CMS-2, CMS-2S, AES-300, AES-300S, AES-150P, AES-300P	120–160	180	180
SS-1, SS-1H, CSS-1, CSS-1H, PCE, EAP&T, SS-1P, RS-1P, CRS-1P, CSS-1P, recycling agent, emulsified recycling agent, polymer mod AE crack sealant	50–130	140	140
PG binders	275–350	350	350
Rubber asphalt crack sealers (Class A, Class B)	350–375	400	–
A-R binders Types I, II, and III	325–425	425	425

5. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but is subsidiary or is included in payment for other pertinent Items.

Item 301
Asphalt Antistripping Agents

1. DESCRIPTION

Furnish and incorporate all required asphalt antistripping agents in asphalt concrete paving mixtures and asphalt-stabilized base mixtures to meet moisture resistance testing requirements.

2. MATERIALS

2.1. **Lime**. Provide hydrated lime or commercial lime slurry in accordance with DMS-6350, "Lime and Lime Slurry."

2.2. **Liquid Antistripping Agent**. Provide a liquid antistripping agent that is uniform and shows no evidence of crystallization, settling, or separation.

Ensure all liquid antistripping agents arrive in:

- properly labeled and unopened containers, as shipped from the manufacturer, or
- sealed tank trucks with an invoice to show contents and quantities.

Provide product information to the Engineer including:

- material safety data sheet,
- specific gravity of the agent at the manufacturer's recommended addition temperature,
- manufacturer's recommended dosage range, and
- handling and storage instructions.

3. EQUIPMENT

Provide all equipment to store, handle, dispense, meter, and mix asphalt antistripping agents.

4. CONSTRUCTION

4.1. **Laboratory Design Evaluation and Production Mixture Verification**. Provide a laboratory mixture design and production mixture that meet moisture resistance requirements. Evaluate proposed asphalt pavement or base mixtures during design and production according to the moisture resistance requirements in the asphalt mixture specification.

Governing specifications require the Contractor or Engineer to design the mixture, and the party performing the design is responsible for the moisture susceptibility evaluation. If the Contractor designs the mixture, the Engineer verifies compliance.

Determine the dosage needed to achieve the moisture resistance requirements during design if an antistripping agent is required. Use this addition rate in the production mixture.

Add between 0.5% and 2.0% of hydrated lime or commercial lime slurry solids by weight of the individual aggregate treated when using lime.

Add liquid antistripping agent, when used, to the binder, in accordance with the manufacturer's instructions. Do not exceed the manufacturer's maximum recommended dosage rate.

Stop production if the production mixture does not meet moisture resistance requirements and correct the problem.

4.2. **Addition of Antistripping Agents at the Mix Plant.** Connect the measuring device for the addition of the asphalt antistripping agent into the automatic plant controls to automatically adjust the supply to plant production and provide a consistent percentage in the mixture. Set automatic plant controls so that an interruption of asphalt antistripping agent's flow causes plant shutdown.

4.2.1. **Lime.** Incorporate lime in a manner that thoroughly and uniformly distributes lime onto the aggregate surface or into the mixture. Use metering equipment, as approved, to ensure the required quantity of lime is used.

4.2.1.1. **Hydrated Lime.** Add hydrated lime to the aggregate by one of the following methods, unless otherwise shown on the plans:

- Mix in an approved pug mill mixer with damp aggregate containing water at least 2% above saturated surface dry conditions.
- Add into the drum-mix plant immediately before asphalt binder addition or in the pug mill of the weigh-batch plant before asphalt binder addition. Dry mix aggregates and lime before adding asphalt binder when a weigh batch plant is used.

4.2.1.2. **Commercial Lime Slurry.** Add commercial lime slurry to the aggregate by one of the following methods unless otherwise shown on the plans:

- Mix in a suitable pug mill mixer with the aggregate.
- Mix with aggregate between the plant cold feeds and the dryer or mixing drum during mixture production.

4.2.2. **Liquid Antistripping Agent.** Incorporate liquid antistripping agent into the binder as follows:

- Handle in accordance with the manufacturer's recommendations.
- Add at the manufacturer's recommended addition temperature.
- Add into the asphalt line by means of an in-line-metering device, in accordance with Item 520, "Weighing and Measuring Equipment," and a blending device to disperse the agent.
- Place the metering and blending devices in an approved location.

5. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but is subsidiary or is included in payment quantity for other pertinent Items.

Item 310
Prime Coat

1. DESCRIPTION

Prepare and treat existing or newly constructed surface with an asphalt binder or other specialty prime coat binder material. Apply blotter material as required.

2. MATERIALS

2.1. **Binder**. Use material of the type and grade shown on the plans in accordance with Item 300, "Asphalts, Oils, and Emulsions," or as listed in the Department's MPL for prime coat binders.

2.2. **Blotter**. Use either base course sweepings obtained from cleaning the base or native sand as blotter materials unless otherwise shown on the plans or approved.

3. EQUIPMENT

Provide applicable equipment in accordance with Article 316.3., "Equipment."

4. CONSTRUCTION

4.1. **General**. Apply the mixture when the air temperature is at or above 60°F, or above 50°F and rising. Measure the air temperature in the shade away from artificial heat. The Engineer will determine when weather conditions are suitable for application.

Do not permit traffic, hauling, or placement of subsequent courses over freshly constructed prime coats. Maintain the primed surface until placement of subsequent courses or acceptance of the work.

4.2. **Surface Preparation**. Prepare the surface by sweeping or other approved methods. Lightly sprinkle the surface with water before applying bituminous material, when directed, to control dust and ensure absorption.

4.3. **Application**.

4.3.1. **Binder**. The Engineer will select the application temperature within the limits recommended in Item 300, "Asphalts, Oils, and Emulsions," or by the material manufacturer. Apply material within 15°F of the selected temperature but do not exceed the maximum allowable temperature.

Distribute the material smoothly and evenly at the rate selected by the Engineer. Roll the freshly applied prime coat with a pneumatic-tire roller to ensure penetration when directed.

4.3.2. **Blotter**. Spread blotter material before allowing traffic to use a primed surface. Apply blotter material to primed surface at the specified rate when "Prime Coat and Blotter" is shown on the plans as a bid item or as directed. Apply blotter to spot locations when "Prime Coat" is shown on the plans as a bid item or as directed to accommodate traffic movement through the work area. Remove blotter material before placing the surface. Dispose of blotter material according to applicable state and federal requirements.

5. MEASUREMENT

This Item will be measured by the gallon of binder placed and accepted.

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Prime Coat" or "Prime Coat and Blotter" of the type and grade of binder specified. This price is full compensation for cleaning and sprinkling the area to be primed; materials, including blotter material; and rolling, equipment, labor, tools, and incidentals.

Item 316
Seal Coat

1. DESCRIPTION

Construct a surface treatment consisting of one or more applications of a single layer of asphalt material covered with a single layer of aggregate.

2. MATERIALS

Furnish materials of the type and grade shown on the plans in accordance with the following:

2.1. **Asphalt**. Furnish asphalt materials meeting the requirements of Item 300, "Asphalts, Oils, and Emulsions."

Furnish Type II or Type III A-R binder in accordance with Section 300.2.9., "Asphalt-Rubber Binders," as shown on the plans. Furnish a blend design for approval. Include in the design, at a minimum, the following:

- manufacturer and grade of asphalt cement;
- manufacturer and grade of crumb rubber;
- manufacturer, type, and percentage of extender oil, if used;
- test report on crumb rubber gradation in accordance with Tex-200-F, Part I;
- design percentage of crumb rubber versus asphalt content;
- blending temperature; and
- test results on the properties at reaction times of 60, 90, 240, 360, and 1,440 min. in accordance with Section 300.2.9., "Asphalt-Rubber Binders."

Furnish a new asphalt-rubber blend design if the grade or source for any of the components changes.

If a tack coat is specified when using asphalt-rubber, unless otherwise shown on the plans or approved, furnish CSS-1H, SS-1H, or a performance grade (PG) binder with a minimum high temperature grade of PG 58 for tack coat binder. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use. If required, verify that emulsified asphalt proposed for use meets the minimum residual asphalt percentage specified in Item 300, "Asphalts, Oils, and Emulsions."

2.2. **Aggregate**. Furnish aggregate meeting Item 302, "Aggregates for Surface Treatments," of the type and grade shown on the plans. Unless otherwise shown on the plans, furnish aggregate with a minimum B Surface Aggregate Classification.

2.3. **Materials Selections**. Furnish asphalt and aggregate shown on the plans.

3. EQUIPMENT

3.1. **Distributor**. Furnish a distributor that will apply the asphalt material uniformly at the specified rate or as directed.

3.1.1. **Transverse Variable Rate**. When a transverse variable rate is shown on the plans, ensure that the nozzles outside the wheel paths will output a predetermined percentage more asphalt material by volume than the nozzles over the wheel paths. Use a dual spray bar distributor as desired to provide for a transverse variable rate.

3.1.2. **Agitation for Asphalt-Rubber.** If using asphalt-rubber, furnish a distributor capable of keeping the rubber in uniform suspension and adequately mixing the asphalt, rubber, and any additional additives.

3.1.3. **Calibration.**

3.1.3.1. **Transverse Distribution.** Furnish a distributor test report, less than 1 yr. old, when tested in accordance with Tex-922-K, Part III. The Department reserves the right to witness the calibration testing. Notify the Engineer 3 days before calibration testing.

Include the following documentation on the test report:

- the serial number of the distributor,
- a method that identifies the actual nozzle set used in the test, and
- the fan width of the nozzle set at a 12-in. bar height.

When a transverse variable rate is required, and a single spray bar is to be used, perform the test using the type and grade of asphalt material to be used on the project. The Engineer may verify the transverse rate and distribution at any time. If verification does not meet the requirements, correct deficiencies and furnish a new test report.

3.1.3.2. **Tank Volume.** Furnish a volumetric calibration and strap stick for the distributor tank in accordance with Tex-922-K, Part I.

Provide documentation of distributor calibration performed not more than 5 yr. before the date first used on the project. The Engineer may verify calibration accuracy in accordance with Tex-922-K, Part II.

3.1.4. **Computerized Distributor.** When paying for asphalt material by weight, the Engineer may allow use of the computerized distributor display to verify application rates. Verify application rate accuracy at a frequency acceptable to the Engineer.

3.2. **Aggregate Spreader.** Use a continuous-feed, self-propelled spreader to apply aggregate uniformly at the specified rate or as directed. If racked in aggregate is specified on the plans, furnish a second aggregate spreader for the racked in aggregate to apply aggregate uniformly at the specified rate.

3.3. **Rollers.** Unless otherwise shown on the plans, furnish light pneumatic-tire rollers in accordance with Item 210, "Rolling."

3.4. **Broom.** Furnish rotary, self-propelled brooms.

3.5. **Asphalt Storage and Handling Equipment.** When the plans or the Engineer allows storage tanks, furnish a thermometer in each tank to indicate the asphalt temperature continuously. Keep equipment clean and free of leaks. Keep asphalt material free of contamination.

3.6. **Aggregate Haul Trucks.** Unless otherwise approved, use trucks of uniform capacity to deliver the aggregate. Provide documentation showing measurements and calculation in cubic yards. Clearly mark the calibrated level. Truck size may be limited when shown on the plans.

3.7. **Digital Distance Measuring Instrument.** Furnish a vehicle with a calibrated digital distance measuring instrument accurate to ±6 ft. per mile.

4. CONSTRUCTION

4.1. **General.** Comply with the seal coat season as shown on the plans. Asphalt and aggregate rates shown on the plans are for estimating purposes only. Adjust the rates for existing conditions as directed.

4.2. **Temporary Aggregate Stockpiles**. The Engineer will approve the location of temporary aggregate stockpiles on the right of way before delivery. Place stockpiles in a manner that will not:

- obstruct traffic or sight distance,
- interfere with the access from abutting property, or
- interfere with roadway drainage.

Locate stockpiles a minimum of 30 ft. from roadway when possible. Sign and barricade as shown on the plans.

4.3. **Aggregate Furnished by the Department**. When shown on the plans, the Department will furnish aggregate to the Contractor without cost. Stockpile locations are shown on the plans.

4.4. **Adverse Weather Conditions**. Do not place surface treatments when, in the Engineer's opinion, general weather conditions are unsuitable. Meet the requirements for air and surface temperature shown below.

4.4.1. **Standard Temperature Limitations**. Apply seal coat when air temperature is above 50°F and rising. Do not apply seal coat when air temperature is 60°F and falling. In all cases, do not apply seal coat when surface temperature is below 60°F.

4.4.2. **Polymer-Modified Asphalt Cement Temperature Limitations**. When using materials described in Section 300.2.2., "Polymer Modified Asphalt Cement," apply seal coat when air temperature is above 70°F and rising. Do not apply seal coat when air temperature is 80°F and falling. In all cases, do not apply seal coat when surface temperature is below 70°F.

4.4.3. **Asphalt-Rubber Temperature Limitations**. Do not place hot asphalt-rubber seal coat when, in the Engineer's opinion, general weather conditions are unsuitable. Apply seal coat when the air temperature is 80°F and above, or above 70°F and rising. In all cases, do not apply seal coat when surface temperature is below 70°F.

4.4.4. **Cool Weather Night Air Temperature**. The Engineer reserves the right to review the **National Oceanic and Atmospheric Administration** (**NOAA**) weather forecast and determine if the nightly air temperature is suitable for asphalt placement to prevent aggregate loss.

4.4.5. **Cold Weather Application**. When asphalt application is allowed outside of the above temperature restrictions, the Engineer will approve the binder grade and the air and surface temperatures for asphalt material application. Apply seal coat at air and surface temperatures as directed.

4.5. **Mixing Hot A-R Binder**. If using asphalt-rubber, mix in accordance with the approved blend design required in Section 316.2.1., "Asphalt."

At the end of each shift, provide the Engineer with production documentation, which includes the following:

- amount and temperature of asphalt cement before addition of rubber,
- amount of rubber and any extender added,
- viscosity of each hot A-R batch just before roadway placement, and
- time of the rubber additions and viscosity tests.

4.6. **Surface Preparation**. Remove existing raised pavement markers. Repair any damage incurred by removal as directed. Remove dirt, dust, or other harmful material before sealing. When shown on the plans, remove vegetation and blade pavement edges. When directed, apply a tack coat before applying the hot asphalt-rubber treatment on an existing wearing surface in accordance with Section 340.2.5., "Tack Coat."

4.7. **Rock Land and Shot**.

4.7.1. **Definitions**.

- A "rock land" is the area covered at the aggregate rate directed with 1 truckload of aggregate.

- A "shot" is the area covered by 1 distributor load of asphalt material.

4.7.2. **Setting Lengths**. Calculate the lengths of both rock land and shot. Adjust shot length to be an even multiple of the rock land. Verify that the distributor has enough asphalt material to complete the entire shot length. Mark shot length before applying asphalt. When directed, mark length of each rock land to verify the aggregate rate.

4.8. **Asphalt Placement**.

4.8.1. **General**. The maximum shot width is the width of the current transverse distribution test required under Section 316.3.1.3.1., "Transverse Distribution," or the width of the aggregate spreader box, whichever is less. Adjust the shot width so operations do not encroach on traffic or interfere with the traffic control plan, as directed. Use paper or other approved material at the beginning and end of each shot to construct a straight transverse joint and to prevent overlapping of the asphalt. Unless otherwise approved, match longitudinal joints with the lane lines. The Engineer may require a string line if necessary to keep joints straight with no overlapping. Use sufficient pressure to flare the nozzles fully.

Select an application temperature, as approved, in accordance with Item 300, "Asphalts, Oils, and Emulsions." Uniformly apply the asphalt material at the rate directed, within 15°F of the approved temperature, and not above the maximum allowable temperature.

4.8.2. **Limitations**. Do not apply asphalt to the roadway until:

- traffic control methods and devices are in place as shown on the plans or as directed,
- the loaded aggregate spreader is in position and ready to begin,
- haul trucks are loaded with enough aggregate to cover the shot area and are in place behind the spreader box, and
- rollers are in place behind the haul trucks.

4.8.3. **Nonuniform Application**. Stop application if it is not uniform due to streaking, ridging, puddling, or flowing off the roadway surface. Verify equipment condition, operating procedures, application temperature, and material properties. Determine and correct the cause of nonuniform application. If the cause is high or low emulsion viscosity, replace emulsion with material that corrects the problem.

4.8.4. **Test Strips**. The Engineer may stop asphalt application and require construction of test strips at the Contractor's expense if any of the following occurs:

- nonuniformity of application continues after corrective action;
- on 3 consecutive shots, application rate differs by more than 0.03 gal. per square yard from the rate directed; or
- any shot differs by more than 0.05 gal. per square yard from the rate directed.

The Engineer will approve the test strip location. The Engineer may require additional test strips until surface treatment application meets specification requirements.

4.9. **Aggregate Placement**. As soon as possible, apply aggregate uniformly at the rate directed without causing the rock to roll over.

4.9.1. **Nonuniform Application**. Stop application if it is not uniform in the transverse direction. Verify equipment condition, operating procedures, and transverse application rate. The transverse application rate should be within 1 lb. Determine and correct the cause of nonuniform application.

4.10. **Rolling**. Start rolling operation on each shot as soon as aggregate is applied. Use sufficient rollers to cover the entire mat width in 1 pass, i.e., 1 direction. Roll in a staggered pattern. Unless otherwise shown on the plans, make a minimum of:

- 5 passes or

- 3 passes when the asphalt material is an emulsion.

If rollers are unable to keep up with the spreader box, stop application until rollers have caught up, or furnish additional rollers. Keep roller tires asphalt-free.

4.11. **Patching**. Before rolling, repair spots where coverage is incomplete. Repair can be made by hand spotting or other approved method. When necessary, apply additional asphalt material to embed aggregate.

4.12. **Racked-in Aggregate**. If specified on the plans, apply racked-in aggregate after patching, uniformly at the rate directed. The racked-in aggregate must be applied before opening the roadway or intersection to traffic.

4.13. **Brooming**. After rolling, sweep as soon as aggregate has sufficiently bonded to remove excess. In areas of racked-in aggregate, sweep as directed.

4.14. **Final Acceptance**. Maintain seal coat until the Engineer accepts the work. Repair any surface failures. Before final project acceptance, remove all temporary stockpiles and restore the area to the original contour and grade.

5. MEASUREMENT

5.1. **Asphalt Material**. Unless otherwise shown on the plans, asphalt material will be measured by one of the following methods:

5.1.1. **Volume**. Asphalt material, including all components, will be measured at the applied temperature by strapping the tank before and after road application. The distributor calibrated strap stick will be used for measuring the asphalt level in the distributor asphalt tank. The certified tank chart will be used to determine the beginning gallons and the final gallons in the distributor tank. The quantity to be measured for payment will be the difference between the beginning gallons and the final gallons.

5.1.2. **Weight**. Asphalt material will be measured in tons using certified scales meeting the requirements of Item 520, "Weighing and Measuring Equipment," unless otherwise approved. The transporting truck must have a seal attached to the draining device and other openings. Random checking on public scales at the Contractor's expense may be required to verify weight accuracy.

Upon work completion or temporary suspension, any remaining asphalt material will be weighed by a certified public weigher, or measured by volume in a calibrated distributor or tank and the quantity converted to tons at the measured temperature. The quantity to be measured will be the number of tons received minus the number of tons remaining after all directed work is complete and minus the amount used for other items.

5.1.3. **Quantity Adjustments**. When shown on the plans, the measured quantity will be adjusted to compensate for variation in required application or residual rates for different types of asphalt.

5.2. **Aggregate**. Aggregate will be measured by the cubic yard in the trucks as applied on the road. Strike off the loaded aggregate for accurate measurement when directed.

5.3. **Loading, Hauling, and Distributing Aggregate**. When the Department furnishes the aggregate, the loading, hauling, and distributing will be measured by the cubic yard in the trucks as applied on the road.

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit prices bid for "Asphalt," "Aggregate," and "Loading, Hauling, and Distributing Aggregate" of the types-grades specified on the plans. These prices are full compensation for surface preparation; furnishing, preparing, hauling, and placing materials; removing existing pavement markers and excess aggregate; rolling; cleaning up stockpiles; and equipment, labor, tools, and incidentals.

Item 320
Equipment for Asphalt Concrete Pavement

1. DESCRIPTION

Provide equipment to produce, haul, place, compact, and core asphalt concrete pavement.

2. EQUIPMENT

Ensure weighing and measuring equipment complies with Item 520, "Weighing and Measuring Equipment." Synchronize equipment to produce a mixture meeting the required proportions.

2.1. **Production Equipment**. Provide:

- drum-mix type, weigh-batch, or modified weigh-batch mixing plants that ensure a uniform, continuous production;
- automatic proportioning and measuring devices with interlock cut-off circuits that stop operations if the control system malfunctions;
- visible readouts indicating the weight or volume of asphalt and aggregate proportions;
- safe and accurate means to take required samples by inspection forces;
- permanent means to check the output of metering devices and to perform calibration and weight checks; and
- additive-feed systems to ensure a uniform, continuous material flow in the desired proportion.

2.1.1. **Drum-Mix Plants**. Provide a mixing plant that complies with the requirements below.

2.1.1.1. **Aggregate Feed System**. Provide:

- a minimum of one cold aggregate bin for each stockpile of individual materials used to produce the mix;
- bins designed to prevent overflow of material;
- scalping screens or other approved methods to remove any oversized material, roots, or other objectionable materials;
- a feed system to ensure a uniform, continuous material flow in the desired proportion to the dryer;
- an integrated means for moisture compensation;
- belt scales, weigh box, or other approved devices to measure the weight of the combined aggregate; and
- cold aggregate bin flow indicators that automatically signal interrupted material flow.

2.1.1.2. **Reclaimed Asphalt Pavement (RAP) and Recycled Asphalt Shingles (RAS) Feed Systems**. Provide a minimum of one bin for each stockpile of RAP and RAS to weigh and feed the recycled material into the hot-mix plant.

2.1.1.3. **Mineral Filler Feed System**. Provide a closed system for mineral filler that maintains a constant supply with minimal loss of material through the exhaust system. Interlock the measuring device into the automatic plant controls to automatically adjust the supply of mineral filler to plant production and provide a consistent percentage to the mixture.

2.1.1.4. **Heating, Drying, and Mixing Systems**. Provide:

- a dryer or mixing system to agitate the aggregate during heating;
- a heating system that controls the temperature during production to prevent aggregate and asphalt binder damage;

- a heating system that completely burns fuel and leaves no residue; and
- a recording thermometer that continuously measures and records the mixture discharge temperature.

2.1.1.5. **Dust Collection System**. Provide a dust collection system to collect fines generated by the drying and mixing process and reintroduce them into the mixing drum.

2.1.1.6. **Asphalt Binder Equipment**. Supply equipment to heat binder to the required temperature. Equip the heating apparatus with a continuously recording thermometer located at the highest temperature point. Produce a 24-hr. chart of the recorded temperature. Place a device with automatic temperature compensation that accurately meters the binder in the line leading to the mixer.

Furnish a sampling port on the line between the storage tank and mixer. Supply an additional sampling port between any additive blending device and mixer.

Supply an in-line viscosity-measuring device located between the blending unit and the mixing drum when A-R binder is specified. Provide a means to calibrate the meter on site when an asphalt mass flow meter is used.

2.1.1.7. **Mixture Storage and Discharge**. Provide a surge-storage system to minimize interruptions during operations unless otherwise approved. Furnish a gob hopper or other device to minimize segregation in the bin. Provide an automated system that weighs the mixture upon discharge and produces a ticket showing:

- date,
- project identification number,
- plant identification,
- mix identification,
- vehicle identification,
- total weight of the load,
- tare weight of the vehicle,
- weight of mixture in each load, and
- load number or sequential ticket number for the day.

2.1.1.8. **Truck Scales**. Provide standard platform scales at an approved location.

2.1.2. **Weigh-Batch Plants**. Provide a mixing plant that complies with Section 320.2.1.1., "Drum-Mix Plants," except as required below.

2.1.2.1. **Screening and Proportioning**. Provide enough hot bins to separate the aggregate and to control proportioning of the mixture type specified. Supply bins that discard excessive and oversized material through overflow chutes. Provide safe access for inspectors to obtain samples from the hot bins.

2.1.2.2. **Aggregate Weigh Box and Batching Scales**. Provide a weigh box and batching scales to hold and weigh a complete batch of aggregate. Provide an automatic proportioning system with low bin indicators that automatically stop when material level in any bin is not enough to complete the batch.

2.1.2.3. **Asphalt Binder Measuring System**. Provide bucket and scales with enough capacity to hold and weigh binder for one batch.

2.1.2.4. **Mixer**. Equip mixers with an adjustable automatic timer that controls the dry and wet mixing period and locks the discharge doors for the required mixing period. Furnish a pug mill with a mixing chamber large enough to prevent spillage.

2.1.3. **Modified Weigh-Batch Plants**. Provide a mixing plant that complies with Section 320.2.1.2., "Weigh-Batch Plants," except as specifically described below.

2.1.3.1. **Aggregate Feeds**. Aggregate control is required at the cold feeds. Hot bin screens are not required.

2.1.3.2. **Surge Bins**. Provide one or more bins large enough to produce 1 complete batch of mixture.

2.2. **Hauling Equipment**. Provide trucks with enclosed sides to prevent asphalt mixture loss. Cover each load of mixture with waterproof tarpaulins when shown on the plans or required by the Engineer. Clean all truck beds before use to ensure the mixture is not contaminated. Coat the inside truck beds, when necessary, with an approved release agent from the Department's MPL.

2.3. **Placement and Compaction Equipment**. Provide equipment that does not damage underlying pavement. Comply with laws and regulations concerning overweight vehicles. Use other equipment that will consistently produce satisfactory results, when approved.

2.3.1. **Asphalt Paver**. Furnish a paver that will produce a finished surface that meets longitudinal and transverse profile, typical section, and placement requirements. Ensure the paver does not support the weight of any portion of hauling equipment other than the connection. Provide loading equipment that does not transmit vibrations or other motions to the paver that adversely affect the finished pavement quality. Equip the paver with an automatic, dual, longitudinal-grade control system and an automatic, transverse-grade control system.

2.3.1.1. **Tractor Unit**. Supply a tractor unit that can push or propel vehicles, dumping directly into the finishing machine to obtain the desired lines and grades to eliminate any hand finishing. Equip the unit with a hitch able to maintain contact between the hauling equipment's rear wheels and the finishing machine's pusher rollers while mixture is unloaded.

2.3.1.2. **Screed**. Provide a heated compacting screed that will produce a finished surface that meets longitudinal and transverse profile, typical section, and placement requirements. Screed extensions must provide the same compacting action and heating as the main unit unless otherwise approved.

2.3.1.3. **Grade Reference**. Provide a grade reference with enough support that the maximum deflection does not exceed 1/16 in. between supports. Ensure that the longitudinal controls can operate from any longitudinal grade reference including a string line, ski, mobile reference, or joint matching shoes.

2.3.2. **Material Transfer Devices**. Provide the specified type of device when shown on the plans. Ensure the devices provide a continuous, uniform mixture flow to the asphalt paver. Provide windrow pick-up equipment, when used, constructed to pick up substantially all roadway mixture placed in the windrow.

2.3.3. **Remixing Equipment**. Provide equipment, when required, that includes a pug mill, variable pitch augers, or variable diameter augers operating under a storage unit with a minimum capacity of 8 tons.

2.3.4. **Motor Grader**. Provide a self-propelled grader, when allowed, with a blade length of at least 12 ft. and a wheelbase of at least 16 ft.

2.3.5. **Thermal Imaging System or Hand-Held Thermal Camera**. Provide a thermal imaging system or hand-held thermal camera meeting the requirements of Tex-244-F.

2.3.6. **Rollers**. Provide rollers meeting the requirements of Item 210, "Rolling," for each type of roller required for compaction.

2.3.7. **Straightedges and Templates**. Furnish 10-ft. straightedges and other templates as required or approved.

2.4. **Field Laboratory**. Provide and maintain a Type D Structure (Asphalt Mix Control Laboratory) unless otherwise shown on the plans in accordance with Item 504, "Field Office and Laboratory," and details shown on the plans.

2.5. **Coring Equipment**. Provide equipment suitable to obtain a pavement specimen meeting the dimensions for testing when coring is required.

3. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items.

Item 341
Dense-Graded Hot-Mix Asphalt

1. DESCRIPTION

Construct a hot-mix asphalt (HMA) pavement layer composed of a compacted, dense-graded mixture of aggregate and asphalt binder mixed hot in a mixing plant. Pay adjustments will apply to HMA placed under this specification unless the HMA is deemed exempt in accordance with Section 341.4.9.4., "Exempt Production."

2. MATERIALS

Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications.

Notify the Engineer of all material sources and before changing any material source or formulation. The Engineer will verify that the specification requirements are met when the Contractor makes a source or formulation change, and may require a new laboratory mixture design, trial batch, or both. The Engineer may sample and test project materials at any time during the project to verify specification compliance in accordance with Item 6, "Control of Materials."

2.1. **Aggregate**. Furnish aggregates from sources that conform to the requirements shown in Table 1 and as specified in this Section. Aggregate requirements in this Section, including those shown in Table 1, may be modified or eliminated when shown on the plans. Additional aggregate requirements may be specified when shown on the plans. Provide aggregate stockpiles that meet the definitions in this Section for coarse, intermediate, or fine aggregate. Aggregate from reclaimed asphalt pavement (RAP) is not required to meet Table 1 requirements unless otherwise shown on the plans. Supply aggregates that meet the definitions in Tex-100-E for crushed gravel or crushed stone. The Engineer will designate the plant or the quarry as the sampling location. Provide samples from materials produced for the project. The Engineer will establish the Surface Aggregate Classification (SAC) and perform Los Angeles abrasion, magnesium sulfate soundness, and Micro-Deval tests. Perform all other aggregate quality tests listed in Table 1. Document all test results on the mixture design report. The Engineer may perform tests on independent or split samples to verify Contractor test results. Stockpile aggregates for each source and type separately. Determine aggregate gradations for mixture design and production testing based on the washed sieve analysis given in Tex-200-F, Part II.

2.1.1. **Coarse Aggregate**. Coarse aggregate stockpiles must have no more than 20% material passing the No. 8 sieve. Aggregates from sources listed in the Department's *Bituminous Rated Source Quality Catalog* (BRSQC) are preapproved for use. Use only the rated values for hot-mix listed in the BRSQC. Rated values for surface treatment (ST) do not apply to coarse aggregate sources used in hot-mix asphalt.

For sources not listed on the Department's BRSQC:

- build an individual stockpile for each material;
- request the Department test the stockpile for specification compliance; and
- once approved, do not add material to the stockpile unless otherwise approved.

Provide aggregate from non-listed sources only when tested by the Engineer and approved before use. Allow 30 calendar days for the Engineer to sample, test, and report results for non-listed sources.

Provide coarse aggregate with at least the minimum SAC shown on the plans. SAC requirements only apply to aggregates used on the surface of travel lanes. SAC requirements apply to aggregates used on surfaces

other than travel lanes when shown on the plans. The SAC for sources on the Department's *Aggregate Quality Monitoring Program* (AQMP) (Tex-499-A) is listed in the BRSQC.

2.1.1.1. **Blending Class A and Class B Aggregates**. Class B aggregate meeting all other requirements in Table 1 may be blended with a Class A aggregate to meet requirements for Class A materials. Ensure that at least 50% by weight, or volume if required, of the material retained on the No. 4 sieve comes from the Class A aggregate source when blending Class A and B aggregates to meet a Class A requirement. Blend by volume if the bulk specific gravities of the Class A and B aggregates differ by more than 0.300. Coarse aggregate from RAP and Recycled Asphalt Shingles (RAS) will be considered as Class B aggregate for blending purposes.

The Engineer may perform tests at any time during production, when the Contractor blends Class A and B aggregates to meet a Class A requirement, to ensure that at least 50% by weight, or volume if required, of the material retained on the No. 4 sieve comes from the Class A aggregate source. The Engineer will use the Department's mix design Excel template, when electing to verify conformance, to calculate the percent of Class A aggregate retained on the No. 4 sieve by inputting the bin percentages shown from readouts in the control room at the time of production and stockpile gradations measured at the time of production. The Engineer may determine the gradations based on either washed or dry sieve analysis from samples obtained from individual aggregate cold feed bins or aggregate stockpiles. The Engineer may perform spot checks using the gradations supplied by the Contractor on the mixture design report as an input for the Excel template; however, a failing spot check will require confirmation with a stockpile gradation determined by the Engineer.

2.1.1.2. **Micro-Deval Abrasion**. The Engineer will perform a minimum of one Micro-Deval abrasion test in accordance with Tex-461-A for each coarse aggregate source used in the mixture design that has a Rated Source Soundness Magnesium (RSSM) loss value greater than 15 as listed in the BRSQC. The Engineer will perform testing before the start of production and may perform additional testing at any time during production. The Engineer may obtain the coarse aggregate samples from each coarse aggregate source or may require the Contractor to obtain the samples. The Engineer may waive all Micro-Deval testing based on a satisfactory test history of the same aggregate source.

The Engineer will estimate the magnesium sulfate soundness loss for each coarse aggregate source, when tested, using the following formula:

$$Mg_{est.} = (RSSM)(MD_{act}/RSMD)$$

where:
$Mg_{est.}$ = magnesium sulfate soundness loss
$MD_{act.}$ = actual Micro-Deval percent loss
$RSMD$ = Rated Source Micro-Deval

When the estimated magnesium sulfate soundness loss is greater than the maximum magnesium sulfate soundness loss specified, the coarse aggregate source will not be allowed for use unless otherwise approved. The Engineer will consult the Geotechnical, Soils, and Aggregates Branch of the Construction Division, and additional testing may be required before granting approval.

2.1.2. **Intermediate Aggregate**. Aggregates not meeting the definition of coarse or fine aggregate will be defined as intermediate aggregate. Supply intermediate aggregates, when used, that are free from organic impurities. The Engineer may test the intermediate aggregate in accordance with Tex-408-A to verify the material is free from organic impurities. Supply intermediate aggregate from coarse aggregate sources, when used, that meet the requirements shown in Table 1 unless otherwise approved.

Test the stockpile if 10% or more of the stockpile is retained on the No. 4 sieve, and verify that it meets the requirements in Table 1 for crushed face count (Tex-460-A) and flat and elongated particles (Tex-280-F).

2.1.3. **Fine Aggregate**. Fine aggregates consist of manufactured sands, screenings, and field sands. Fine aggregate stockpiles must meet the gradation requirements in Table 2. Supply fine aggregates that are free

from organic impurities. The Engineer may test the fine aggregate in accordance with Tex-408-A to verify the material is free from organic impurities. No more than 15% of the total aggregate may be field sand or other uncrushed fine aggregate. Use fine aggregate, with the exception of field sand, from coarse aggregate sources that meet the requirements shown in Table 1 unless otherwise approved.

Test the stockpile if 10% or more of the stockpile is retained on the No. 4 sieve and verify that it meets the requirements in Table 1 for crushed face count (Tex-460-A) and flat and elongated particles (Tex-280-F).

Table 1
Aggregate Quality Requirements

Property	Test Method	Requirement
Coarse Aggregate		
SAC	Tex-499-A (AQMP)	As shown on the plans
Deleterious material, %, Max	Tex-217-F, Part I	1.5
Decantation, %, Max	Tex-217-F, Part II	1.5
Micro-Deval abrasion, %	Tex-461-A	Note[1]
Los Angeles abrasion, %, Max	Tex-410-A	40
Magnesium sulfate soundness, 5 cycles, %, Max	Tex-411-A	30
Crushed face count,[2] %, Min	Tex-460-A, Part I	85
Flat and elongated particles @ 5:1, %, Max	Tex-280-F	10
Fine Aggregate		
Linear shrinkage, %, Max	Tex-107-E	3
Combined Aggregate[3]		
Sand equivalent, %, Min	Tex-203-F	45

1. Used to estimate the magnesium sulfate soundness loss in accordance with Section 341.2.1.1.2., "Micro-Deval Abrasion."
2. Only applies to crushed gravel.
3. Aggregates, without mineral filler, RAP, RAS, or additives, combined as used in the job-mix formula (JMF).

Table 2
Gradation Requirements for Fine Aggregate

Sieve Size	% Passing by Weight or Volume
3/8"	100
#8	70–100
#200	0–30

2.2. **Mineral Filler.** Mineral filler consists of finely divided mineral matter such as agricultural lime, crusher fines, hydrated lime, or fly ash. Mineral filler is allowed unless otherwise shown on the plans. Use no more than 2% hydrated lime or fly ash unless otherwise shown on the plans. Use no more than 1% hydrated lime if a substitute binder is used unless otherwise shown on the plans or allowed. Test all mineral fillers except hydrated lime and fly ash in accordance with Tex-107-E to ensure specification compliance. The plans may require or disallow specific mineral fillers. Provide mineral filler, when used, that:

- is sufficiently dry, free-flowing, and free from clumps and foreign matter as determined by the Engineer;
- does not exceed 3% linear shrinkage when tested in accordance with Tex-107-E; and
- meets the gradation requirements in Table 3.

Table 3
Gradation Requirements for Mineral Filler

Sieve Size	% Passing by Weight or Volume
#8	100
#200	55–100

2.3. **Baghouse Fines.** Fines collected by the baghouse or other dust-collecting equipment may be reintroduced into the mixing drum.

2.4. **Asphalt Binder.** Furnish the type and grade of performance-graded (PG) asphalt specified on the plans.

2.5. **Tack Coat**. Furnish CSS-1H, SS-1H, or a PG binder with a minimum high-temperature grade of PG 58 for tack coat binder in accordance with Item 300, "Asphalts, Oils, and Emulsions." Specialized or preferred tack coat materials may be allowed or required when shown on the plans. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use.

The Engineer will obtain at least one sample of the tack coat binder per project in accordance with Tex-500-C, Part III, and test it to verify compliance with Item 300, "Asphalts, Oils, and Emulsions." The Engineer will obtain the sample from the asphalt distributor immediately before use.

2.6. **Additives**. Use the type and rate of additive specified when shown on the plans. Additives that facilitate mixing, compaction, or improve the quality of the mixture are allowed when approved. Provide the Engineer with documentation such as the bill of lading showing the quantity of additives used in the project unless otherwise directed.

2.6.1. **Lime and Liquid Antistripping Agent**. When lime or a liquid antistripping agent is used, add in accordance with Item 301, "Asphalt Antistripping Agents." Do not add lime directly into the mixing drum of any plant where lime is removed through the exhaust stream unless the plant has a baghouse or dust collection system that reintroduces the lime into the drum.

2.6.2. **Warm Mix Asphalt (WMA)**. Warm Mix Asphalt (WMA) is defined as HMA that is produced within a target temperature discharge range of 215°F and 275°F using approved WMA additives or processes from the Department's MPL.

WMA is allowed for use on all projects and is required when shown on the plans. When WMA is required, the maximum placement or target discharge temperature for WMA will be set at a value below 275°F.

Department-approved WMA additives or processes may be used to facilitate mixing and compaction of HMA produced at target discharge temperatures above 275°F; however, such mixtures will not be defined as WMA.

2.7. **Recycled Materials**. Use of RAP and RAS is permitted unless otherwise shown on the plans. Do not exceed the maximum allowable percentages of RAP and RAS shown in Table 4. The allowable percentages shown in Table 4 may be decreased or increased when shown on the plans. Determine asphalt binder content and gradation of the RAP and RAS stockpiles for mixture design purposes in accordance with Tex-236-F. The Engineer may verify the asphalt binder content of the stockpiles at any time during production. Perform other tests on RAP and RAS when shown on the plans. Asphalt binder from RAP and RAS is designated as recycled asphalt binder. Calculate and ensure that the ratio of the recycled asphalt binder to total binder does not exceed the percentages shown in Table 5 during mixture design and HMA production when RAP or RAS is used. Use a separate cold feed bin for each stockpile of RAP and RAS during HMA production.

Surface, intermediate, and base mixes referenced in Tables 4 and 5 are defined as follows:

- **Surface**. The final HMA lift placed at or near the top of the pavement structure;
- **Intermediate**. Mixtures placed below an HMA surface mix and less than or equal to 8.0 in. from the riding surface; and
- **Base**. Mixtures placed greater than 8.0 in. from the riding surface.

2.7.1. **RAP**. RAP is salvaged, milled, pulverized, broken, or crushed asphalt pavement. Crush or break RAP so that 100% of the particles pass the 2 in. sieve. Fractionated RAP is defined as 2 or more RAP stockpiles, divided into coarse and fine fractions.

Use of Contractor-owned RAP including HMA plant waste is permitted unless otherwise shown on the plans. Department-owned RAP stockpiles are available for the Contractor's use when the stockpile locations are shown on the plans. If Department-owned RAP is available for the Contractor's use, the Contractor may use Contractor-owned fractionated RAP and replace it with an equal quantity of Department-owned RAP. This allowance does not apply to a Contractor using unfractionated RAP. Department-owned RAP generated through required work on the Contract is available for the Contractor's use when shown on the plans.

Perform any necessary tests to ensure Contractor- or Department-owned RAP is appropriate for use. The Department will not perform any tests or assume any liability for the quality of the Department-owned RAP unless otherwise shown on the plans. The Contractor will retain ownership of RAP generated on the project when shown on the plans.

The coarse RAP stockpile will contain only material retained by processing over a 3/8-in. or 1/2-in. screen unless otherwise approved. The fine RAP stockpile will contain only material passing the 3/8-in. or 1/2-in. screen unless otherwise approved. The Engineer may allow the Contractor to use an alternate to the 3/8-in. or 1/2-in. screen to fractionate the RAP. The maximum percentages of fractionated RAP may be comprised of coarse or fine fractionated RAP or the combination of both coarse and fine fractionated RAP.

Do not use Department- or Contractor-owned RAP contaminated with dirt or other objectionable materials. Do not use Department- or Contractor-owned RAP if the decantation value exceeds 5% and the plasticity index is greater than 8. Test the stockpiled RAP for decantation in accordance with Tex-406-A, Part I. Determine the plasticity index in accordance with Tex-106-E if the decantation value exceeds 5%. The decantation and plasticity index requirements do not apply to RAP samples with asphalt removed by extraction or ignition.

Do not intermingle Contractor-owned RAP stockpiles with Department-owned RAP stockpiles. Remove unused Contractor-owned RAP material from the project site upon completion of the project. Return unused Department-owned RAP to the designated stockpile location.

Table 4
Maximum Allowable Amounts of RAP[1]

Maximum Allowable Fractionated RAP[2] (%)			Maximum Allowable Unfractionated RAP[3] (%)		
Surface	Intermediate	Base	Surface	Intermediate	Base
20.0	30.0	40.0	10.0	10.0	10.0

1. Must also meet the recycled binder to total binder ratio shown in Table 5.
2. Up to 5% RAS may be used separately or as a replacement for fractionated RAP.
3. Unfractionated RAP may not be combined with fractionated RAP or RAS.

2.7.2. **RAS**. Use of post-manufactured RAS or post-consumer RAS (tear-offs) is permitted unless otherwise shown on the plans. Up to 5% RAS may be used separately or as a replacement for fractionated RAP in accordance with Table 4 and Table 5. RAS is defined as processed asphalt shingle material from manufacturing of asphalt roofing shingles or from re-roofing residential structures. Post-manufactured RAS is processed manufacturer's shingle scrap by-product. Post-consumer RAS is processed shingle scrap removed from residential structures. Comply with all regulatory requirements stipulated for RAS by the TCEQ. RAS may be used separately or in conjunction with RAP.

Process the RAS by ambient grinding or granulating such that 100% of the particles pass the 3/8 in. sieve when tested in accordance with Tex-200-F, Part I. Perform a sieve analysis on processed RAS material before extraction (or ignition) of the asphalt binder.

Add sand meeting the requirements of Table 1 and Table 2 or fine RAP to RAS stockpiles if needed to keep the processed material workable. Any stockpile that contains RAS will be considered a RAS stockpile and be limited to no more than 5.0% of the HMA mixture in accordance with Table 4.

Certify compliance of the RAS with DMS-11000, "Evaluating and Using Nonhazardous Recyclable Materials Guidelines." Treat RAS as an established nonhazardous recyclable material if it has not come into contact with any hazardous materials. Use RAS from shingle sources on the Department's MPL. Remove substantially all materials before use that are not part of the shingle, such as wood, paper, metal, plastic, and felt paper. Determine the deleterious content of RAS material for mixture design purposes in accordance with Tex-217-F, Part III. Do not use RAS if deleterious materials are more than 0.5% of the stockpiled RAS unless otherwise approved. Submit a sample for approval before submitting the mixture design. The Department will perform the testing for deleterious material of RAS to determine specification compliance.

2.8. **Substitute Binders**. Unless otherwise shown on the plans, the Contractor may use a substitute PG binder listed in Table 5 instead of the PG binder originally specified, if the substitute PG binder and mixture made with the substitute PG binder meet the following:

- the substitute binder meets the specification requirements for the substitute binder grade in accordance with Section 300.2.10., "Performance-Graded Binders"; and
- the mixture has less than 10.0 mm of rutting on the Hamburg Wheel test (Tex-242-F) after the number of passes required for the originally specified binder. Use of substitute PG binders may only be allowed at the discretion of the Engineer if the Hamburg Wheel test results are between 10.0 mm and 12.5 mm.

Table 5
Allowable Substitute PG Binders and Maximum Recycled Binder Ratios

Originally Specified PG Binder	Allowable Substitute PG Binder	Maximum Ratio of Recycled Binder[1] to Total Binder (%)		
		Surface	Intermediate	Base
HMA				
76-22[2]	70-22 or 64-22	20.0	20.0	20.0
	70-28 or 64-28	30.0	35.0	40.0
70-22[2]	64-22	20.0	20.0	20.0
	64-28 or 58-28	30.0	35.0	40.0
64-22[2]	58-28	30.0	35.0	40.0
76-28[2]	70-28 or 64-28	20.0	20.0	20.0
	64-34	30.0	35.0	40.0
70-28[2]	64-28 or 58-28	20.0	20.0	20.0
	64-34 or 58-34	30.0	35.0	40.0
64-28[2]	58-28	20.0	20.0	20.0
	58-34	30.0	35.0	40.0
WMA[3]				
76-22[2]	70-22 or 64-22	30.0	35.0	40.0
70-22[2]	64-22 or 58-28	30.0	35.0	40.0
64-22[4]	58-28	30.0	35.0	40.0
76-28[2]	70-28 or 64-28	30.0	35.0	40.0
70-28[2]	64-28 or 58-28	30.0	35.0	40.0
64-28[4]	58-28	30.0	35.0	40.0

1. Combined recycled binder from RAP and RAS.
2. Use no more than 20.0% recycled binder when using this originally specified PG binder.
3. WMA as defined in Section 341.2.6.2., "Warm Mix Asphalt (WMA)."
4. When used with WMA, this originally specified PG binder is allowed for use at the maximum recycled binder ratios shown in this table.

3. EQUIPMENT

Provide required or necessary equipment in accordance with Item 320, "Equipment for Asphalt Concrete Pavement."

4. CONSTRUCTION

Produce, haul, place, and compact the specified paving mixture. In addition to tests required by the specification, Contractors may perform other QC tests as deemed necessary. At any time during the project, the Engineer may perform production and placement tests as deemed necessary in accordance with Item 5, "Control of the Work." Schedule and participate in a mandatory pre-paving meeting with the Engineer on or before the first day of paving unless otherwise shown on the plans.

4.1. **Certification**. Personnel certified by the Department-approved hot-mix asphalt certification program must conduct all mixture designs, sampling, and testing in accordance with Table 6. Supply the Engineer with a list of certified personnel and copies of their current certificates before beginning production and when personnel changes are made. Provide a mixture design developed and signed by a Level 2 certified specialist. Provide Level 1A certified specialists at the plant during production operations. Provide Level 1B certified specialists to conduct placement tests.

Table 6
Test Methods, Test Responsibility, and Minimum Certification Levels

Test Description	Test Method	Contractor	Engineer	Level[1]
1. Aggregate and Recycled Material Testing				
Sampling	Tex-221-F	✓	✓	1A
Dry sieve	Tex-200-F, Part I	✓	✓	1A
Washed sieve	Tex-200-F, Part II	✓	✓	1A
Deleterious material	Tex-217-F, Parts I & III	✓	✓	1A
Decantation	Tex-217-F, Part II	✓	✓	1A
Los Angeles abrasion	Tex-410-A		✓	TxDOT
Magnesium sulfate soundness	Tex-411-A		✓	TxDOT
Micro-Deval abrasion	Tex-461-A		✓	2
Crushed face count	Tex-460-A	✓	✓	2
Flat and elongated particles	Tex-280-F	✓	✓	2
Linear shrinkage	Tex-107-E	✓	✓	2
Sand equivalent	Tex-203-F	✓	✓	2
Organic impurities	Tex-408-A	✓	✓	2
2. Asphalt Binder & Tack Coat Sampling				
Asphalt binder sampling	Tex-500-C, Part II	✓	✓	1A/1B
Tack coat sampling	Tex-500-C, Part III	✓	✓	1A/1B
3. Mix Design & Verification				
Design and JMF changes	Tex-204-F	✓	✓	2
Mixing	Tex-205-F	✓	✓	2
Molding (TGC)	Tex-206-F	✓	✓	1A
Molding (SGC)	Tex-241-F	✓	✓	1A
Laboratory-molded density	Tex-207-F	✓	✓	1A
VMA[2] (calculation only)	Tex-204-F	✓	✓	2
Rice gravity	Tex-227-F	✓	✓	1A
Ignition oven correction factors[3]	Tex-236-F	✓	✓	2
Indirect tensile strength	Tex-226-F	✓	✓	2
Hamburg Wheel test	Tex-242-F	✓	✓	2
Boil test	Tex-530-C	✓	✓	1A
4. Production Testing				
Selecting production random numbers	Tex-225-F, Part I		✓	1A
Mixture sampling	Tex-222-F	✓	✓	1A
Molding (TGC)	Tex-206-F	✓	✓	1A
Molding (SGC)	Tex-241-F	✓	✓	1A
Laboratory-molded density	Tex-207-F	✓	✓	1A
VMA[2] (calculation only)	Tex-204-F	✓	✓	1A
Rice gravity	Tex-227-F	✓	✓	1A
Gradation & asphalt binder content[3]	Tex-236-F	✓	✓	1A
Control charts	Tex-233-F	✓	✓	1A
Moisture content	Tex-212-F	✓	✓	1A
Hamburg Wheel test	Tex-242-F	✓	✓	2
Micro-Deval abrasion	Tex-461-A		✓	2
Boil test	Tex-530-C	✓	✓	1A
Abson recovery	Tex-211-F		✓	TxDOT
Overlay test	Tex-248-F		✓	TxDOT
Cantabro loss	Tex-245-F		✓	2
5. Placement Testing				
Selecting placement random numbers	Tex-225-F, Part II		✓	1A/1B
Trimming roadway cores	Tex-207-F	✓	✓	1A/1B
In-place air voids	Tex-207-F	✓	✓	1A/1B
Establish rolling pattern	Tex-207-F	✓		1B
Control charts	Tex-233-F	✓	✓	1A
Ride quality measurement	Tex-1001-S	✓	✓	Note[4]
Segregation (density profile)	Tex-207-F, Part V	✓	✓	1B
Longitudinal joint density	Tex-207-F, Part VII	✓	✓	1B
Thermal profile	Tex-244-F	✓	✓	1B

1. Level 1A, 1B, and 2 are certification levels provided by the Hot Mix Asphalt Center certification program.
2. Voids in mineral aggregates.
3. Refer to Section 341.4.9.2.3., "Production Testing," for exceptions to using an ignition oven.
4. Profiler and operator are required to be certified at the Texas A&M Transportation Institute facility when Surface Test Type B is specified.

4.2. **Reporting and Responsibilities.** Use Department-provided Excel templates to record and calculate all test data, including mixture design, production and placement QC/QA, control charts, thermal profiles, segregation density profiles, and longitudinal joint density. Obtain the latest version of the Excel templates at http://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html or from the Engineer. The Engineer and the Contractor will provide any available test results to the other party when requested. The maximum allowable time for the Contractor and Engineer to exchange test data is as given in Table 7 unless otherwise approved. The Engineer and the Contractor will immediately report to the other party any test result that requires suspension of production or placement, a payment penalty, or that fails to meet the specification requirements. Record and submit all test results and pertinent information on Department-provided Excel templates to the Engineer electronically by means of a portable USB flash drive, compact disc, or via email.

Subsequent sublots placed after test results are available to the Contractor, which require suspension of operations, may be considered unauthorized work. Unauthorized work will be accepted or rejected at the discretion of the Engineer in accordance with Article 5.3., "Conformity with Plans, Specifications, and Special Provisions."

Table 7
Reporting Schedule

Description	Reported By	Reported To	To Be Reported Within
Production Quality Control			
Gradation[1]	Contractor	Engineer	1 working day of completion of the sublot
Asphalt binder content[1]			
Laboratory-molded density[2]			
Moisture content[3]			
Boil test[3]			
Production Quality Assurance			
Gradation[3]	Engineer	Contractor	1 working day of completion of the sublot
Asphalt binder content[3]			
Laboratory-molded density[1]			
Hamburg Wheel test[2]			
Boil test[3]			
Binder tests[2]			
Placement Quality Control			
In-place air voids[2]	Contractor	Engineer	1 working day of completion of the lot
Segregation[1]			
Longitudinal joint density[1]			
Thermal profile[1]			
Placement Quality Assurance			
In-place air voids[1]	Engineer	Contractor	1 working day of receipt of the trimmed cores for in-place air voids[4]
Segregation[2]			
Longitudinal joint density[2]			
Thermal profile[2]			
Aging ratio[2]			
Pay adjustment summary	Engineer	Contractor	2 working days of performing all required tests and receiving Contractor test data

1. These tests are required on every sublot.
2. Optional test. To be reported as soon as results become available.
3. To be performed at the frequency specified on the plans.
4. 2 days are allowed if cores cannot be dried to constant weight within 1 day.

The Engineer will use the Department-provided Excel template to calculate all pay adjustment factors for the lot. Sublot samples may be discarded after the Engineer and Contractor sign off on the pay adjustment summary documentation for the lot.

Use the procedures described in Tex-233-F to plot the results of all quality control (QC) and quality assurance (QA) testing. Update the control charts as soon as test results for each sublot become available. Make the control charts readily accessible at the field laboratory. The Engineer may suspend production for failure to update control charts.

4.3. **Quality Control Plan (QCP)**. Develop and follow the QCP in detail. Obtain approval for changes to the QCP made during the project. The Engineer may suspend operations if the Contractor fails to comply with the QCP.

Submit a written QCP before the mandatory pre-paving meeting. Receive approval of the QCP before beginning production. Include the following items in the QCP:

4.3.1. **Project Personnel**. For project personnel, include:

- a list of individuals responsible for QC with authority to take corrective action;
- current contact information for each individual listed; and
- current copies of certification documents for individuals performing specified QC functions.

4.3.2. **Material Delivery and Storage**. For material delivery and storage, include:

- the sequence of material processing, delivery, and minimum quantities to assure continuous plant operations;
- aggregate stockpiling procedures to avoid contamination and segregation;
- frequency, type, and timing of aggregate stockpile testing to assure conformance of material requirements before mixture production; and
- procedure for monitoring the quality and variability of asphalt binder.

4.3.3. **Production**. For production, include:

- loader operation procedures to avoid contamination in cold bins;
- procedures for calibrating and controlling cold feeds;
- procedures to eliminate debris or oversized material;
- procedures for adding and verifying rates of each applicable mixture component (e.g., aggregate, asphalt binder, RAP, RAS, lime, liquid antistrip, WMA);
- procedures for reporting job control test results; and
- procedures to avoid segregation and drain-down in the silo.

4.3.4. **Loading and Transporting**. For loading and transporting, include:

- type and application method for release agents; and
- truck loading procedures to avoid segregation.

4.3.5. **Placement and Compaction**. For placement and compaction, include:

- proposed agenda for mandatory pre-paving meeting, including date and location;
- proposed paving plan (e.g., paving widths, joint offsets, and lift thicknesses);
- type and application method for release agents in the paver and on rollers, shovels, lutes, and other utensils;
- procedures for the transfer of mixture into the paver, while avoiding segregation and preventing material spillage;
- process to balance production, delivery, paving, and compaction to achieve continuous placement operations and good ride quality;
- paver operations (e.g., operation of wings, height of mixture in auger chamber) to avoid physical and thermal segregation and other surface irregularities; and
- procedures to construct quality longitudinal and transverse joints.

4.4. **Mixture Design**.

4.4.1. **Design Requirements**. The Contractor may design the mixture using a Texas Gyratory Compactor (TGC) or a Superpave Gyratory Compactor (SGC) unless otherwise shown on the plans. Use the typical weight design example given in Tex-204-F, Part I, when using a TGC. Use the Superpave mixture design procedure given

in Tex-204-F, Part IV, when using a SGC. Design the mixture to meet the requirements listed in Tables 1, 2, 3, 4, 5, 8, 9, and 10.

4.4.1.1. **Target Laboratory-Molded Density When The TGC Is Used.** Design the mixture at a 96.5% target laboratory-molded density. Increase the target laboratory-molded density to 97.0% or 97.5% at the Contractor's discretion or when shown on the plans or specification.

4.4.1.2. **Design Number of Gyrations (Ndesign) When The SGC Is Used.** Design the mixture at 50 gyrations (Ndesign). Use a target laboratory-molded density of 96.0% to design the mixture; however, adjustments can be made to the Ndesign value as noted in Table 9. The Ndesign level may be reduced to no less than 35 gyrations at the Contractor's discretion.

Use an approved laboratory from the Department's MPL to perform the Hamburg Wheel test, and provide results with the mixture design, or provide the laboratory mixture and request that the Department perform the Hamburg Wheel test. The Engineer will be allowed 10 working days to provide the Contractor with Hamburg Wheel test results on the laboratory mixture design.

The Engineer will provide the mixture design when shown on the plans. The Contractor may submit a new mixture design at any time during the project. The Engineer will verify and approve all mixture designs (JMF1) before the Contractor can begin production.

Provide the Engineer with a mixture design report using the Department-provided Excel template. Include the following items in the report:

- the combined aggregate gradation, source, specific gravity, and percent of each material used;
- asphalt binder content and aggregate gradation of RAP and RAS stockpiles;
- the target laboratory-molded density (or Ndesign level when using the SGC);
- results of all applicable tests;
- the mixing and molding temperatures;
- the signature of the Level 2 person or persons that performed the design;
- the date the mixture design was performed; and
- a unique identification number for the mixture design.

Table 8
Master Gradation Limits (% Passing by Weight or Volume) and VMA Requirements

Sieve Size	A Coarse Base	B Fine Base	C Coarse Surface	D Fine Surface	F Fine Mixture
2"	100.0[1]	–	–	–	–
1-1/2"	98.0–100.0	100.0[1]	–	–	–
1"	78.0–94.0	98.0–100.0	100.0[1]	–	–
3/4"	64.0–85.0	84.0–98.0	95.0–100.0	100.0[1]	–
1/2"	50.0–70.0	–	–	98.0–100.0	100.0[1]
3/8"	–	60.0–80.0	70.0–85.0	85.0–100.0	98.0–100.0
#4	30.0–50.0	40.0–60.0	43.0–63.0	50.0–70.0	70.0–90.0
#8	22.0–36.0	29.0–43.0	32.0–44.0	35.0–46.0	38.0–48.0
#30	8.0–23.0	13.0–28.0	14.0–28.0	15.0–29.0	12.0–27.0
#50	3.0–19.0	6.0–20.0	7.0–21.0	7.0–20.0	6.0–19.0
#200	2.0–7.0	2.0–7.0	2.0–7.0	2.0–7.0	2.0–7.0
Design VMA, % Minimum					
–	12.0	13.0	14.0	15.0	16.0
Production (Plant-Produced) VMA, % Minimum					
–	11.5	12.5	13.5	14.5	15.5

1. Defined as maximum sieve size. No tolerance allowed.

Table 9
Laboratory Mixture Design Properties

Mixture Property	Test Method	Requirement
Target laboratory-molded density, % (TGC)	Tex-207-F	96.5[1]
Design gyrations (Ndesign for SGC)	Tex-241-F	50[2]
Indirect tensile strength (dry), psi	Tex-226-F	85–200[3]
Boil test[4]	Tex-530-C	–

1. Increase to 97.0% or 97.5% at the Contractor's discretion or when shown on the plans or specification.
2. Adjust within a range of 35–100 gyrations when shown on the plans or specification or when mutually agreed between the Engineer and Contractor.
3. The Engineer may allow the IDT strength to exceed 200 psi if the corresponding Hamburg Wheel rut depth is greater than 3.0 mm and less than 12.5 mm.
4. Used to establish baseline for comparison to production results. May be waived when approved.

Table 10
Hamburg Wheel Test Requirements

High-Temperature Binder Grade	Test Method	Minimum # of Passes[1] @ 12.5 mm[2] Rut Depth, Tested @ 50°C
PG 64 or lower	Tex-242-F	10,000
PG 70		15,000
PG 76 or higher		20,000

1. May be decreased or waived when shown on the plans.
2. When the rut depth at the required minimum number of passes is less than 3 mm, the Engineer may require the Contractor to increase the target laboratory-molded density (TGC) by 0.5% to no more than 97.5% or lower the Ndesign level (SGC) to no less than 35 gyrations.

4.4.2. **Job-Mix Formula Approval**. The job-mix formula (JMF) is the combined aggregate gradation, target laboratory-molded density (or Ndesign level), and target asphalt percentage used to establish target values for hot-mix production. JMF1 is the original laboratory mixture design used to produce the trial batch. When WMA is used, JMF1 may be designed and submitted to the Engineer without including the WMA additive. When WMA is used, document the additive or process used and recommended rate on the JMF1 submittal. The Engineer and the Contractor will verify JMF1 based on plant-produced mixture from the trial batch unless otherwise approved. The Engineer may accept an existing mixture design previously used on a Department project and may waive the trial batch to verify JMF1. The Department may require the Contractor to reimburse the Department for verification tests if more than 2 trial batches per design are required.

4.4.2.1. **Contractor's Responsibilities**.

4.4.2.1.1. **Providing Gyratory Compactor**. Use a TGC calibrated in accordance with Tex-914-K when electing or required to design the mixture in accordance with Tex-204-F, Part I, for molding production samples. Furnish an SGC calibrated in accordance with Tex-241-F when electing or required to design the mixture in accordance with Tex-204-F, Part IV, for molding production samples. Locate the SGC, if used, at the Engineer's field laboratory and make the SGC available to the Engineer for use in molding production samples.

4.4.2.1.2. **Gyratory Compactor Correlation Factors**. Use Tex-206-F, Part II, to perform a gyratory compactor correlation when the Engineer uses a different gyratory compactor. Apply the correlation factor to all subsequent production test results.

4.4.2.1.3. **Submitting JMF1**. Furnish a mix design report (JMF1) with representative samples of all component materials and request approval to produce the trial batch. Provide approximately 10,000 g of the design mixture if opting to have the Department perform the Hamburg Wheel test on the laboratory mixture, and request that the Department perform the test.

4.4.2.1.4. **Supplying Aggregates**. Provide approximately 40 lb. of each aggregate stockpile unless otherwise directed.

4.4.2.1.5. **Supplying Asphalt**. Provide at least 1 gal. of the asphalt material and sufficient quantities of any additives proposed for use.

4.4.2.1.6. **Ignition Oven Correction Factors**. Determine the aggregate and asphalt correction factors from the ignition oven in accordance with Tex-236-F. Provide the Engineer with split samples of the mixtures before the trial batch production, including all additives (except water), and blank samples used to determine the correction factors for the ignition oven used for QA testing during production. Correction factors established from a previously approved mixture design may be used for the current mixture design if the mixture design and ignition oven are the same as previously used, unless otherwise directed.

4.4.2.1.7. **Boil Test**. Perform the test and retain the tested sample from Tex-530-C until completion of the project or as directed. Use this sample for comparison purposes during production. The Engineer may waive the requirement for the boil test.

4.4.2.1.8. **Trial Batch Production**. Provide a plant-produced trial batch upon receiving conditional approval of JMF1 and authorization to produce a trial batch, including the WMA additive or process if applicable, for verification testing of JMF1 and development of JMF2. Produce a trial batch mixture that meets the requirements in Table 4, Table 5, and Table 11. The Engineer may accept test results from recent production of the same mixture instead of a new trial batch.

4.4.2.1.9. **Trial Batch Production Equipment**. Use only equipment and materials proposed for use on the project to produce the trial batch.

4.4.2.1.10. **Trial Batch Quantity**. Produce enough quantity of the trial batch to ensure that the mixture meets the specification requirements.

4.4.2.1.11. **Number of Trial Batches**. Produce trial batches as necessary to obtain a mixture that meets the specification requirements.

4.4.2.1.12. **Trial Batch Sampling**. Obtain a representative sample of the trial batch and split it into 3 equal portions in accordance with Tex-222-F. Label these portions as "Contractor," "Engineer," and "Referee." Deliver samples to the appropriate laboratory as directed.

4.4.2.1.13. **Trial Batch Testing**. Test the trial batch to ensure the mixture produced using the proposed JMF1 meets the mixture requirements in Table 11. Ensure the trial batch mixture is also in compliance with the Hamburg Wheel requirement in Table 10. Use a Department-approved laboratory to perform the Hamburg Wheel test on the trial batch mixture or request that the Department perform the Hamburg Wheel test. The Engineer will be allowed 10 working days to provide the Contractor with Hamburg Wheel test results on the trial batch. Provide the Engineer with a copy of the trial batch test results.

4.4.2.1.14. **Development of JMF2**. Evaluate the trial batch test results after the Engineer grants full approval of JMF1 based on results from the trial batch, determine the optimum mixture proportions, and submit as JMF2. Adjust the asphalt binder content or gradation to achieve the specified target laboratory-molded density. The asphalt binder content established for JMF2 is not required to be within any tolerance of the optimum asphalt binder content established for JMF1; however, mixture produced using JMF2 must meet the voids in mineral aggregates (VMA) requirements for production shown in Table 8. If the optimum asphalt binder content for JMF2 is more than 0.5% lower than the optimum asphalt binder content for JMF1, the Engineer may perform or require the Contractor to perform Tex-226-F on Lot 1 production to confirm the indirect tensile strength does not exceed 200 psi. Verify that JMF2 meets the mixture requirements in Table 5.

4.4.2.1.15. **Mixture Production**. Use JMF2 to produce Lot 1 as described in Section 341.4.9.3.1.1., "Lot 1 Placement," after receiving approval for JMF2 and a passing result from the Department's or a Department-approved laboratory's Hamburg Wheel test on the trial batch. If desired, proceed to Lot 1 production, once JMF2 is approved, at the Contractor's risk without receiving the results from the Department's Hamburg Wheel test on the trial batch.

Notify the Engineer if electing to proceed without Hamburg Wheel test results from the trial batch. Note that the Engineer may require up to the entire sublot of any mixture failing the Hamburg Wheel test to be removed and replaced at the Contractor's expense.

4.4.2.1.16. **Development of JMF3.** Evaluate the test results from Lot 1, determine the optimum mixture proportions, and submit as JMF3 for use in Lot 2.

4.4.2.1.17. **JMF Adjustments.** If JMF adjustments are necessary to achieve the specified requirements, make the adjustments before beginning a new lot. The adjusted JMF must:

- be provided to the Engineer in writing before the start of a new lot;
- be numbered in sequence to the previous JMF;
- meet the mixture requirements in Table 4 and Table 5;
- meet the master gradation limits shown in Table 8; and
- be within the operational tolerances of JMF2 listed in Table 11.

4.4.2.1.18. **Requesting Referee Testing.** Use referee testing, if needed, in accordance with Section 341.4.9.1., "Referee Testing," to resolve testing differences with the Engineer.

Table 11
Operational Tolerances

Description	Test Method	Allowable Difference Between Trial Batch and JMF1 Target	Allowable Difference from Current JMF Target	Allowable Difference between Contractor and Engineer[1]
Individual % retained for #8 sieve and larger	Tex-200-F or Tex-236-F	Must be Within Master Grading Limits in Table 8	±5.0[2,3]	±5.0
Individual % retained for sieves smaller than #8 and larger than #200			±3.0[2,3]	±3.0
% passing the #200 sieve			±2.0[2,3]	±1.6
Asphalt binder content, %	Tex-236-F	±0.5	±0.3[3]	±0.3
Laboratory-molded density, %	Tex-207-F	±1.0	±1.0	±1.0
In-place air voids, %		N/A	N/A	±1.0
Laboratory-molded bulk specific gravity		N/A	N/A	±0.020
VMA, %, min	Tex-204-F	Note[4]	Note[4]	N/A
Theoretical maximum specific (Rice) gravity	Tex-227-F	N/A	N/A	±0.020

1. Contractor may request referee testing only when values exceed these tolerances.
2. When within these tolerances, mixture production gradations may fall outside the master grading limits; however, the % passing the #200 will be considered out of tolerance when outside the master grading limits.
3. Only applies to mixture produced for Lot 1 and higher.
4. Test and verify that Table 8 requirements are met.

4.4.2.2. **Engineer's Responsibilities.**

4.4.2.2.1. **Gyratory Compactor.** For mixtures designed in accordance with Tex-204-F, Part I, the Engineer will use a Department TGC, calibrated in accordance with Tex-914-K, to mold samples for trial batch and production testing. The Engineer will make the Department TGC and the Department field laboratory available to the Contractor for molding verification samples, if requested by the Contractor.

For mixtures designed in accordance with Tex-204-F, Part IV, the Engineer will use a Department SGC, calibrated in accordance with Tex-241-F, to mold samples for laboratory mixture design verification. For molding trial batch and production specimens, the Engineer will use the Contractor-provided SGC at the field laboratory or provide and use a Department SGC at an alternate location. The Engineer will make the Contractor-provided SGC in the Department field laboratory available to the Contractor for molding verification samples.

4.4.2.2.2. **Conditional Approval of JMF1 and Authorizing Trial Batch.** The Engineer will review and verify conformance of the following information within 2 working days of receipt:

- the Contractor's mix design report (JMF1);
- the Contractor-provided Hamburg Wheel test results;

- all required materials including aggregates, asphalt, additives, and recycled materials; and
- the mixture specifications.

The Engineer will grant the Contractor conditional approval of JMF1 if the information provided on the paper copy of JMF1 indicates that the Contractor's mixture design meets the specifications. When the Contractor does not provide Hamburg Wheel test results with laboratory mixture design, 10 working days are allowed for conditional approval of JMF1. The Engineer will base full approval of JMF1 on the test results on mixture from the trial batch.

Unless waived, the Engineer will determine the Micro-Deval abrasion loss in accordance with Section 341.2.1.1.2., "Micro-Deval Abrasion." If the Engineer's test results are pending after 2 working days, conditional approval of JMF1 will still be granted within 2 working days of receiving JMF1. When the Engineer's test results become available, they will be used for specification compliance.

After conditionally approving JMF1, including either Contractor- or Department-supplied Hamburg Wheel test results, the Contractor is authorized to produce a trial batch.

4.4.2.2.3. **Hamburg Wheel Testing of JMF1**. If the Contractor requests the option to have the Department perform the Hamburg Wheel test on the laboratory mixture, the Engineer will mold samples in accordance with Tex-242-F to verify compliance with the Hamburg Wheel test requirement in Table 10.

4.4.2.2.4. **Ignition Oven Correction Factors**. The Engineer will use the split samples provided by the Contractor to determine the aggregate and asphalt correction factors for the ignition oven used for QA testing during production in accordance with Tex-236-F.

4.4.2.2.5. **Testing the Trial Batch**. Within 1 full working day, the Engineer will sample and test the trial batch to ensure that the mixture meets the requirements in Table 11. If the Contractor requests the option to have the Department perform the Hamburg Wheel test on the trial batch mixture, the Engineer will mold samples in accordance with Tex-242-F to verify compliance with the Hamburg Wheel test requirement in Table 10.

The Engineer will have the option to perform the following tests on the trial batch:

- Tex-226-F, to verify that the indirect tensile strength meets the requirement shown in Table 9; and
- Tex-530-C, to retain and use for comparison purposes during production.

4.4.2.2.6. **Full Approval of JMF1**. The Engineer will grant full approval of JMF1 and authorize the Contractor to proceed with developing JMF2 if the Engineer's results for the trial batch meet the requirements in Table 11. The Engineer will notify the Contractor that an additional trial batch is required if the trial batch does not meet these requirements.

4.4.2.2.7. **Approval of JMF2**. The Engineer will approve JMF2 within one working day if the mixture meets the requirements in Table 5 and the gradation meets the master grading limits shown in Table 8. The asphalt binder content established for JMF2 is not required to be within any tolerance of the optimum asphalt binder content established for JMF1; however, mixture produced using JMF2 must meet the VMA requirements shown in Table 8. If the optimum asphalt binder content for JMF2 is more than 0.5% lower than the optimum asphalt binder content for JMF1, the Engineer may perform or require the Contractor to perform Tex-226-F on Lot 1 production to confirm the indirect tensile strength does not exceed 200 psi.

4.4.2.2.8. **Approval of Lot 1 Production**. The Engineer will authorize the Contractor to proceed with Lot 1 production (using JMF2) as soon as a passing result is achieved from the Department's or a Department-approved laboratory's Hamburg Wheel test on the trial batch. The Contractor may proceed at its own risk with Lot 1 production without the results from the Hamburg Wheel test on the trial batch.

If the Department's or Department-approved laboratory's sample from the trial batch fails the Hamburg Wheel test, the Engineer will suspend production until further Hamburg Wheel tests meet the specified values. The Engineer may require up to the entire sublot of any mixture failing the Hamburg Wheel test be removed and replaced at the Contractor's expense.

4.4.2.2.9. **Approval of JMF3 and Subsequent JMF Changes**. JMF3 and subsequent JMF changes are approved if they meet the mixture requirements shown in Table 4, Table 5, and the master grading limits shown in Table 8, and are within the operational tolerances of JMF2 shown in Table 11.

4.5. **Production Operations**. Perform a new trial batch when the plant or plant location is changed. Take corrective action and receive approval to proceed after any production suspension for noncompliance to the specification. Submit a new mix design and perform a new trial batch when the asphalt binder content of:

- any RAP stockpile used in the mix is more than 0.5% higher than the value shown on the mixture design report; or
- RAS stockpile used in the mix is more than 2.0% higher than the value shown on the mixture design report.

4.5.1. **Storage and Heating of Materials**. Do not heat the asphalt binder above the temperatures specified in Item 300, "Asphalts, Oils, and Emulsions," or outside the manufacturer's recommended values. Provide the Engineer with daily records of asphalt binder and hot-mix asphalt discharge temperatures (in legible and discernible increments) in accordance with Item 320, "Equipment for Asphalt Concrete Pavement," unless otherwise directed. Do not store mixture for a period long enough to affect the quality of the mixture, nor in any case longer than 12 hr. unless otherwise approved.

4.5.2. **Mixing and Discharge of Materials**. Notify the Engineer of the target discharge temperature and produce the mixture within 25°F of the target. Monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 350°F (or 275°F for WMA) and is not lower than 215°F. The Department will not pay for or allow placement of any mixture produced above 350°F.

Produce WMA within the target discharge temperature range of 215°F and 275°F when WMA is required. Take corrective action any time the discharge temperature of the WMA exceeds the target discharge range. The Engineer may suspend production operations if the Contractor's corrective action is not successful at controlling the production temperature within the target discharge range. Note that when WMA is produced, it may be necessary to adjust burners to ensure complete combustion such that no burner fuel residue remains in the mixture.

Control the mixing time and temperature so that substantially all moisture is removed from the mixture before discharging from the plant. Determine the moisture content, if requested, by oven-drying in accordance with Tex-212-F, Part II, and verify that the mixture contains no more than 0.2% of moisture by weight. Obtain the sample immediately after discharging the mixture into the truck, and perform the test promptly.

4.6. **Hauling Operations**. Clean all truck beds before use to ensure that mixture is not contaminated. Use a release agent shown on the Department's MPL to coat the inside bed of the truck when necessary.

Use equipment for hauling as defined in Section 341.4.7.3.3., "Hauling Equipment." Use other hauling equipment only when allowed.

4.7. **Placement Operations**. Collect haul tickets from each load of mixture delivered to the project and provide the Department's copy to the Engineer approximately every hour, or as directed. Use a hand-held thermal camera or infrared thermometer, when a thermal imaging system is not used, to measure and record the internal temperature of the mixture as discharged from the truck or Material Transfer Device (MTD) before or as the mix enters the paver and an approximate station number or GPS coordinates on each ticket. Calculate the daily yield and cumulative yield for the specified lift and provide to the Engineer at the end of paving operations for each day unless otherwise directed. The Engineer may suspend production if the Contractor fails to produce and provide haul tickets and yield calculations by the end of paving operations for each day.

Prepare the surface by removing raised pavement markers and objectionable material such as moisture, dirt, sand, leaves, and other loose impediments from the surface before placing mixture. Remove vegetation from pavement edges. Place the mixture to meet the typical section requirements and produce a smooth, finished surface with a uniform appearance and texture. Offset longitudinal joints of successive courses of hot-mix by at least 6 in. Place mixture so that longitudinal joints on the surface course coincide with lane lines, or as

directed. Ensure that all finished surfaces will drain properly. Place the mixture at the rate or thickness shown on the plans. The Engineer will use the guidelines in Table 12 to determine the compacted lift thickness of each layer when multiple lifts are required. The thickness determined is based on the rate of 110 lb./sq. yd. for each inch of pavement unless otherwise shown on the plans.

Table 12
Compacted Lift Thickness and Required Core Height

Mixture Type	Compacted Lift Thickness Guidelines		Minimum Untrimmed Core Height (in.) Eligible for Testing
	Minimum (in.)	Maximum (in.)	
A	3.00	6.00	2.00
B	2.50	5.00	1.75
C	2.00	4.00	1.50
D	1.50	3.00	1.25
F	1.25	2.50	1.25

4.7.1. **Weather Conditions.**

4.7.1.1. **When Using a Thermal Imaging System.** The Contractor may pave any time the roadway is dry and the roadway surface temperature is at least 32°F; however, the Engineer may restrict the Contractor from paving surface mixtures if the ambient temperature is likely to drop below 32°F within 12 hr. of paving. Provide output data from the thermal imaging system to demonstrate to the Engineer that no recurring severe thermal segregation exists in accordance with Section 341.4.7.3.1.2., "Thermal Imaging System."

4.7.1.2. **When Not Using a Thermal Imaging System.** Place mixture when the roadway surface temperature is at or above the temperatures listed in Table 13 unless otherwise approved or as shown on the plans. Measure the roadway surface temperature with a hand-held thermal camera or infrared thermometer. The Engineer may allow mixture placement to begin before the roadway surface reaches the required temperature if conditions are such that the roadway surface will reach the required temperature within 2 hr. of beginning placement operations. Place mixtures only when weather conditions and moisture conditions of the roadway surface are suitable as determined by the Engineer. The Engineer may restrict the Contractor from paving if the ambient temperature is likely to drop below 32°F within 12 hr. of paving.

Table 13
Minimum Pavement Surface Temperatures

Originally Specified High Temperature Binder Grade	Minimum Pavement Surface Temperatures (°F)	
	Subsurface Layers or Night Paving Operations	Surface Layers Placed in Daylight Operations
PG 64 or lower	45	50
PG 70	55[1]	60[1]
PG 76 or higher	60[1]	60[1]

1. Contractors may pave at temperatures 10°F lower than these values when utilizing a paving process including WMA or equipment that eliminates thermal segregation. In such cases, use a hand-held thermal camera operated in accordance with Tex-244-F to demonstrate to the satisfaction of the Engineer that the uncompacted mat has no more than 10°F of thermal segregation.

4.7.2. **Tack Coat.** Clean the surface before placing the tack coat. The Engineer will set the rate between 0.04 and 0.10 gal. of residual asphalt per square yard of surface area. Apply a uniform tack coat at the specified rate unless otherwise directed. Apply the tack coat in a uniform manner to avoid streaks and other irregular patterns. Apply a thin, uniform tack coat to all contact surfaces of curbs, structures, and all joints. Allow adequate time for emulsion to break completely before placing any material. Prevent splattering of tack coat when placed adjacent to curb, gutter, and structures. Roll the tack coat with a pneumatic-tire roller to remove streaks and other irregular patterns when directed.

4.7.3. **Lay-Down Operations.**

4.7.3.1. **Thermal Profile.** Use a hand-held thermal camera or a thermal imaging system to obtain a continuous thermal profile in accordance with Tex-244-F. Thermal profiles are not applicable in areas described in Section 341.4.9.3.1.4., "Miscellaneous Areas."

4.7.3.1.1. **Thermal Segregation**.

4.7.3.1.1.1. **Moderate**. Any areas that have a temperature differential greater than 25°F, but not exceeding 50°F, are deemed as having moderate thermal segregation.

4.7.3.1.1.2. **Severe**. Any areas that have a temperature differential greater than 50°F are deemed as having severe thermal segregation.

4.7.3.1.2. **Thermal Imaging System**. Review the output results when a thermal imaging system is used, and provide the automated report described in Tex-244-F to the Engineer daily unless otherwise directed. Modify the paving process as necessary to eliminate any recurring (moderate or severe) thermal segregation identified by the thermal imaging system. The Engineer may suspend paving operations if the Contractor cannot successfully modify the paving process to eliminate recurring severe thermal segregation. Density profiles are not required and not applicable when using a thermal imaging system. Provide the Engineer with electronic copies of all daily data files that can be used with the thermal imaging system software to generate temperature profile plots upon completion of the project or as requested by the Engineer.

4.7.3.1.3. **Thermal Camera**. Take immediate corrective action to eliminate recurring moderate thermal segregation when a hand-held thermal camera is used. Evaluate areas with moderate thermal segregation by performing density profiles in accordance with Section 341.4.9.3.3.2., "Segregation (Density Profile)." Provide the Engineer with the thermal profile of every sublot within one working day of the completion of each lot. Report the results of each thermal profile in accordance with Section 341.4.2., "Reporting and Responsibilities." The Engineer will use a hand-held thermal camera to obtain a thermal profile at least once per project. No production or placement bonus will be paid for any sublot that contains severe thermal segregation. Suspend operations and take immediate corrective action to eliminate severe thermal segregation unless otherwise directed. Resume operations when the Engineer determines that subsequent production will meet the requirements of this Section. Evaluate areas with severe thermal segregation by performing density profiles in accordance with Section 341.4.9.3.3.2., "Segregation (Density Profile)." Remove and replace the material in any areas that have both severe thermal segregation and a failing result for Segregation (Density Profile) unless otherwise directed. The sublot in question may receive a production and placement bonus if applicable when the defective material is successfully removed and replaced.

4.7.3.2. **Windrow Operations**. Operate windrow pickup equipment so that when hot-mix is placed in windrows, substantially all the mixture deposited on the roadbed is picked up and loaded into the paver.

4.7.3.3. **Hauling Equipment**. Use belly dumps, live bottom, or end dump trucks to haul and transfer mixture; however, with exception of paving miscellaneous areas, end dump trucks are only allowed when used in conjunction with an MTD with remixing capability or when a thermal imaging system is used unless otherwise allowed.

4.7.3.4. **Screed Heaters**. Turn off screed heaters to prevent overheating of the mat if the paver stops for more than 5 min. The Engineer may evaluate the suspect area in accordance with Section 341.4.9.3.3.4., "Recovered Asphalt Dynamic Shear Rheometer (DSR)," if the screed heater remains on for more than 5 min. while the paver is stopped.

4.8. **Compaction**. Compact the pavement uniformly to contain between 3.8% and 8.5% in-place air voids. Take immediate corrective action to bring the operation within 3.8% and 8.5% when the in-place air voids exceed the range of these tolerances. The Engineer will allow paving to resume when the proposed corrective action is likely to yield between 3.8% and 8.5% in-place air voids.

Obtain cores in areas placed under Exempt Production, as directed, at locations determined by the Engineer. The Engineer may test these cores and suspend operations or require removal and replacement if the in-place air voids are less than 2.7% or more than 9.9%. Areas defined in Section 341.4.9.3.1.4., "Miscellaneous Areas," are not subject to in-place air void determination.

Furnish the type, size, and number of rollers required for compaction as approved. Use a pneumatic-tire roller to seal the surface unless excessive pickup of fines occurs. Use additional rollers as required to

remove any roller marks. Use only water or an approved release agent on rollers, tamps, and other compaction equipment unless otherwise directed.

Use the control strip method shown in Tex-207-F, Part IV, on the first day of production to establish the rolling pattern that will produce the desired in-place air voids unless otherwise directed.

Use tamps to thoroughly compact the edges of the pavement along curbs, headers, and similar structures and in locations that will not allow thorough compaction with rollers. The Engineer may require rolling with a trench roller on widened areas, in trenches, and in other limited areas.

Complete all compaction operations before the pavement temperature drops below 160°F unless otherwise allowed. The Engineer may allow compaction with a light finish roller operated in static mode for pavement temperatures below 160°F.

Allow the compacted pavement to cool to 160°F or lower before opening to traffic unless otherwise directed. Sprinkle the finished mat with water or limewater, when directed, to expedite opening the roadway to traffic.

4.9. **Acceptance Plan**. Pay adjustments for the material will be in accordance with Section 341.6., "Payment."

Sample and test the hot-mix on a lot and sublot basis. Suspend production until test results or other information indicates to the satisfaction of the Engineer that the next material produced or placed will result in pay factors of at least 1.000, if the production pay factor given in Section 341.6.1., "Production Pay Adjustment Factors," for 2 consecutive lots or the placement pay factor given in Section 341.6.2., "Placement Pay Adjustment Factors," for 2 consecutive lots is below 1.000.

4.9.1. **Referee Testing**. The Construction Division is the referee laboratory. The Contractor may request referee testing if a "remove and replace" condition is determined based on the Engineer's test results, or if the differences between Contractor and Engineer test results exceed the maximum allowable difference shown in Table 11 and the differences cannot be resolved. The Contractor may also request referee testing if the Engineer's test results require suspension of production and the Contractor's test results are within specification limits. Make the request within 5 working days after receiving test results and cores from the Engineer. Referee tests will be performed only on the sublot in question and only for the particular tests in question. Allow 10 working days from the time the referee laboratory receives the samples for test results to be reported. The Department may require the Contractor to reimburse the Department for referee tests if more than 3 referee tests per project are required and the Engineer's test results are closer to the referee test results than the Contractor's test results.

The Construction Division will determine the laboratory-molded density based on the molded specific gravity and the maximum theoretical specific gravity of the referee sample. The in-place air voids will be determined based on the bulk specific gravity of the cores, as determined by the referee laboratory and the Engineer's average maximum theoretical specific gravity for the lot. With the exception of "remove and replace" conditions, referee test results are final and will establish pay adjustment factors for the sublot in question. The Contractor may decline referee testing and accept the Engineer's test results when the placement pay adjustment factor for any sublot results in a "remove and replace" condition. Placement sublots subject to be removed and replaced will be further evaluated in accordance with Section 341.6.2.2., "Placement Sublots Subject to Removal and Replacement."

4.9.2. **Production Acceptance**.

4.9.2.1. **Production Lot**. A production lot consists of 4 equal sublots. The default quantity for Lot 1 is 1,000 tons; however, when requested by the Contractor, the Engineer may increase the quantity for Lot 1 to no more than 4,000 tons. The Engineer will select subsequent lot sizes based on the anticipated daily production such that approximately 3 to 4 sublots are produced each day. The lot size will be between 1,000 tons and 4,000 tons. The Engineer may change the lot size before the Contractor begins any lot.

If the optimum asphalt binder content for JMF2 is more than 0.5% lower than the optimum asphalt binder content for JMF1, the Engineer may perform or require the Contractor to perform Tex-226-F on Lot 1 to

confirm the indirect tensile strength does not exceed 200 psi. Take corrective action to bring the mixture within specification compliance if the indirect tensile strength exceeds 200 psi unless otherwise directed.

4.9.2.1.1. **Incomplete Production Lots.** If a lot is begun but cannot be completed, such as on the last day of production or in other circumstances deemed appropriate, the Engineer may close the lot. Adjust the payment for the incomplete lot in accordance with Section 341.6.1., "Production Pay Adjustment Factors." Close all lots within 5 working days unless otherwise allowed.

4.9.2.2. **Production Sampling.**

4.9.2.2.1. **Mixture Sampling.** Obtain hot-mix samples from trucks at the plant in accordance with Tex-222-F. The sampler will split each sample into 3 equal portions in accordance with Tex-200-F and label these portions as "Contractor," "Engineer," and "Referee." The Engineer will perform or witness the sample splitting and take immediate possession of the samples labeled "Engineer" and "Referee." The Engineer will maintain the custody of the samples labeled "Engineer" and "Referee" until the Department's testing is completed.

4.9.2.2.1.1. **Random Sample.** At the beginning of the project, the Engineer will select random numbers for all production sublots. Determine sample locations in accordance with Tex-225-F. Take one sample for each sublot at the randomly selected location. The Engineer will perform or witness the sampling of production sublots.

4.9.2.2.1.2. **Blind Sample.** For one sublot per lot, the Engineer will obtain and test a "blind" sample instead of the random sample collected by the Contractor. Test either the "blind" or the random sample; however, referee testing (if applicable) will be based on a comparison of results from the "blind" sample. The location of the Engineer's "blind" sample will not be disclosed to the Contractor. The Engineer's "blind" sample may be randomly selected in accordance with Tex-225-F for any sublot or selected at the discretion of the Engineer. The Engineer will use the Contractor's split sample for sublots not sampled by the Engineer.

4.9.2.2.2. **Informational Cantabro and Overlay Testing.** When requested or shown on the plans, select one random sublot from Lot 2 or higher for Cantabro and Overlay testing during the first week of production. Obtain and provide the Engineer with approximately 90 lb. (40 kg) of mixture in sealed containers, boxes, or bags labeled with the Control-Section-Job (CSJ), mixture type, lot, and sublot number. The Engineer will ship the mixture to the Construction Division for Cantabro and Overlay testing. Results from these tests will not be used for specification compliance.

4.9.2.2.3. **Asphalt Binder Sampling.** Obtain a 1-qt. sample of the asphalt binder for each lot of mixture produced. Obtain the sample at approximately the same time the mixture random sample is obtained. Sample from a port located immediately upstream from the mixing drum or pug mill in accordance with Tex-500-C, Part II. Label the can with the corresponding lot and sublot numbers and deliver the sample to the Engineer. The Engineer may also obtain independent samples. If obtaining an independent asphalt binder sample, the Engineer will split a sample of the asphalt binder with the Contractor. The Engineer will test at least one asphalt binder sample per project to verify compliance with Item 300, "Asphalts, Oils, and Emulsions."

4.9.2.3. **Production Testing.** The Contractor and Engineer must perform production tests in accordance with Table 14. The Contractor has the option to verify the Engineer's test results on split samples provided by the Engineer. Determine compliance with operational tolerances listed in Table 11 for all sublots.

Take immediate corrective action if the Engineer's laboratory-molded density on any sublot is less than 95.0% or greater than 98.0% to bring the mixture within these tolerances. The Engineer may suspend operations if the Contractor's corrective actions do not produce acceptable results. The Engineer will allow production to resume when the proposed corrective action is likely to yield acceptable results.

The Engineer may allow alternate methods for determining the asphalt binder content and aggregate gradation if the aggregate mineralogy is such that Tex-236-F does not yield reliable results. Provide evidence that results from Tex-236-F are not reliable before requesting permission to use an alternate method unless otherwise directed. Use the applicable test procedure as directed if an alternate test method is allowed.

Table 14
Production and Placement Testing Frequency

Description	Test Method	Minimum Contractor Testing Frequency	Minimum Engineer Testing Frequency
Individual % retained for #8 sieve and larger	Tex-200-F or Tex-236-F	1 per sublot	1 per 12 sublots[1]
Individual % retained for sieves smaller than #8 and larger than #200			
% passing the #200 sieve			
Laboratory-molded density	Tex-207-F	N/A	1 per sublot[1]
Laboratory-molded bulk specific gravity			
In-place air voids			
VMA	Tex-204-F		
Segregation (density profile)[2]	Tex-207-F, Part V	1 per sublot	1 per project
Longitudinal joint density	Tex-207-F, Part VII		
Moisture content	Tex-212-F, Part II	When directed	
Theoretical maximum specific (Rice) gravity	Tex-227-F	N/A	1 per sublot[1]
Asphalt binder content	Tex-236-F	1 per sublot	1 per lot[1]
Hamburg Wheel test	Tex-242-F	N/A	1 per project
Recycled Asphalt Shingles (RAS)[3]	Tex-217-F, Part III	N/A	
Thermal profile[2]	Tex-244-F	1 per sublot	
Asphalt binder sampling and testing	Tex-500-C	1 per lot (sample only)	
Tack coat sampling and testing	Tex-500-C, Part III	N/A	
Boil test[4]	Tex-530-C	1 per lot	
Cantabro loss[5]	Tex-245-F	1 per project (sample only)	
Overlay test[5]	Tex-248-F		

1. For production defined in Section 341.4.9.4., "Exempt Production," the Engineer will test one per day if 100 tons or more are produced. For Exempt Production, no testing is required when less than 100 tons are produced.
2. Not required when a thermal imaging system is used.
3. Testing performed by the Construction Division or designated laboratory.
4. The Engineer may reduce or waive the sampling and testing requirements based on a satisfactory test history.
5. Testing performed by the Construction Division and for informational purposes only.

4.9.2.4. **Operational Tolerances**. Control the production process within the operational tolerances listed in Table 11. When production is suspended, the Engineer will allow production to resume when test results or other information indicates the next mixture produced will be within the operational tolerances.

4.9.2.4.1. **Gradation**. Suspend operation and take corrective action if any aggregate is retained on the maximum sieve size shown in Table 8. A sublot is defined as out of tolerance if either the Engineer's or the Contractor's test results are out of operational tolerance. Suspend production when test results for gradation exceed the operational tolerances for 3 consecutive sublots on the same sieve or 4 consecutive sublots on any sieve unless otherwise directed. The consecutive sublots may be from more than one lot.

4.9.2.4.2. **Asphalt Binder Content**. A sublot is defined as out of operational tolerance if either the Engineer's or the Contractor's test results exceed the values listed in Table 11. No production or placement bonus will be paid for any sublot that is out of operational tolerance for asphalt binder content. Suspend production and shipment of the mixture if the Engineer's or the Contractor's asphalt binder content deviates from the current JMF by more than 0.5% for any sublot.

4.9.2.4.3. **Voids in Mineral Aggregates (VMA)**. The Engineer will determine the VMA for every sublot. For sublots when the Engineer does not determine asphalt binder content, the Engineer will use the asphalt binder content results from QC testing performed by the Contractor to determine VMA.

Take immediate corrective action if the VMA value for any sublot is less than the minimum VMA requirement for production listed in Table 8. Suspend production and shipment of the mixture if the Engineer's VMA results on 2 consecutive sublots are below the minimum VMA requirement for production listed in Table 8. No production or placement bonus will be paid for any sublot that does not meet the minimum VMA requirement for production listed in Table 8 based on the Engineer's VMA determination.

Suspend production and shipment of the mixture if the Engineer's VMA result is more than 0.5% below the minimum VMA requirement for production listed in Table 8. In addition to suspending production, the Engineer may require removal and replacement or may allow the sublot to be left in place without payment.

4.9.2.4.4. **Hamburg Wheel Test**. The Engineer may perform a Hamburg Wheel test at any time during production, including when the boil test indicates a change in quality from the materials submitted for JMF1. In addition to testing production samples, the Engineer may obtain cores and perform Hamburg Wheel tests on any areas of the roadway where rutting is observed. Suspend production until further Hamburg Wheel tests meet the specified values when the production or core samples fail the Hamburg Wheel test criteria in Table 10. Core samples, if taken, will be obtained from the center of the finished mat or other areas excluding the vehicle wheel paths. The Engineer may require up to the entire sublot of any mixture failing the Hamburg Wheel test to be removed and replaced at the Contractor's expense.

If the Department's or Department approved laboratory's Hamburg Wheel test results in a "remove and replace" condition, the Contractor may request that the Department confirm the results by re-testing the failing material. The Construction Division will perform the Hamburg Wheel tests and determine the final disposition of the material in question based on the Department's test results.

4.9.2.5. **Individual Loads of Hot-Mix**. The Engineer can reject individual truckloads of hot-mix. When a load of hot-mix is rejected for reasons other than temperature, contamination, or excessive uncoated particles, the Contractor may request that the rejected load be tested. Make this request within 4 hr. of rejection. The Engineer will sample and test the mixture. If test results are within the operational tolerances shown in Table 11, payment will be made for the load. If test results are not within operational tolerances, no payment will be made for the load.

4.9.3. **Placement Acceptance**.

4.9.3.1. **Placement Lot**. A placement lot consists of 4 placement sublots. A placement sublot consists of the area placed during a production sublot.

4.9.3.1.1. **Lot 1 Placement**. Placement bonuses for Lot 1 will be in accordance with Section 341.6.2., "Placement Pay Adjustment Factors"; however, no placement penalty will be assessed for any sublot placed in Lot 1 when the in-place air voids are greater than or equal to 2.7% and less than or equal to 9.9%. Remove and replace any sublot with in-place air voids less than 2.7% or greater than 9.9%.

4.9.3.1.2. **Incomplete Placement Lots**. An incomplete placement lot consists of the area placed as described in Section 341.4.9.2.1.1., "Incomplete Production Lots," excluding areas defined in Section 341.4.9.3.1.4., "Miscellaneous Areas." Placement sampling is required if the random sample plan for production resulted in a sample being obtained from an incomplete production sublot.

4.9.3.1.3. **Shoulders, Ramps, Etc**. Shoulders, ramps, intersections, acceleration lanes, deceleration lanes, and turn lanes are subject to in-place air void determination and pay adjustments unless designated on the plans as not eligible for in-place air void determination. Intersections may be considered miscellaneous areas when determined by the Engineer.

4.9.3.1.4. **Miscellaneous Areas**. Miscellaneous areas include areas that typically involve significant handwork or discontinuous paving operations, such as temporary detours, driveways, mailbox turnouts, crossovers, gores, spot level-up areas, and other similar areas. Temporary detours are subject to in-place air void determination when shown on the plans. Miscellaneous areas also include level-ups and thin overlays when the layer thickness specified on the plans is less than the minimum untrimmed core height eligible for testing shown in Table 12. The specified layer thickness is based on the rate of 110 lb./sq. yd. for each inch of pavement unless another rate is shown on the plans. When "level up" is listed as part of the item bid description code, a pay adjustment factor of 1.000 will be assigned for all placement sublots as described in Section 341.6, "Payment." Miscellaneous areas are not eligible for random placement sampling locations. Compact miscellaneous areas in accordance with Section 341.4.8., "Compaction." Miscellaneous areas are not subject to in-place air void determination, thermal profiles testing, segregation (density profiles), or longitudinal joint density evaluations.

4.9.3.2. **Placement Sampling**. The Engineer will select random numbers for all placement sublots at the beginning of the project. The Engineer will provide the Contractor with the placement random numbers immediately after the sublot is completed. Mark the roadway location at the completion of each sublot and record the station number. Determine one random sample location for each placement sublot in accordance with Tex-225-F. Adjust the random sample location by no more than necessary to achieve a 2-ft. clearance if the location is within 2 ft. of a joint or pavement edge.

Shoulders, ramps, intersections, acceleration lanes, deceleration lanes, and turn lanes are always eligible for selection as a random sample location; however, if a random sample location falls on one of these areas and the area is designated on the plans as not subject to in-place air void determination, cores will not be taken for the sublot and a 1.000 pay factor will be assigned to that sublot.

Provide the equipment and means to obtain and trim roadway cores on site. On-site is defined as in close proximity to where the cores are taken. Obtain the cores within one working day of the time the placement sublot is completed unless otherwise approved. Obtain two 6-in. diameter cores side-by-side from within 1 ft. of the random location provided for the placement sublot. For Type D and Type F mixtures, 4-in. diameter cores are allowed. Mark the cores for identification, measure and record the untrimmed core height, and provide the information to the Engineer. The Engineer will witness the coring operation and measurement of the core thickness. Visually inspect each core and verify that the current paving layer is bonded to the underlying layer. Take corrective action if an adequate bond does not exist between the current and underlying layer to ensure that an adequate bond will be achieved during subsequent placement operations.

Trim the cores immediately after obtaining the cores from the roadway in accordance with Tex-207-F if the core heights meet the minimum untrimmed value listed in Table 12. Trim the cores on site in the presence of the Engineer. Use a permanent marker or paint pen to record the lot and sublot numbers on each core as well as the designation as Core A or B. The Engineer may require additional information to be marked on the core and may choose to sign or initial the core. The Engineer will take custody of the cores immediately after they are trimmed and will retain custody of the cores until the Department's testing is completed. Before turning the trimmed cores over to the Engineer, the Contractor may wrap the trimmed cores or secure them in a manner that will reduce the risk of possible damage occurring during transport by the Engineer. After testing, the Engineer will return the cores to the Contractor.

The Engineer may have the cores transported back to the Department's laboratory at the HMA plant via the Contractor's haul truck or other designated vehicle. In such cases where the cores will be out of the Engineer's possession during transport, the Engineer will use Department-provided security bags and the Roadway Core Custody protocol located at http://www.txdot.gov/business/specifications.htm to provide a secure means and process that protects the integrity of the cores during transport.

Decide whether to include the pair of cores in the air void determination for that sublot if the core height before trimming is less than the minimum untrimmed value shown in Table 12. Trim the cores as described above before delivering to the Engineer if electing to have the cores included in the air void determination. Deliver untrimmed cores to the Engineer and inform the Engineer of the decision to not have the cores included in air void determination if electing to not have the cores included in air void determination. The placement pay factor for the sublot will be 1.000 if cores will not be included in air void determination.

Instead of the Contractor trimming the cores on site immediately after coring, the Engineer and the Contractor may mutually agree to have the trimming operations performed at an alternate location such as a field laboratory or other similar location. In such cases, the Engineer will take possession of the cores immediately after they are obtained from the roadway and will retain custody of the cores until testing is completed. Either the Department or Contractor representative may perform trimming of the cores. The Engineer will witness all trimming operations in cases where the Contractor representative performs the trimming operation.

Dry the core holes and tack the sides and bottom immediately after obtaining the cores. Fill the hole with the same type of mixture and properly compact the mixture. Repair core holes with other methods when approved.

4.9.3.3. **Placement Testing**. Perform placement tests in accordance with Table 14. After the Engineer returns the cores, the Contractor may test the cores to verify the Engineer's test results for in-place air voids. The allowable differences between the Contractor's and Engineer's test results are listed in Table 11.

4.9.3.3.1. **In-Place Air Voids**. The Engineer will measure in-place air voids in accordance with Tex-207-F and Tex-227-F. Before drying to a constant weight, cores may be pre-dried using a Corelok or similar vacuum device to remove excess moisture. The Engineer will average the values obtained for all sublots in the production lot to determine the theoretical maximum specific gravity. The Engineer will use the average air void content for in-place air voids.

The Engineer will use the vacuum method to seal the core if required by Tex-207-F. The Engineer will use the test results from the unsealed core to determine the placement pay adjustment factor if the sealed core yields a higher specific gravity than the unsealed core. After determining the in-place air void content, the Engineer will return the cores and provide test results to the Contractor.

4.9.3.3.2. **Segregation (Density Profile)**. Test for segregation using density profiles in accordance with Tex-207-F, Part V. Density profiles are not required and are not applicable when using a thermal imaging system. Density profiles are not applicable in areas described in Section 341.4.9.3.1.4., "Miscellaneous Areas."

Perform a density profile every time the paver stops for more than 60 sec. on areas that are identified by either the Contractor or the Engineer as having thermal segregation and on any visibly segregated areas unless otherwise approved. Perform a minimum of one profile per sublot if the paver does not stop for more than 60 sec. and there are no visibly segregated areas or areas that are identified as having thermal segregation.

Provide the Engineer with the density profile of every sublot in the lot within one working day of the completion of each lot. Report the results of each density profile in accordance with Section 341.4.2., "Reporting and Responsibilities."

The density profile is considered failing if it exceeds the tolerances in Table 15. No production or placement bonus will be paid for any sublot that contains a failing density profile. When a hand-held thermal camera is used instead of a thermal imaging system, the Engineer will measure the density profile at least once per project. The Engineer's density profile results will be used when available. The Engineer may require the Contractor to remove and replace the area in question if the area fails the density profile and has surface irregularities as defined in Section 341.4.9.3.3.5., "Irregularities." The sublot in question may receive a production and placement bonus if applicable when the defective material is successfully removed and replaced.

Investigate density profile failures and take corrective actions during production and placement to eliminate the segregation. Suspend production if 2 consecutive density profiles fail unless otherwise approved. Resume production after the Engineer approves changes to production or placement methods.

Table 15
Segregation (Density Profile) Acceptance Criteria

Mixture Type	Maximum Allowable Density Range (Highest to Lowest)	Maximum Allowable Density Range (Average to Lowest)
Type A & Type B	8.0 pcf	5.0 pcf
Type C, Type D & Type F	6.0 pcf	3.0 pcf

4.9.3.3.3. **Longitudinal Joint Density**.

4.9.3.3.3.1. **Informational Tests.** Perform joint density evaluations while establishing the rolling pattern and verify that the joint density is no more than 3.0 pcf below the density taken at or near the center of the mat. Adjust the rolling pattern, if needed, to achieve the desired joint density. Perform additional joint density evaluations, at least once per sublot, unless otherwise directed.

4.9.3.3.3.2. **Record Tests**. Perform a joint density evaluation for each sublot at each pavement edge that is or will become a longitudinal joint. Joint density evaluations are not applicable in areas described in Section 341.4.9.3.1.4., "Miscellaneous Areas." Determine the joint density in accordance with Tex-207-F, Part VII. Record the joint density information and submit results on Department forms to the Engineer. The evaluation is considered failing if the joint density is more than 3.0 pcf below the density taken at the core random sample location and the correlated joint density is less than 90.0%. The Engineer will make independent joint density verification at least once per project and may make independent joint density verifications at the random sample locations. The Engineer's joint density test results will be used when available.

Provide the Engineer with the joint density of every sublot in the lot within one working day of the completion of each lot. Report the results of each joint density in accordance with Section 341.4.2., "Reporting and Responsibilities."

Investigate joint density failures and take corrective actions during production and placement to improve the joint density. Suspend production if the evaluations on 2 consecutive sublots fail unless otherwise approved. Resume production after the Engineer approves changes to production or placement methods.

4.9.3.3.4. **Recovered Asphalt Dynamic Shear Rheometer (DSR)**. The Engineer may take production samples or cores from suspect areas of the project to determine recovered asphalt properties. Asphalt binders with an aging ratio greater than 3.5 do not meet the requirements for recovered asphalt properties and may be deemed defective when tested and evaluated by the Construction Division. The aging ratio is the DSR value of the extracted binder divided by the DSR value of the original unaged binder. Obtain DSR values in accordance with AASHTO T 315 at the specified high temperature performance grade of the asphalt. The Engineer may require removal and replacement of the defective material at the Contractor's expense. The asphalt binder will be recovered for testing from production samples or cores in accordance with Tex-211-F.

4.9.3.3.5. **Irregularities**. Identify and correct irregularities including segregation, rutting, raveling, flushing, fat spots, mat slippage, irregular color, irregular texture, roller marks, tears, gouges, streaks, uncoated aggregate particles, or broken aggregate particles. The Engineer may also identify irregularities, and in such cases, the Engineer will promptly notify the Contractor. If the Engineer determines that the irregularity will adversely affect pavement performance, the Engineer may require the Contractor to remove and replace (at the Contractor's expense) areas of the pavement that contain irregularities and areas where the mixture does not bond to the existing pavement.

If irregularities are detected, the Engineer may require the Contractor to immediately suspend operations or may allow the Contractor to continue operations for no more than one day while the Contractor is taking appropriate corrective action.

4.9.4. **Exempt Production**. The Engineer may deem the mixture as exempt production for the following conditions:

- anticipated daily production is less than 1,000 tons;
- total production for the project is less than 5,000 tons;
- when mutually agreed between the Engineer and the Contractor; or
- when shown on the plans.

For exempt production, the Contractor is relieved of all production and placement sampling and testing requirements, and the production and placement pay factors are 1.000. All other specification requirements apply, and the Engineer will perform acceptance tests for production and placement listed in Table 14 when 100 tons or more per day are produced.

For exempt production:

- produce, haul, place, and compact the mixture in compliance with the specification and as directed;
- control mixture production to yield a laboratory-molded density that is within ±1.0% of the target laboratory-molded density as tested by the Engineer;
- compact the mixture in accordance with Section 341.4.8., "Compaction"; and

- when a thermal imaging system is not used, the Engineer may perform segregation (density profiles) and thermal profiles in accordance with the specification.

4.9.5. **Ride Quality**. Measure ride quality in accordance with Item 585, "Ride Quality for Pavement Surfaces," unless otherwise shown on the plans.

5. MEASUREMENT

Hot mix will be measured by the ton of composite hot-mix, which includes asphalt, aggregate, and additives. Measure the weight on scales in accordance with Item 520, "Weighing and Measuring Equipment."

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under Section 341.5., "Measurement," will be paid for at the unit bid price for "Dense Graded Hot-Mix Asphalt" of the mixture type, SAC, and binder specified. These prices are full compensation for surface preparation, materials including tack coat, placement, equipment, labor, tools, and incidentals.

Pay adjustments for bonuses and penalties will be applied as determined in this Item; however, a pay adjustment factor of 1.000 will be assigned for all placement sublots for "level ups" only when "level up" is listed as part of the item bid description code. A pay adjustment factor of 1.000 will be assigned to all production and placement sublots when "exempt" is listed as part of the item bid description code.

Payment for each sublot, including applicable pay adjustment bonuses, will only be paid for sublots when the Contractor supplies the Engineer with the required documentation for production and placement QC/QA, thermal profiles, segregation density profiles, and longitudinal joint densities in accordance with Section 341.4.2., "Reporting and Responsibilities." When a thermal imaging system is used, documentation is not required for thermal profiles or segregation density profiles on individual sublots; however, the thermal imaging system automated reports described in Tex-244-F are required.

Trial batches will not be paid for unless they are included in pavement work approved by the Department.

Pay adjustment for ride quality will be determined in accordance with Item 585, "Ride Quality for Pavement Surfaces."

6.1. **Production Pay Adjustment Factors**. The production pay adjustment factor is based on the laboratory-molded density using the Engineer's test results. A pay adjustment factor will be determined from Table 16 for each sublot using the deviation from the target laboratory-molded density defined in Table 9. The production pay adjustment factor for completed lots will be the average of the pay adjustment factors for the 4 sublots sampled within that lot.

Table 16
Production Pay Adjustment Factors for Laboratory-Molded Density[1]

Absolute Deviation from Target Laboratory-Molded Density	Production Pay Adjustment Factor (Target Laboratory-Molded Density)
0.0	1.050
0.1	1.050
0.2	1.050
0.3	1.044
0.4	1.038
0.5	1.031
0.6	1.025
0.7	1.019
0.8	1.013
0.9	1.006
1.0	1.000
1.1	0.965
1.2	0.930
1.3	0.895
1.4	0.860
1.5	0.825
1.6	0.790
1.7	0.755
1.8	0.720
> 1.8	Remove and replace

1. If the Engineer's laboratory-molded density on any sublot is less than 95.0% or greater than 98.0%, take immediate corrective action to bring the mixture within these tolerances. The Engineer may suspend operations if the Contractor's corrective actions do not produce acceptable results. The Engineer will allow production to resume when the proposed corrective action is likely to yield acceptable results.

6.1.1. **Payment for Incomplete Production Lots**. Production pay adjustments for incomplete lots, described under Section 341.4.9.2.1.1., "Incomplete Production Lots," will be calculated using the average production pay factors from all sublots sampled. A production pay factor of 1.000 will be assigned to any lot when the random sampling plan did not result in collection of any samples.

6.1.2. **Production Sublots Subject to Removal and Replacement**. If after referee testing, the laboratory-molded density for any sublot results in a "remove and replace" condition as listed in Table 16, the Engineer may require removal and replacement or may allow the sublot to be left in place without payment. The Engineer may also accept the sublot in accordance with Section 5.3.1., "Acceptance of Defective or Unauthorized Work." Replacement material meeting the requirements of this Item will be paid for in accordance with this Section.

6.2. **Placement Pay Adjustment Factors**. The placement pay adjustment factor is based on in-place air voids using the Engineer's test results. A pay adjustment factor will be determined from Table 17 for each sublot that requires in-place air void measurement. A placement pay adjustment factor of 1.000 will be assigned to the entire sublot when the random sample location falls in an area designated on the plans as not subject to in-place air void determination. A placement pay adjustment factor of 1.000 will be assigned to quantities placed in areas described in Section 341.4.9.3.1.4., "Miscellaneous Areas." The placement pay adjustment factor for completed lots will be the average of the placement pay adjustment factors for up to 4 sublots within that lot.

Table 17
Placement Pay Adjustment Factors for In-Place Air Voids

In-Place Air Voids	Placement Pay Adjustment Factor	In-Place Air Voids	Placement Pay Adjustment Factor
< 2.7	Remove and Replace	6.4	1.042
2.7	0.710	6.5	1.040
2.8	0.740	6.6	1.038
2.9	0.770	6.7	1.036
3.0	0.800	6.8	1.034
3.1	0.830	6.9	1.032
3.2	0.860	7.0	1.030
3.3	0.890	7.1	1.028
3.4	0.920	7.2	1.026
3.5	0.950	7.3	1.024
3.6	0.980	7.4	1.022
3.7	0.998	7.5	1.020
3.8	1.002	7.6	1.018
3.9	1.006	7.7	1.016
4.0	1.010	7.8	1.014
4.1	1.014	7.9	1.012
4.2	1.018	8.0	1.010
4.3	1.022	8.1	1.008
4.4	1.026	8.2	1.006
4.5	1.030	8.3	1.004
4.6	1.034	8.4	1.002
4.7	1.038	8.5	1.000
4.8	1.042	8.6	0.998
4.9	1.046	8.7	0.996
5.0	1.050	8.8	0.994
5.1	1.050	8.9	0.992
5.2	1.050	9.0	0.990
5.3	1.050	9.1	0.960
5.4	1.050	9.2	0.930
5.5	1.050	9.3	0.900
5.6	1.050	9.4	0.870
5.7	1.050	9.5	0.840
5.8	1.050	9.6	0.810
5.9	1.050	9.7	0.780
6.0	1.050	9.8	0.750
6.1	1.048	9.9	0.720
6.2	1.046	> 9.9	Remove and Replace
6.3	1.044		

6.2.1. **Payment for Incomplete Placement Lots**. Pay adjustments for incomplete placement lots described under Section 341.4.9.3.1.2., "Incomplete Placement Lots," will be calculated using the average of the placement pay factors from all sublots sampled and sublots where the random location falls in an area designated on the plans as not eligible for in-place air void determination. A placement pay adjustment factor of 1.000 will be assigned to any lot when the random sampling plan did not result in collection of any samples.

6.2.2. **Placement Sublots Subject to Removal and Replacement**. If after referee testing, the placement pay adjustment factor for any sublot results in a "remove and replace" condition as listed in Table 17, the Engineer will choose the location of 2 cores to be taken within 3 ft. of the original failing core location. The Contractor will obtain the cores in the presence of the Engineer. The Engineer will take immediate possession of the untrimmed cores and submit the untrimmed cores to the Construction Division, where they will be trimmed if necessary and tested for bulk specific gravity within 10 working days of receipt.

The average bulk specific gravity of the cores will be divided by the Engineer's average maximum theoretical specific gravity for that lot to determine the new pay adjustment factor of the sublot in question. If the new pay adjustment factor is 0.700 or greater, the new pay adjustment factor will apply to that sublot. If the new pay adjustment factor is less than 0.700, no payment will be made for the sublot. Remove and replace the

failing sublot, or the Engineer may allow the sublot to be left in place without payment. The Engineer may also accept the sublot in accordance with Section 5.3.1., "Acceptance of Defective or Unauthorized Work." Replacement material meeting the requirements of this Item will be paid for in accordance with this Section.

6.3. **Total Adjusted Pay Calculation**. Total adjusted pay (TAP) will be based on the applicable pay adjustment factors for production and placement for each lot.

TAP = (A+B)/2

where:
A = Bid price × production lot quantity × average pay adjustment factor for the production lot
B = Bid price × placement lot quantity × average pay adjustment factor for the placement lot + (bid price × quantity placed in miscellaneous areas × 1.000)

Production lot quantity = Quantity actually placed - quantity left in place without payment

Placement lot quantity = Quantity actually placed - quantity left in place without payment - quantity placed in miscellaneous areas

Item 421
Hydraulic Cement Concrete

1. DESCRIPTION

Furnish hydraulic cement concrete for concrete pavements, concrete structures, and other concrete construction.

2. MATERIALS

Use materials from prequalified sources listed on the Department website. Provide coarse and fine aggregates from sources listed in the Department's *Concrete Rated Source Quality Catalog* (CRSQC). Use materials from non-listed sources only when tested and approved by the Engineer before use. Allow 30 calendar days for the Engineer to sample, test, and report results for non-listed sources. Do not combine approved material with unapproved material.

2.1. **Cement.** Furnish cement conforming to DMS-4600, "Hydraulic Cement."

2.2. **Supplementary Cementing Materials (SCM).**

- **Fly Ash.** Furnish fly ash, ultra-fine fly ash (UFFA), and modified Class F fly ash (MFFA) conforming to DMS-4610, "Fly Ash."
- **Slag Cement.** Furnish Slag Cement conforming to DMS-4620, "Ground Granulated Blast Furnace Slag."
- **Silica Fume.** Furnish silica fume conforming to DMS-4630, "Silica Fume."
- **Metakaolin.** Furnish metakaolin conforming to DMS-4635, "Metakaolin."

2.3. **Cementitious Material.** Cementitious materials are the cement and supplementary cementing materials used in concrete.

2.4. **Chemical Admixtures.** Furnish admixtures conforming to DMS-4640, "Chemical Admixtures for Concrete."

2.5. **Water.** Furnish mixing and curing water that is free from oils, acids, organic matter, or other deleterious substances. Water from municipal supplies approved by the Texas Department of Health will not require testing. Provide test reports showing compliance with Table 1 before use when using water from other sources.

Water that is a blend of concrete wash water and other acceptable water sources, certified by the concrete producer as complying with the requirements of both Table 1 and Table 2, may be used as mix water. Test the blended water weekly for 4 weeks for compliance with Table 1 and Table 2 or provide previous test results. Then test every month for compliance. Provide water test results upon request.

Table 1
Chemical Limits for Mix Water

Contaminant	Test Method	Maximum Concentration (ppm or mg\L)
Chloride (Cl)	ASTM C114	
Prestressed concrete		500
Bridge decks & superstructure		500
All other concrete		1,000
Sulfate (SO4)	ASTM C114	2,000
Alkalies (Na2O + 0.658K2O)	ASTM C114	600
Total solids	ASTM C1603	50,000

Table 2
Acceptance Criteria for Questionable Water Supplies

Property	Test Method	Limits
Compressive strength, min % control at 7 days	ASTM C31, ASTM C39[1,2]	90
Time of set, deviation from control, h:min.	ASTM C403	From 1:00 early to 1:30 later

1. Base comparisons on fixed proportions and the same volume of test water compared to the control mix using 100% potable water or distilled water.
2. Base comparisons on sets consisting of at least 2 standard specimens made from a composite sample.

Do not use mix water that has an adverse effect on the air-entraining agent, on any other chemical admixture, or on strength or time of set of the concrete. Use mixing and curing water free of iron and other impurities that may cause staining or discoloration when using white hydraulic cement.

2.6. **Aggregate.**

2.6.1. **Coarse Aggregate.** Provide coarse aggregate consisting of durable particles of gravel, crushed blast furnace slag, recycled crushed hydraulic cement concrete, crushed stone, or combinations which are free from frozen material and from injurious amounts of salt, alkali, vegetable matter, or other objectionable material, either free or as an adherent coating. Provide coarse aggregate of uniform quality throughout.

Provide coarse aggregate with the requirements listed in Table 3 unless otherwise shown on the plan.

Table 3
Coarse Aggregate Requirements

Description	Test Method	Limit
Weight of Clay Lumps, % Max	Tex-413-A	0.25
Weight of Shale, % Max		1.0
Weight of Laminate and Friable Particle, % Max		5.0
L.A. Abrasion Wear, % Max	Tex-410-A	40
5-Cycle Magnesium Sulfate Soundness,[1,2] non-air-entrained concrete, % Max	Tex-411-A	25
5-Cycle Magnesium Sulfate Soundness,[1,3] air-entrained concrete, % Max		18
Loss by Decantation, % Max	Tex-406-A	1.5

1. Recycled crushed hydraulic cement concrete is not subject to 5-cycle magnesium sulfate soundness requirements.
2. Allowed when air-entrained concrete is used at the Contractor's option.
3. Only when air-entrained concrete is required by the plans.

Increase the loss by decantation limit to 3.0% for all classes of concrete and 5.0% for Class A, B, and P if the material finer than the No. 200 sieve is determined to be at least 85% calcium carbonate in accordance with Tex-406-A, Part III, in the case of coarse aggregates made primarily from crushing stone unless otherwise shown on the plans. Provide test results upon request.

Provide coarse aggregate conforming to the gradation requirements shown in Table 4 when tested in accordance with Tex-401-A unless otherwise specified.

Table 4
Coarse Aggregate Gradation Chart

Aggregate Grade No.[1]	Maximum Nominal Size	Percent Passing on Each Sieve								
		2-1/2"	2"	1-1/2"	1"	3/4"	1/2"	3/8"	#4	#8
1	2"	100	80–100	50–85		20–40			0–10	
2	1-1/2"		100	95–100		35–70		10–30	0–10	
3	1-1/2"		100	95–100		60–90	25–60		0–10	
4 (57)	1"			100	95–100		25–60		0–10	0–5
5 (67)	3/4"				100	90–100		20–55	0–10	0–5
6 (7)	1/2"					100	90–100	40–70	0–15	0–5
7	3/8"						100	70–95	0–25	
8	3/8"						100	95–100	20–65	0–10

1. Corresponding ASTM C33 gradation shown in parentheses.

2.6.2. **Fine Aggregate.** Provide fine aggregate consisting of clean, hard, durable particles of natural, manufactured sand, recycled crushed hydraulic cement concrete, slag, lightweight aggregate, or a combination thereof. Provide fine aggregate free from frozen material and from injurious amounts of salt, alkali, vegetable matter, or other objectionable material.

Provide fine aggregates with the requirements in Table 5 unless otherwise shown on the plans.

Table 5
Fine Aggregate Requirements

Description	Test Method	Limit
Weight of Clay Lumps, % Max	Tex-413-A	0.50
Organic Impurities[1]	Tex-408-A	Color not darker than standard
Sand Equivalent	Tex-203-F	80
Fineness Modulus	Tex-402-A	2.3 to 3.1

1. Only when air-entrained concrete is specified.

Provide fine aggregate or combinations of aggregates conforming to the gradation requirements shown in Table 6 when tested in accordance with Tex-401-A unless otherwise specified.

Table 6
Fine Aggregate Gradation Chart (Grade 1)

Sieve Size	Percent Passing
3/8"	100
#4	95–100
#8	80–100
#16	50–85
#30	25–65
#50	10–35[1]
#100	0–10
#200	0–3[2]

1. 6–35 when sand equivalent value is greater than 85.
2. 0–6 for manufactured sand.

2.6.3. **Intermediate Aggregate.** Provide intermediate aggregate consisting of clean, hard, durable particles of natural, manufactured sand, slag, recycled crushed hydraulic cement concrete, lightweight aggregate, or a combination thereof when optimized aggregate gradation (OAG) concrete is specified or when used at the Contractor's option. Provide intermediate aggregate free from frozen material and injurious amounts of salt, alkali, vegetable matter, or other objectionable material.

Provide intermediate aggregate with the requirements in Table 7.

Table 7
Intermediate Aggregate Requirements

Description	Test Method	Limit
Weight of Clay Lumps, % Max	Tex-413-A	0.50
L.A. Abrasion Wear,[1] % Max	Tex-410-A	40
5-Cycle Magnesium Sulfate Soundness,[1,2,3] non-air-entrained concrete, % Max	Tex-411-A	25
5-Cycle Magnesium Sulfate Soundness,[1,2,4] air-entrained concrete, % Max		18
Organic Impurities[5]	Tex-408-A	Color not darker than standard
Loss by Decantation,[1] % Max	Tex-406-A	1.5

1. Only applies to the portion retained on the No. 4 sieve, if more than 30% of the intermediate aggregate is retained on the No. 4 sieve.
2. Recycled crushed hydraulic cement concrete is not subject to 5-cycle magnesium sulfate soundness requirements.
3. Allowed when air-entrained concrete is used at the Contractor's option.
4. Only when air-entrained concrete is required by the plans.
5. Only applies to the portion passing the 3/8 in. sieve, if more than 30% of the intermediate aggregate is passing the 3/8 in. sieve.

For the portion retained on the No. 4 sieve, if more than 30% of the intermediate aggregate is retained on the No. 4 sieve, and in the case of aggregates made primarily from crushing stone, unless otherwise shown on the plans, the loss by decantation may be increased to 3.0% for all classes of concrete and 5.0% for Class A, B, and P if the material finer than the No. 200 sieve is determined to be at least 85% calcium carbonate in accordance with Tex-406-A, Part III. Provide test results upon request.

2.7. **Mortar and Grout**. Furnish pre-packaged grouts conforming to DMS-4675, "Cementitious Grouts and Mortars for Miscellaneous Applications," when specified for applications other than post-tension grouting.

Section 421.4.2.6., "Mix Design Options," does not apply for mortar and grout.

2.8. **Storage of Materials**.

2.8.1. **Cement and Supplementary Cementing Materials**. Store all cement and supplementary cementing materials in weatherproof enclosures that will protect them from dampness or absorption of moisture.

When permitted, small quantities of packaged cementitious material may be stored in the open, on a raised platform, and under waterproof covering for up to 48 hr.

2.8.2. **Aggregates**. Handle and store concrete aggregates in a manner that prevents contamination with foreign materials. Clear and level the sites for the stockpiles of all vegetation if the aggregates are stored on the ground and do not use the bottom 6-in. layer of aggregate without cleaning the aggregate before use.

Maintain separate stockpiles and prevent intermixing when conditions require the use of 2 or more grades of coarse aggregates. Separate the stockpiles using physical barriers where space is limited. Store aggregates from different sources in different stockpiles unless the Engineer authorizes pre-blending of the aggregates. Minimize segregation in stockpiles. Remix and test stockpiles when segregation is apparent.

Sprinkle stockpiles to control moisture and temperature as necessary. Maintain reasonably uniform moisture content in aggregate stockpiles.

2.8.3. **Chemical Admixtures**. Store admixtures in accordance with manufacturer's recommendations and prevent admixtures from freezing.

3. EQUIPMENT

3.1. **Concrete Plants and Mixing Equipment**. Except for volumetric stationary plant or truck (auger) mixers, each plant and truck mixer must be currently certified by the National Ready Mixed Concrete Association (NRMCA) or have an inspection report signed and sealed by a licensed professional engineer showing concrete measuring, mixing, and delivery equipment meets all requirements of ASTM C94. A new certification or signed and sealed report is required every time a plant is moved. Plants with a licensed professional engineer's inspection require re-inspection every 2 yr. Provide a copy of the certification or the

signed and sealed inspection report to the Engineer. Remove equipment or facilities from service until corrected when they fail to meet specification requirements.

When allowed on the plans or by the Engineer, for concrete classes not identified as structural concrete in Table 8 or for Class C concrete not used for bridge-class structures, the Engineer may inspect and approve all plants and trucks instead of the NRMCA or non-Department engineer-sealed certifications. The criteria and frequency of Engineer approval of plants and trucks is the same used for NRMCA certification.

Inspect and furnish inspection reports on the condition of blades and fins and their percent wear from the original manufacturer's design for truck mixers and agitators annually. Repair mixing equipment exhibiting 10% or more wear before use. If an inspection within 12 mo. is not practical, a 2-mo. grace period (for a maximum of 14 mo. between inspections) is permitted.

3.1.1. **Scales**. Check all scales before beginning of operations, after each move, or whenever their accuracy or adequacy is questioned, and at least once every 6 mo. Immediately correct deficiencies, and recalibrate. Provide a record of calibration showing scales in compliance with ASTM C94 requirements. Check batching accuracy of volumetric water batching devices at least every 90 days. Check batching accuracy of chemical admixture dispensing devices at least every 6 mo. Perform daily checks as necessary to ensure measuring accuracy.

3.1.2. **Volumetric Mixers**. Provide volumetric mixers with rating plates defining the capacity and the performance of the mixer in accordance with the Volumetric Mixer Manufacturers Bureau or equivalent. Provide volumetric mixers that comply with ASTM C685. Provide test data showing mixers meet the uniformity test requirements of Tex-472-A.

Unless allowed on the plans or by the Engineer, volumetric truck (auger) mixers may not supply classes of concrete identified as structural concrete in Table 8.

3.1.3. **Agitators and Truck and Stationary Mixers**. Provide stationary and truck mixers capable of combining the ingredients of the concrete into a thoroughly mixed and uniform mass and capable of discharging the concrete so at least 5 of the 6 requirements of Tex-472-A are met.

Perform concrete uniformity tests on mixers or agitators in accordance with Tex-472-A as directed, to resolve issues of mix uniformity and mixer performance.

Perform the mixer or agitator uniformity test at the full rated capacity of the equipment. Remove all equipment that fails the uniformity test from service.

Inspect and maintain mixers and agitators. Keep them free of concrete buildup, and repair or replace worn or damaged blades or fins.

Ensure all mixers have a plate affixed showing manufacturer's recommended operating speed and rated capacity for mixing and agitating.

3.2. **Hauling Equipment**. Provide hauling equipment capable of maintaining the mixed concrete in a thoroughly mixed and uniform mass, and discharging the concrete with a satisfactory degree of uniformity.

Provide equipment with smooth, mortar-tight metal containers equipped with gates that prevent accidental discharge of the concrete when using non-agitating equipment for transporting concrete.

Maintain hauling equipment clean and free of built-up concrete.

3.3. **Testing Equipment**. Furnish and maintain the following in accordance with the pertinent test procedure unless otherwise shown on the plans or specified:

- sieves necessary to perform aggregate gradation analysis when optimized aggregate gradation is specified,

- equipment necessary to perform Tex-415-A and Tex-422-A,
- equipment necessary to perform Tex-409-A or Tex-425-A,
- test molds,
- curing facilities,
- maturity meters if used, and
- wheelbarrow or other container acceptable for the sampling of the concrete.

Provide strength-testing equipment when required in accordance with the Contract-controlling test unless shown otherwise.

4. CONSTRUCTION

4.1. **Classification of Concrete Mix Designs**. Provide classes of concrete meeting the requirements shown in Table 8.

A higher-strength class of concrete with equal or lower water-to-cementitious material (w/cm) ratio may be substituted for the specified class of concrete when approved.

4.2. **Mix Design Proportioning**. Furnish mix designs using ACI 211, Tex-470-A, or other approved procedures for the classes of concrete listed in Table 8 unless a design method is indicated on the plans. Perform mix design proportioning by absolute volume method unless otherwise approved. Perform cement replacement using equivalent weight method unless otherwise approved.

Do not exceed the maximum w/cm ratio listed in Table 8 when designing the mixture.

4.2.1. **Cementitious Materials**. Do not exceed 700 lb. of cementitious material per cubic yard of concrete unless otherwise specified or approved.

- Use cement of the same type and from the same source for monolithic placements.
- Do not use supplementary cementing materials when white hydraulic cement is specified.

Table 8
Concrete Classes

Class of Concrete	Design Strength,[1] Min f'_c (psi)	Max w/cm Ratio	Coarse Aggregate Grades[2,3,4]	Cement Types	Mix Design Options	Exceptions to Mix Design Options	General Usage[5]
A	3,000	0.60	1–4, 8	I, II, I/II, IL, IP, IS, IT, V	1, 2, 4, & 7	When the cementitious material content does not exceed 520 lb./cu. yd., Class C fly ash may be used instead of Class F fly ash.	Curb, gutter, curb & gutter, conc. retards, sidewalks, driveways, back-up walls, anchors, non-reinforced drilled shafts
B	2,000	0.60	2–7				Riprap, traffic signal controller foundations, small roadside signs, and anchors
C[6]	3,600	0.45	1–6	I, II, I/II, IP, IS, IT,[7] V	1–8		Drilled shafts, bridge substructure, bridge railing, culverts except top slab of direct traffic culverts, headwalls, wing walls, approach slabs, inlets, manholes, concrete traffic barrier (cast-in-place)
E	3,000	0.50	2–5	I, II, I/II, IL, IP, IS, IT,[7] V	1–8	When the cementitious material content does not exceed 520 lb./cu. yd., Class C fly ash may be used instead of Class F fly ash.	Seal concrete
F[6]	Note[8]	0.45	2–5	I, II, I/II, IP, IS, IT,[7] V			Railroad structures; occasionally for bridge piers, columns, or bents

Table 8 (continued)
Concrete Classes

Class of Concrete	Design Strength,[1] Min f'_c (psi)	Max w/cm Ratio	Coarse Aggregate Grades[2,3,4]	Cement Types	Mix Design Options	Exceptions to Mix Design Options	General Usage[5]
H[6]	Note[8]	0.45	3–6	I, II, I/II, III, IP, IS, IT,[7] V	1–5	Do not use Type III cement in mass placement concrete. Up to 20% of blended cement may be replaced with listed SCMs when Option 4 is used for precast concrete.	Precast concrete, post-tension members
S[6]	4,000	0.45	2–5	I, II, I/II, IP, IS, IT,[7]V	1–8		Bridge slabs, top slabs of direct traffic culverts
P	See Item 360, "Concrete Pavement."	0.50	2–3	I, II, I/II, IL, IP, IS, IT, V	1–8	When the cementitious material content does not exceed 520 lb./cu. yd., Class C fly ash may be used instead of Class F fly ash.	Concrete pavement
CO[6]	4,600	0.40	6	I, II, I/II, IP, IS, IT,[7] V	1–8		Bridge deck concrete overlay
LMC[6]	4,000	0.40	6–8				Latex-modified concrete overlay
SS[6]	3,600	0.45	4–6			Use a minimum cementitious material content of 658 lb./cu. yd. of concrete.	Slurry displacement shafts, underwater drilled shafts
K[6]	Note[8]	0.40	Note[8]	I, II, I/II, III IP, IS, IT,[7] V			Note[8]
HES	Note[8]	0.45	Note[8]	I, IL, II, I/II, III		Mix design options do not apply. 700 lb. of cementitious material per cubic yard limit does not apply.	Concrete pavement, concrete pavement repair
"X" (HPC) [6,9,10]	Note[11]	0.45	Note[11]	I, II, I/II, III IP, IS, IT,[7] V	1–5, & 8	Maximum fly ash replacement for Options 1 and 3 may be increased to 45%. Up to 20% of a blended cement may be replaced with listed SCMs for Option 4. Do not use Option 8 for precast concrete.	
"X" (SRC) [6,9,10]	Note[11]	0.45	Note[11]	I/II, II, IP, IS, IT,[7] V	1–4 , & 7	Do not use Class C Fly Ash Type III-MS may be used where allowed. Type I and Type III cements may be used with Options 1–3, with a maximum w/cm of 0.40. Up to 20% of blended cement may be replaced with listed SCMs when Option 4 is used for precast concrete. Do not use Option 7 for precast concrete.	

1. Design strength must be attained within 56 days.
2. Do not use Grade 1 coarse aggregate except in massive foundations with 4 in. minimum clear spacing between reinforcing steel bars, unless otherwise permitted. Do not use Grade 1 aggregate in drilled shafts.
3. Use Grade 8 aggregate in extruded curbs unless otherwise approved.
4. Other grades of coarse aggregate maybe used in non-structural concrete classes when allowed by the Engineer.
5. For information only.
6. Structural concrete classes.
7. Do not use Type IT cements containing > 5% limestone.
8. As shown on the plans or specified.
9. "X" denotes class of concrete shown on the plans or specified.
10. (HPC): High Performance Concrete, (SRC): Sulfate Resistant Concrete.
11. Same as class of concrete shown on the plans.

4.2.2. **Aggregates.** Recycled crushed hydraulic cement concrete may be used as a coarse or fine aggregate in Class A, B, D, E, and P concrete. Limit recycled crushed concrete fine aggregate to a maximum of 20% of the fine aggregate.

Use light-colored aggregates when white hydraulic cement is specified.

Use fine aggregate with an acid insoluble residue of at least 60% by weight when tested in accordance with Tex-612-J in all concrete subject to direct traffic.

Use the following equation to determine if the aggregate combination meets the acid insoluble residue requirement when blending fine aggregate or using an intermediate aggregate:

$$\frac{(A_1 \times P_1)+(A_2 \times P_2)+(A_{ia} \times P_{ia})}{100} \geq 60\%$$

where:
A_1 = acid insoluble (%) of fine aggregate 1
A_2 = acid insoluble (%) of fine aggregate 2
A_{ia} = acid insoluble (%) of intermediate aggregate passing the 3/8 in. sieve
P_1 = percent by weight of fine aggregate 1 of the fine aggregate blend
P_2 = percent by weight of fine aggregate 2 of the fine aggregate blend
P_{ia} = percent by weight of intermediate aggregate passing the 3/8 in. sieve

Alternatively to the above equation, blend fine aggregate with a micro-deval loss of less than 12%, when tested in accordance with Tex-461-A, with at least 40% of a fine aggregate with an acid insoluble residue of at least 60%.

4.2.3. **Chemical Admixtures**. Do not use Type C, Type E, Type F, or Type G admixtures in Class S bridge deck concrete. Do not use chemical admixtures containing calcium chloride in any concrete.

Use a 30% calcium nitrite solution when a corrosion-inhibiting admixture is required. The corrosion-inhibiting admixture must be set neutral unless otherwise approved. Dose the admixture at the rate of gallons of admixture per cubic yard of concrete shown on the plans.

4.2.4. **Air Entrainment**. Use an approved air-entraining admixture when air-entrained concrete is specified, or when an air-entraining admixture is used at the Contractor's option, and do not exceed the manufacturer's recommended dosage. Ensure the minimum entrained air content is at least 3.0% for all classes of concrete except Class P when air-entrained concrete is specified, during trial batch, or when providing previous field data.

4.2.5. **Slump**. Provide concrete with a slump in accordance with Table 9 unless otherwise specified. When approved, the slump of a given concrete mix may be increased above the values shown in Table 9 using chemical admixtures, provided the admixture-treated concrete has the same or lower water-to-cementitious material ratio and does not exhibit segregation or excessive bleeding. Request approval to exceed the slump limits in Table 9 sufficiently in advance for proper evaluation by the Engineer.

Perform job-control testing of slump in accordance with Section 421.4.8.3.1., "Job-Control Testing."

Table 9
Placement Slump Requirements

General Usage[1]	Placement Slump Range,[2] in.
Walls (over 9 in. thick), caps, columns, piers, approach slabs, concrete overlays	3 to 5
Bridge slabs, top slabs of direct traffic culverts, latex-modified concrete for bridge deck overlays	3 to 5-1/2
Inlets, manholes, walls (less than 9 in. thick), bridge railing, culverts, concrete traffic barrier, concrete pavement (formed), seal concrete	4 to 5-1/2
Precast concrete	4 to 9
Underwater concrete placements	6 to 8-1/2
Drilled shafts, slurry displaced and underwater drilled shafts	See Item 416, "Drilled Shaft Foundations."
Curb, gutter, curb and gutter, concrete retards, sidewalk, driveways, anchors, riprap, small roadside sign foundations, concrete pavement repair, concrete repair	As approved

1. For information only.
2. For fiber reinforced concrete, perform slump before addition of fibers.

4.2.6. **Mix Design Options.**

4.2.6.1. **Option 1**. Replace 20% to 35% of the cement with Class F fly ash.

4.2.6.2. **Option 2**. Replace 35% to 50% of the cement with slag cement or MFFA.

4.2.6.3. **Option 3**. Replace 35% to 50% of the cement with a combination of Class F fly ash, slag cement, MFFA, UFFA, metakaolin, or silica fume; however, no more than 35% may be fly ash, and no more than 10% may be silica fume.

4.2.6.4. **Option 4**. Use Type IP, Type IS, or Type IT cement as allowed in Table 5 for each class of concrete. Up to 10% of a Type IP, Type IS, or Type IT cement may be replaced with Class F fly ash, slag cement, or silica fume. Use no more than 10% silica fume in the final cementitious material mixture if the Type IT cement contains silica fume, and silica fume is used to replace the cement.

4.2.6.5. **Option 5**. Replace 35% to 50% of the cement with a combination of Class C fly ash and at least 6% of silica fume, UFFA, or metakaolin. However, no more than 35% may be Class C fly ash, and no more than 10% may be silica fume.

4.2.6.6. **Option 6**. Use a lithium nitrate admixture at a minimum dosage determined by testing conducted in accordance with Tex-471-A, "Lithium Dosage Determination Using Accelerated Mortar Bar Testing." Before use of the mix, provide an annual certified test report signed and sealed by a licensed professional engineer, from a laboratory on the Department's MPL, certified by the Construction Division as being capable of testing according to Tex-471-A, "Lithium Dosage Determination Using Accelerated Mortar Bar Testing."

4.2.6.7. **Option 7**. Ensure the total alkali contribution from the cement in the concrete does not exceed 3.5 lb. per cubic yard of concrete when using hydraulic cement not containing SCMs calculated as follows:

$$\text{lb. alkali per cu. yd.} = \frac{(\text{lb. cement per cu. yd.}) \times (\%\ Na_2O \text{ equivalent in cement})}{100}$$

4.2.6.8. **Option 8**. Perform annual testing as required for any deviations from Options 1–5 or use mix design options listed in Table 10. Laboratories performing ASTM C1260, ASTM C1567, and ASTM C1293 testing must be listed on the Department's MPL. Before use of the mix, provide a certified test report signed and sealed by a licensed professional engineer demonstrating the proposed mixture conforms to the requirements of Table 10.

Provide a certified test report signed and sealed by a licensed professional engineer, when HPC is required, and less than 20% of the cement is replaced with SCMs, demonstrating ASTM C1202 test results indicate the permeability of the concrete is less than 1,500 coulombs tested immediately after either of the following curing schedules:

- Moisture cure specimens 56 days at 73°F.
- Moisture cure specimens 7 days at 73°F followed by 21 days at 100°F.

Table 10
Option 8 Testing and Mix Design Requirements

Scenario	ASTM C1260 Result		Testing Requirements for Mix Design Materials or Prescriptive Mix Design Options[1]
	Mix Design Fine Aggregate	Mix Design Coarse Aggregate	
A	> 0.10%	> 0.10%	Determine the dosage of SCMs needed to limit the 14-day expansion of each aggregate[2] to 0.08% when tested individually in accordance with ASTM C1567, or Use a minimum of 40% Class C fly ash with a maximum CaO^3 content of 25%.
B	≤ 0.10%	≤ 0.10%	Use a minimum of 40% Class C fly ash with a maximum CaO^3 content of 25%, or Use any ternary combination which replaces 35% to 50% of cement.
	≤ 0.10%	ASTM C1293 1 yr. Expansion ≤ 0.04%	Use a minimum of 20% of any Class C fly ash, or Use any ternary combination which replaces 35% to 50% of cement.
C	≤ 0.10%	> 0.10%	Determine the dosage of SCMs needed to limit the 14-day expansion of coarse and intermediate[2] aggregate to 0.08% when tested individually in accordance with ASTM C1567, or Use a minimum of 40% Class C fly ash with a maximum CaO^3 content of 25%.
D	> 0.10%	≤ 0.10%	Use a minimum of 40% Class C fly ash with a maximum CaO^3 content of 25%, or Use any ternary combination which replaces 35% to 50% of cement.
	> 0.10%	ASTM C1293 1 yr. Expansion ≤ 0.04%	Determine the dosage of SCMs needed to limit the 14-day expansion of fine aggregate to 0.08% when tested in accordance with ASTM C1567.

1. Do not use Class C fly ash if the ASTM C1260 value of the fine, intermediate, or coarse aggregate is 0.30% or greater, unless the fly ash is used as part of a ternary system.
2. Intermediate size aggregates will fall under the requirements of mix design coarse aggregate.
3. Average the CaO content from the previous ten values as listed on the mill certificate.

4.2.7. **Optimized Aggregate Gradation (OAG) Concrete.** The gradation requirements in Table 3 and Table 4 do not apply when OAG concrete is specified or used by the Contractor unless otherwise shown on the plans. Use Tex-470-A to establish the optimized aggregate gradation. Use at least 420 lb. per cubic yard of cementitious material when OAG concrete is used unless otherwise approved. Use a coarse aggregate with a maximum nominal size of 1-1/2 in. for Class P concrete. Use a coarse aggregate for all other classes of concrete with a maximum nominal size not larger than:

- 1/5 the narrowest dimension between sides of forms, or
- 1/3 the depth of slabs, or
- 3/4 the minimum clear spacing between individual reinforcing bars or wires, bundles of bars, individual tendons, bundled tendons, or ducts.

Make necessary adjustments to individual aggregate stockpile proportions during OAG concrete production when the gradation deviates from the optimized gradation requirements.

4.2.8. **Self-Consolidating Concrete (SCC).** Provide SCC meeting the following requirements shown in Table 11 when approved for use in precast concrete. Use concrete with a slump flow that can be placed without vibration and will not segregate or excessively bleed.

Increase the slump flow of a given concrete mix above the values shown in Table 11 when approved, provided the concrete has the same or lower water-to-cementitious material ratio and meets all other requirements listed in Table 11. Request approval to exceed the slump flow limits sufficiently in advance for proper evaluation by the Engineer.

Table 11
Mix Design Requirements for SCC

Tests	Test Method	Acceptable Limits
Slump Flow for Precast Concrete	ASTM C1611	22 to 27[1]
Slump Flow for Drilled Shafts	ASTM C1611	19 to 24[1]
T_{50}, sec	ASTM C1611	2 to 7
VSI Rating	ASTM C1611	0 or 1
Passing Ability, in.	ASTM C1621	≤ 2
Segregation Column, %	ASTM C1610	≤ 10
Bleeding, %	ASTM C232	≤ 2.5

1. These slump flow limits are generally acceptable for most applications. However, slump flow limits may be adjusted during mix design approval process and when approved by the Engineer.

4.3. **Concrete Trial Batches**. Perform preliminary and final trial batches when required by the plans, or when previous satisfactory field data is not available. Submit previous satisfactory field data to the Engineer showing the proposed mix design conforms to specification requirements when trial batches are not required and before concrete is placed.

Perform preliminary and final trial batches for all self-consolidating concrete mix designs.

4.3.1. **Preliminary Trial Batches**. Perform all necessary preliminary trial batch testing when required, and provide documentation including mix design, material proportions, and test results substantiating the mix design conforms to specification requirements.

4.3.2. **Final Trial batches**. Make all final trial batches using the proposed ingredients in a mixer that is representative of the mixers to be used on the job when required. Make the batch size at least 50% of the mixer's rated capacity. Perform fresh concrete tests for air content and slump, and make, cure, and test strength specimens for compliance with specification requirements. Test at least one set of design strength specimens, consisting of 2 specimens per set, at 7-day, 28-day, and at least one additional age unless otherwise directed. Before placing, provide the Engineer the option of witnessing final trial batches, including the testing of the concrete. If not provided this option, the Engineer may require additional trial batches, including testing, before the concrete is placed.

Conduct all testing listed in Table 11 when performing trial batches for self-consolidating concrete. Make an additional mixture with 3% more water than the preliminary trial batch. Make necessary adjustments to the mix design if this additional mixture does not meet requirements of Table 11. Cast and evaluate mock-ups for precast concrete that are representative of the actual product as directed. Provide the Engineer the option of witnessing final trial batches, including the testing of the concrete and the casting of the mock-ups before placement. If not provided this option, the Engineer may require additional trial batches, including testing and mock-ups, before the concrete is placed.

Establish 7-day compressive strength target values using the following formula for each Class A, B, and E concrete mix designs to be used:

$$\text{Target value} = \text{Minimum design strength} \times \frac{\text{7 - day avg. trial batch strength}}{\text{28 - day avg. trial batch strength}}$$

Submit previous satisfactory field data, data from a new trial batch, or other evidence showing the change will not adversely affect the relevant properties of the concrete when changes are made to the type, brand, or source of aggregates, cement, SCM, water, or chemical admixtures. Submit the data for approval before making changes to the mix design. A change in vendor does not necessarily constitute a change in materials or source. The Engineer may waive new trial batches when there is a prior record of satisfactory performance with the ingredients. During concrete production, dosage changes of chemical admixtures used in the trial batches will not require a re-evaluation of the mix design.

The Contractor has the option of performing trial batches in conjunction with concrete placements except for SCC mixtures, when new trial batches are required during the course of the project. If the concrete fails to meet any requirement, the Engineer will determine acceptability and payment adjustments.

Establish the strength–maturity relationship in accordance with Tex-426-A when the maturity method is specified or permitted. When using the maturity method, any changes in any of the ingredients, including changes in proportions, will require the development of a new strength–maturity relationship for the mix.

4.3.3. **Mix Design of Record**. Once a trial batch or previously satisfactory field data substantiates the mix design, the proportions and mixing methods used become the mix design of record. Do not exceed mix design water-to-cement ratio.

4.4. **Production Testing**.

4.4.1. **Aggregate Moisture Testing**. Determine moisture content per Tex-409-A or Tex-425-A for coarse, intermediate, and fine aggregates at least twice a week, when there is an apparent change, or for new shipments of aggregate. When aggregate hoppers or storage bins are equipped with properly maintained electronic moisture probes for continuous moisture determination, moisture tests per Tex-409-A or Tex-425-A are not required. Electronic moisture probes, however, must be verified at least every 90 days against Tex-409-A and be accurate to within 1.0% of the actual moisture content.

When producing SCC, and when aggregate hoppers or storage bins are not equipped with electric moisture probes, determine the moisture content of the aggregates before producing the first concrete batch each day. Thereafter, determine the moisture content every 4 hr. or when there is an apparent change while SCC is being produced.

4.4.2. **Aggregate Gradation Testing**. Perform a sieve analysis in accordance with Tex-401-A on each stockpile used in the blend at least one day before producing OAG concrete when producing optimized aggregate gradation concrete. Perform sieve analysis on each stockpile after every 10,000 cubic yards of OAG concrete produced. Provide sieve analysis data to the Engineer.

4.5. **Measurement of Materials**.

4.5.1. **Non-Volumetric Mixers**. Measure aggregates by weight. Correct batch weight measurements for aggregate moisture content. Measure mixing water, consisting of water added to the batch, ice added to the batch, water occurring as surface moisture on the aggregates, and water introduced in the form of admixtures, by volume or weight. Measure ice by weight. Measure cement and supplementary cementing materials in a hopper and on a separate scale from those used for other materials. Measure the cement first when measuring the cumulative weight. Measure concrete chemical admixtures by weight or volume. Measure batch materials within the tolerances of Table 12.

Table 12
Mix Design Batching Tolerances—Non-Volumetric Mixers

Material	Tolerance (%)
Cement, wt.	-1 to +3
SCM, wt.	-1 to +3
Cement + SCM (cumulative weighing), wt.	-1 to +3
Water, wt. or volume	±3[1]
Fine aggregate, wt.	±2
Coarse aggregate, wt.	±2
Fine + coarse aggregate (cumulative weighing), wt.	±1
Chemical admixtures, wt. or volume	±3

1. Allowable deviation from target weight not including water withheld or moisture in the aggregate. The Engineer will verify the water-to-cementitious material ratio is within specified limits.

Ensure the quantity measured, when measuring cementitious materials at less than 30% of scale capacity, is accurate to not less than the required amount and not more than 4% in excess. Ensure the cumulative quantity, when measuring aggregates in a cumulative weigh batcher at less than 30% of the scale capacity,

is measured accurate to ±0.3% of scale capacity or ±3% of the required cumulative weight, whichever is less.

Measure cement in number of bags under special circumstances when approved. Use the weights listed on the packaging. Weighing bags of cement is not required. Ensure fractional bags are not used except for small hand-mixed batches of approximately 5 cu. ft. or less and when an approved method of volumetric or weight measurement is used.

4.5.2. **Volumetric Mixers.** Provide an accurate method of measuring all ingredients by volume, and calibrate equipment to assure correct measurement of materials within the specified tolerances. Base tolerances on volume–weight relationship established by calibration, and measure the various ingredients within the tolerances of Table 13. Correct batch measurements for aggregate moisture content.

Table 13
Mix Design Batching Tolerances—Volumetric Mixers

Material	Tolerance
Cement, wt. %	0 to +4
SCM, wt. %	0 to +4
Fine aggregate, wt. %	±2
Coarse aggregate, wt. %	±2
Admixtures, wt. or volume %	±3
Water, wt. or volume %	±1

4.6. **Mixing and Delivering Concrete.**

4.6.1. **Mixing Concrete.** Operate mixers and agitators within the limits of the rated capacity and speed of rotation for mixing and agitation as designated by the manufacturer of the equipment. Provide concrete in a thoroughly mixed and uniform mass with a satisfactory degree of uniformity when tested in accordance with Tex-472-A.

Do not top-load new concrete onto returned concrete.

Adjust mixing times and batching operations as necessary when the concrete contains silica fume to ensure the material is completely and uniformly dispersed in the mix. The dispersion of the silica fume within the mix will be verified by the Construction Division, Materials and Pavements Section, using cylinders made from trial batches. Make necessary changes to the batching operations, if uniform dispersion is not achieved, until uniform and complete dispersion of the silica fume is achieved.

Mix concrete by hand methods or in a small motor-driven mixer when permitted, for small placements of less than 2 cu. yd. For such placements, proportion the mix by volume or weight.

4.6.2. **Delivering Concrete.** Deliver concrete to the project in a thoroughly mixed and uniform mass, and discharge the concrete with a satisfactory degree of uniformity. Conduct testing in accordance with Tex-472-A when there is a reason to suspect the uniformity of concrete and as directed.

Maintain concrete delivery and placement rates sufficient to prevent cold joints.

Adding chemical admixtures or the portion of water withheld is only permitted at the jobsite, under the supervision of the Engineer, to adjust the slump or slump flow of the concrete. Do not add water or chemical admixtures to the batch after more than an amount needed to conduct slump testing has been discharged. Turn the drum or blades at least 30 additional revolutions at mixing speed to ensure thorough and uniform mixing of the concrete. When this water is added, do not exceed the approved mix design water-to-cementitious material ratio.

Before unloading, furnish the delivery ticket for the batch of concrete containing the information required on Department Form 596, "Concrete Batch Ticket." The Engineer will verify all required information is provided on the delivery tickets. The Engineer may suspend concrete operations until the corrective actions are

implemented if delivery tickets do not provide the required information. The Engineer will verify the design water-to-cementitious material ratio is not exceeded.

Begin the discharge of concrete delivered in truck mixers within the times listed in Table 14. Concrete may be discharged after these times provided the concrete temperature and slump meet the requirements listed in this Item and other pertinent Items. Perform these tests with certified testing personnel per Section 421.4.8.1., "Certification of Testing Personnel." Provide the Engineer the option of witnessing testing of the concrete. If not provided this option, the Engineer may require additional testing before the concrete is placed.

Table 14
Concrete Discharge Times

Fresh Concrete Temperature, °F	Max Time After Batching for Concrete Not Containing Type B or D Admixtures, min.	Max Time After Batching for Concrete Containing Type B or D Admixtures,[1] min.
90 and above	45	75
75 ≤ T < 90	60	90
T < 75	90	120

1. Concrete must contain at least the minimum manufacturer's recommended dosage of Type B or D admixture.

4.7. **Placing, Finishing, and Curing Concrete**. Place, finish, and cure concrete in accordance with the pertinent Items.

4.8. **Sampling and Testing of Concrete**. Unless otherwise specified, all fresh and hardened concrete is subject to testing as follows:

4.8.1. **Certification of Testing Personnel**. Contractor personnel performing testing must be either ACI-certified or qualified by a Department-recognized equivalent written and performance testing program for the tests being performed. Personnel performing these tests are subject to Department approval. Use of a commercial laboratory is permitted at the Contractor's option. All personnel performing testing using the maturity method must be qualified by a training program recognized by the Department before using this method on the job.

4.8.2. **Fresh Concrete**. Provide safe access and assistance to the Engineer during sampling. Fresh concrete will be sampled for testing at the discharge end if using belt conveyors or pumps. When it is impractical to sample at the discharge end, a sample will be taken at the time of discharge from the delivery equipment and correlation testing will be performed and documented to ensure specification requirements are met at the discharge end.

4.8.3. **Testing of Fresh Concrete**. Test for the fresh properties listed in Table 15.

Table 15
Fresh Concrete Tests

Tests	Test Methods
Slump[1]	Tex-415-A
Temperature[1]	Tex-422-A
Air Content[2]	Tex-414-A, Tex-416-A or ASTM C457

1. Job-control testing performed by the Contractor.
2. Only required during concrete trial batch when air-entrained concrete is specified on the plans.

Concrete with a slump lower than the minimum placement slump in Table 9 after the addition of all water withheld, or concrete exhibiting segregation and excessive bleeding may be rejected.

When SCC exceeds the maximum placement slump flow or VSI rating, the Engineer will immediately resample and retest the concrete slump flow and VSI rating. If the concrete exceeds the maximum placement slump flow or VSI rating after the retest, the concrete will be rejected.

4.8.3.1. **Job-Control Testing**. Perform job-control concrete temperature and slump testing as specified in Table 16 unless otherwise specified. Provide the Engineer the opportunity to witness the testing. The Engineer may

require a retest if not given the opportunity to witness. Immediately notify the Engineer of any concrete temperature or slump nonconformity issues. Furnish a copy of all test results to the Engineer daily.

Table 16
Job-Control Testing Frequencies

Concrete Placements	Frequency
Bridge Deck Placements	Test the first few loads, then every fifth load delivered.
All Other Structural Class Concrete Placements	One test every 60 cu. yd. or fraction thereof.
Non-Structural Class Concrete Placements	One test every 180 cu. yd. or fraction thereof.

Immediately resample and retest the concrete slump when the concrete exceeds the slump range at time of placement. If the concrete exceeds the slump range after the retest, and is used at the Contractor's option, the Engineer will make strength specimens as specified in Article 421.5., "Acceptance of Concrete."

4.8.3.2. **Strength Specimen Handling**. Remove specimens from their molds and deliver Department test specimens to curing facilities within 24 to 48 hr. after molding, in accordance with pertinent test procedures unless otherwise shown on the plans or directed. Clean and prepare molds for reuse if necessary.

5. ACCEPTANCE OF CONCRETE

The Engineer will sample and test the fresh and hardened concrete for acceptance. The test results will be reported to the Contractor and the concrete supplier. Investigate the quality of the materials, the concrete production operations, and other possible problem areas to determine the cause for any concrete that fails to meet the required strengths as outlined below. Take necessary actions to correct the problem including redesign of the concrete mix. The Engineer may suspend all concrete operations under the pertinent Items if the Contractor is unable to identify, document, and correct the cause of the low strengths in a timely manner. Resume concrete operations only after obtaining approval for any proposed corrective actions. Concrete failing to meet the required strength as outlined below will be evaluated using the procedures listed in Article 421.6., "Measurement and Payment."

5.1. **Structural Concrete**. For concrete classes identified as structural concrete in Table 8, the Engineer will make and test 7-day and 28-day specimens. Acceptance will be based on attaining the design strength given in Table 8.

5.2. **Class P and Class HES**. The Engineer will base acceptance in accordance with Item 360, "Concrete Pavement," and Item 361, "Repair of Concrete Pavement."

5.3. **All Other Concrete**. For concrete classes not identified as structural concrete in Table 8, the Engineer will make and test 7-day specimens. The Engineer will base acceptance on the 7-day target value established in accordance with Section 421.4.3., "Concrete Trial Batches."

6. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items.

The following procedure will be used to evaluate concrete where one or more project acceptance test specimens fail to meet the required design strength specified in this Item or on the plans:

- The concrete for a given placement will be considered structurally adequate and accepted at full price if the average of all test results for specimens made at the time of placement meets the required design strength provided no single test result is less than 85% of the required design strength.
- The Engineer will perform a structural review of the concrete to determine its adequacy to remain in service if the average of all test results for specimens made at the time of placement is less than the required design strength or if any test results are less than 85% of the required design strength. If the in-

situ concrete strength is needed for the structural review, take cores at locations designated by the Engineer in accordance with Tex-424-A. The Engineer will test the cores. The coring and testing will be at the Contractor's expense.

- If all of the tested cores meet the required design strength, the concrete will be paid for at full price.
- If any of the tested cores do not meet the required design strength, but the average strength attained is determined to be structurally adequate, the Engineer will determine the limits of the pay adjustment using the following formula:

$$A = B_p\left[-5.37\left(\frac{S_a}{S_s}\right)^2 + 11.69\left(\frac{S_a}{S_s}\right) - 5.32\right]$$

where:
A = Amount to be paid per unit of measure for the entire placement in question
S_a = Actual average strength from cylinders or cores. Use values from cores, if taken.
S_s = Minimum required strength (specified)
B_p = Unit Bid Price

- If the structural review determines the concrete is not adequate to remain in service, the Engineer will determine the limits of the concrete to be removed.
- The decision to reject structurally inadequate concrete or to apply the pay adjustment factor will be made no later than 56 days after placement.

Item 440
Reinforcement for Concrete

1. DESCRIPTION

Furnish and place reinforcement of the type, size, and details shown on the plans.

2. MATERIALS

Use deformed steel bar reinforcement unless otherwise specified or allowed.

2.1. **Approved Mills.** Before furnishing steel, producing mills of reinforcing steel for the Department must be pre-approved in accordance with DMS-7320, "Qualification Procedure for Reinforcing Steel Producing Mills," by the Construction Division. The Department's MPL has a list of approved producing mills. Reinforcing steel obtained from unapproved sources will not be accepted.

Contact the Construction Division with the name and location of the producing mill for stainless reinforcing steel, low carbon/chromium reinforcing steel, or dual-coated reinforcing steel at least 4 weeks before ordering any material.

2.2. **Deformed Steel Bar Reinforcement.** Provide deformed reinforcing steel conforming to one of the following:

- ASTM A615, Grades 60, 75, or 80;
- ASTM A996, Type A, Grade 60;
- ASTM A996, Type R, Grade 60, permitted in concrete pavement only (Furnish ASTM A996, Type R bars as straight bars only and do not bend them. Bend tests are not required.); or
- ASTM A706, Grades 60 or 80.

Provide the grade of reinforcing steel shown on the plans. Provide Grade 60 if no grade is shown.

The nominal size, area, and weight of reinforcing steel bars this Item covers are shown in Table 1.

Table 1
Size, Area, and Weight of Reinforcing Steel Bars

Bar Size Number (in.)	Diameter (in.)	Area (sq. in.)	Weight per Foot (lbs.)
3	0.375	0.11	0.376
4	0.500	0.20	0.668
5	0.625	0.31	1.043
6	0.750	0.44	1.502
7	0.875	0.60	2.044
8	1.000	0.79	2.670
9	1.128	1.00	3.400
10	1.270	1.27	4.303
11	1.410	1.56	5.313
14	1.693	2.25	7.650
18	2.257	4.00	13.60

2.3. **Smooth Steel Bar Reinforcement.** Provide smooth bars for concrete pavement with a yield strength of at least 60 ksi and meeting ASTM A615. Provide steel conforming to ASTM A615 or meet the physical requirements of ASTM A36 for smooth bars that are larger than No. 3. Designate smooth bars by size number up to No. 4 and by diameter in inches above No. 4.

2.4. **Spiral Reinforcement**. Provide bars or wire for spiral reinforcement of the grade and minimum size or gauge shown on the plans.

Provide smooth or deformed wire conforming to ASTM A1064. Provide bars conforming to ASTM A615; ASTM A996, Type A; or ASTM A675, Grade 80, meeting dimensional requirements of ASTM A615.

2.5. **Weldable Reinforcing Steel**. Provide reinforcing steel conforming to ASTM A706 or with a maximum carbon equivalent (C.E.) of 0.55% if welding of reinforcing steel is required or desired. Provide a report showing the percentages of elements necessary to establish C.E. for reinforcing steel that does not meet ASTM A706, in order to be structurally welded. These requirements do not pertain to miscellaneous welds on reinforcing steel as defined in Section 448.4.2.1.1., "Miscellaneous Welding Applications."

Calculate C.E. using the following formula:

$$C.E. = \%C + \frac{\%Mn}{6} + \frac{\%Cu}{40} + \frac{\%Ni}{20} + \frac{\%Cr}{10} - \frac{\%Mo}{50} - \frac{\%V}{10}$$

Do not weld stainless reinforcing steel without permission from the Engineer. Provide stainless reinforcing steel suitable for welding, if required, and submit welding procedures and electrodes to the Engineer for approval.

2.6. **Welded Wire Reinforcement**. Provide welded wire reinforcement (WWR) conforming to ASTM A1064. Observe the relations shown in Table 2 among size number, diameter in inches, and area when ordering wire by size numbers, unless otherwise specified. Precede the size number for deformed wire with "D" and for smooth wire with "W."

Designate WWR as shown in the following example: 6 × 12 – W16 × W8 (indicating 6-in. longitudinal wire spacing and 12-in. transverse wire spacing with smooth No. 16 wire longitudinally and smooth No. 8 wire transversely).

Table 2
Wire Size Number, Diameter, and Area

Size Number (in.)	Diameter (in.)	Area (sq. in.)
31	0.628	0.310
30	0.618	0.300
28	0.597	0.280
26	0.575	0.260
24	0.553	0.240
22	0.529	0.220
20	0.505	0.200
18	0.479	0.180
16	0.451	0.160
14	0.422	0.140
12	0.391	0.120
10	0.357	0.100
8	0.319	0.080
7	0.299	0.070
6	0.276	0.060
5.5	0.265	0.055
5	0.252	0.050
4.5	0.239	0.045
4	0.226	0.040
3.5	0.211	0.035
2.9	0.192	0.035
2.5	0.178	0.025
2	0.160	0.020
1.4	0.134	0.014
1.2	0.124	0.012
0.5	0.080	0.005

Note—Size numbers (in.) are the nominal cross-sectional area of the wire in hundredths of a square inch. Fractional sizes between the sizes listed above are also available and acceptable for use.

2.7. **Epoxy Coating.** Provide epoxy coated reinforcing steel as shown on the plans. Before furnishing epoxy coated reinforcing steel, an epoxy applicator must be pre-approved in accordance with DMS-7330, "Qualification Procedure for Reinforcing Steel Epoxy Coating Applicators." The Department's MPL has a list of approved applicators.

Furnish coated reinforcing steel meeting the requirements in Table 3.

Table 3
Epoxy Coating Requirements for Reinforcing Steel

Material	Specification
Bar	ASTM A775 or A934
Wire or WWR	ASTM A884 Class A or B
Mechanical couplers	As shown on the plans
Hardware	As shown on the plans

Use epoxy coating material and coating repair material that complies with DMS-8130, "Epoxy Powder Coating for Reinforcing Steel." Patch no more than 1/4-in. total length in any foot at the applicator's plant.

Maintain identification of all reinforcing steel throughout the coating and fabrication process and until delivery to the project site.

Furnish 1 copy of a written certification verifying the coated reinforcing steel meets the requirements of this Item and 1 copy of the manufacturer's control tests.

2.8. **Mechanical Couplers.** Use couplers of the type specified in DMS-4510, "Mechanical Couplers for Reinforcing Steel," Article 4510.5.A, "General Requirements" when mechanical splices in reinforcing steel bars are shown on the plans.

Furnish only couplers pre-qualified in accordance with DMS-4510, "Mechanical Couplers for Reinforcing Steel." Ensure sleeve-wedge type couplers are not used on coated reinforcing. Sample and test couplers for use on individual projects in accordance with DMS-4510, "Mechanical Couplers for Reinforcing Steel." Furnish couplers only at locations shown on the plans.

Furnish couplers for stainless reinforcing steel with the same alloy designation as the reinforcing steel.

2.9. **Fibers**. Supply fibers conforming to DMS-4550 "Fibers for Concrete" at the minimum dosage listed in the Department's MPL, when allowed by the plans. Use non-metallic fibers when shown on the plans.

2.10. **Stainless Reinforcing Steel**. Provide deformed steel bars of the types listed in Table 4 and conforming to ASTM A955, Grade 60 or higher when stainless reinforcing steel is required on the plans.

Table 4
Acceptable Types of Deformed Stainless Steel Bar

UNS Designation	S31653	S31803	S24100	S32304
AISI Type	316LN	2205	XM-28	2304

2.11. **Low Carbon/Chromium Reinforcing Steel**. Provide deformed steel bars conforming to ASTM A1035, Grade 100 when low carbon/chromium reinforcing steel is required on the plans.

2.12. **Dual-Coated Reinforcing Steel**. Provide deformed bars conforming to ASTM A1055, Grade 60 or higher when dual-coated reinforcing steel is required on the plans.

2.13. **Glass Fiber Reinforced Polymer Bars (GFRP)**. Provide bars conforming to the AASHTO LRFD *Bridge Design Guide Specifications for GFRP-Reinforced Concrete Bridge Decks and Traffic Railings*, Section 4, "Material Specifications" when GFRP bars are required on the plans. Provide sample certification demonstrating the GFRP bar supplier has produced bar that meets the Material Specifications 2 mo. before fabrication. Furnish certification upon shipment that the GFRP bar supplied meets the Material Specifications.

3. CONSTRUCTION

3.1. **Bending**. Fabricate reinforcing steel bars as prescribed in the CRSI *Manual of Standard Practice* to the shapes and dimensions shown on the plans. Fabricate in the shop if possible. Field-fabricate, if permitted, using a method approved by the Engineer. Replace improperly fabricated, damaged, or broken bars at no additional expense to the Department. Repair damaged or broken bars embedded in a previous concrete placement using a method approved by the Engineer.

Unless otherwise shown on the plans, the inside diameter of bar bends, in terms of the nominal bar diameter (d), must be as shown in Table 5.

Table 5
Minimum Inside Diameter of Bar Bends

Bend	Bar Size Number (in.)	Pin Diameter
Bends of 90° and greater in stirrups, ties, and other secondary bars that enclose another bar in the bend	3, 4, 5	4d
	6, 7, 8	6d
Bends in main bars and in secondary bars not covered above	3 through 8	6d
	9, 10, 11	8d
	14, 18	10d

Bend-test representative specimens as described for smaller bars in the applicable ASTM specification where bending No. 14 or No. 18 Grade 60 bars is required. Make the required 90° bend around a pin with a diameter of 10 times the nominal diameter of the bar.

Bend stainless reinforcing steel in accordance with ASTM A955.

3.2. **Tolerances**. Fabrication tolerances for bars are shown in Figure 1.

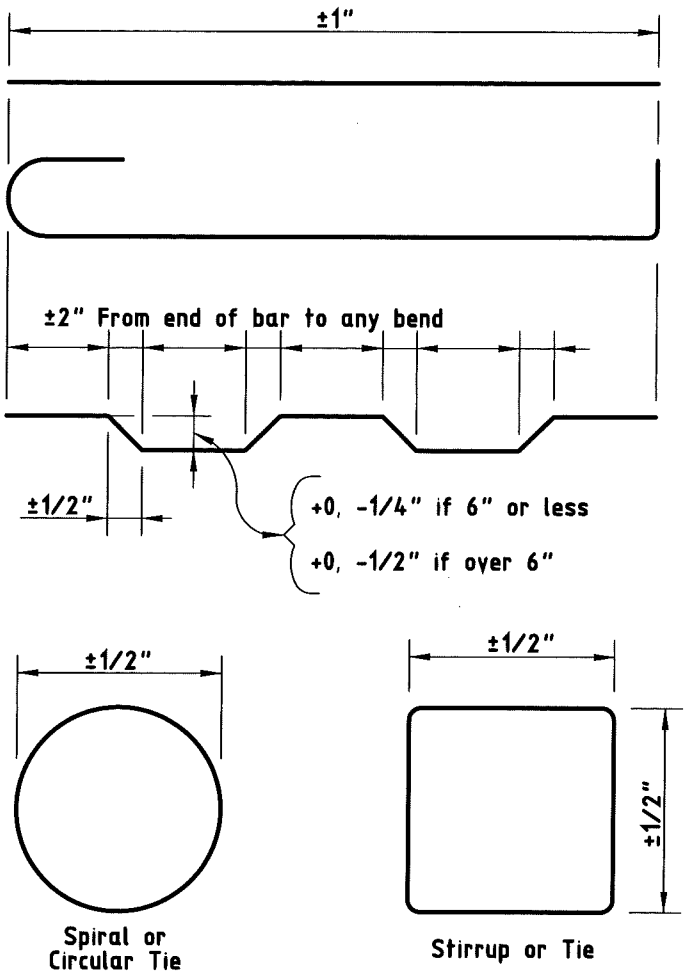


Figure 1
Fabrication Tolerances for Bars

3.3. **Storage**. Store reinforcement above the ground on platforms, skids, or other supports, and protect it from damage and deterioration. Ensure reinforcement is free from dirt, paint, grease, oil, and other foreign materials when it is placed in the work. Use reinforcement free from defects such as cracks and delaminations. Rust, surface seams, surface irregularities, or mill scale will not be cause for rejection if the minimum cross-sectional area of a hand wire-brushed specimen meets the requirements for the size of steel specified.

Do not allow stainless reinforcing steel to be in direct contact with uncoated reinforcing steel, nor with galvanized reinforcing steel. This does not apply to stainless steel wires and ties. Store stainless reinforcing steel separately, off the ground on wooden supports.

3.4. **Splices**. Lap-splice, weld-splice, or mechanically splice bars as shown on the plans. Additional splices not shown on the plans will require approval. Splices not shown on the plans will be permitted in slabs no more than 15 in. in thickness, columns, walls, and parapets.

- Do not splice bars less than 30 ft. in plan length unless otherwise approved. For bars exceeding 30 ft. in plan length, the distance center-to-center of splices must be at least 30 ft. minus 1 splice length, with no more than 1 individual bar length less than 10 ft. Make lap splices not shown on the plans, but otherwise

permitted, in accordance with Table 6. Maintain the specified concrete cover and spacing at splices, and place the lap-spliced bars in contact, securely tied together.

Table 6
Minimum Lap Requirements for Steel Bar Sizes through No. 11

Bar Size Number (in.)	Uncoated Lap Length	Coated Lap Length
3	1 ft. 4 in.	2 ft. 0 in.
4	1 ft. 9 in.	2 ft. 8 in.
5	2 ft. 2 in.	3 ft. 3 in.
6	2 ft. 7 in.	3 ft. 11 in.
7	3 ft. 5 in.	5 ft. 2 in.
8	4 ft. 6 in.	6 ft. 9 in.
9	5 ft. 8 in.	8 ft. 6 in.
10	7 ft. 3 in.	10 ft. 11 in.
11	8 ft. 11 in.	13 ft. 5 in.

- Do not lap No. 14 or No. 18 bars.
- Lap spiral steel at least 1 turn.
- Splice WWR using a lap length that includes the overlap of at least 2 cross wires plus 2 in. on each sheet or roll. Splices using bars that develop equivalent strength and are lapped in accordance with Table 6 are permitted.
- Lap the existing longitudinal bars with the new bars as shown in Table 6 for box culvert extensions with less than 1 ft. of fill. Lap at least 1 ft. 0 in. for extensions with more than 1 ft. of fill.
- Ensure welded splices conform to the requirements of the plans and of Item 448, "Structural Field Welding." Field-prepare ends of reinforcing bars if they will be butt-welded. Delivered bars must be long enough to permit weld preparation.
- Install mechanical coupling devices in accordance with the manufacturer's recommendations at locations shown on the plans. Protect threaded male or female connections, and ensure the threaded connections are clean when making the connection. Do not repair damaged threads.
- Mechanical coupler alternate equivalent strength arrangements, to be accomplished by substituting larger bar sizes or more bars, will be considered if approved in writing before fabrication of the systems.

3.5. **Placing**. Place reinforcement as near as possible to the position shown on the plans. Do not vary bars from plan placement by more than 1/12 of the spacing between bars in the plane of the bar parallel to the nearest surface of concrete. Do not vary bars from plan placement by more than 1/4 in in the plane of the bar perpendicular to the nearest surface of concrete. Provide a minimum 1-in. clear cover of concrete to the nearest surface of bar unless otherwise shown on the plans.

For bridge slabs, the clear cover tolerance for the top mat of reinforcement is −0, +1/2 in.

Locate the reinforcement accurately in the forms, and hold it firmly in place before and during concrete placement by means of bar supports that are adequate in strength and number to prevent displacement and keep the reinforcement at the proper distance from the forms. Provide bar supports in accordance with the CRSI *Manual of Standard Practice*. Use Class 1 supports, approved plastic bar supports, precast mortar, or concrete blocks when supports are in contact with removable or stay-in-place forms. Use Class 3 supports in slab overlays on concrete panels or on existing concrete slabs. Bar supports in contact with soil or subgrade must be approved.

Use Class 1A supports with epoxy coated reinforcing steel. Provide epoxy or plastic coated tie wires and clips for use with epoxy coated reinforcing steel.

Use mortar or concrete with a minimum compressive strength of 5,000 psi for precast bar supports. Provide a suitable tie wire in each block for anchoring to the bar.

Place individual bar supports in rows at 4-ft. maximum spacing in each direction. Place continuous type bar supports at 4-ft. maximum spacing. Use continuous bar supports with permanent metal deck forms.

The exposure of the ends of longitudinals, stirrups, and spacers used to position the reinforcement in concrete pipe and storm drains is not cause for rejection.

Tie reinforcement for bridge slabs and top slabs of direct traffic culverts at all intersections, except tie only alternate intersections where spacing is less than 1 ft. in each direction. Tie the bars at enough intersections to provide a rigid cage of reinforcement for reinforcement cages for other structural members. Fasten mats of WWR securely at the ends and edges.

Clean mortar, mud, dirt, debris, oil, and other foreign material from the reinforcement before concrete placement. Do not place concrete until authorized.

Stop placement until corrective measures are taken if reinforcement is not adequately supported or tied to resist settlement, reinforcement is floating upward, truss bars are overturning, or movement is detected in any direction during concrete placement.

3.6. **Handling, Placing, and Repairing Epoxy Coated Reinforcing Steel.**

3.6.1. **Handling**. Provide systems for handling coated reinforcing steel with padded contact areas. Pad bundling bands or use suitable banding to prevent damage to the coating. Lift bundles of coated reinforcement with a strongback, spreader bar, multiple supports, or a platform bridge. Transport the bundled reinforcement carefully, and store it on protective cribbing. Do not drop or drag the coated reinforcement.

3.6.2. **Placing**. Do not flame-cut coated reinforcement. Saw or shear-cut only when approved. Coat cut ends as specified in Section 440.3.6.3., "Repairing Coating."

Do not weld or mechanically couple coated reinforcing steel except where specifically shown on the plans. Remove the epoxy coating at least 6 in. beyond the weld limits before welding and 2 in. beyond the limits of the coupler before assembly. Clean the steel of oil, grease, moisture, dirt, welding contamination (slag or acid residue), and rust to a near-white finish after welding or coupling. Check the existing epoxy for damage. Remove any damaged or loose epoxy back to sound epoxy coating.

Coat the splice area after cleaning with epoxy repair material to a thickness of 7 to 17 mils after curing. Apply a second application of repair material to the bar and coupler interface to ensure complete sealing of the joint.

3.6.3. **Repairing Coating**. Use material that complies with the requirements of this Item and ASTM D3963 for repairing of the coating. Make repairs in accordance with procedures recommended by the manufacturer of the epoxy coating powder. Apply at least the same coating thickness as required for the original coating for areas to be patched. Repair all visible damage to the coating.

Repair sawed and sheared ends, cuts, breaks, and other damage promptly before additional oxidation occurs. Clean areas to be repaired to ensure they are free from surface contaminants. Make repairs in the shop or field as required.

3.7. **Handling and Placing Stainless Reinforcing Steel**. Handle, cut, and place stainless reinforcing steel bar using tools that are not used on carbon steel. Do not use carbon steel tools, chains, slings, etc. when handling stainless steel. Use only nylon or polypropylene slings. Cut stainless steel reinforcing using shears, saws, abrasive cutoff wheels, or torches. Remove any thermal oxidation using pickling paste. Do not field bend stainless steel reinforcing without approval.

Use 16 gauge fully annealed stainless steel tie wire conforming to the material properties listed in Section 440.2.10., "Stainless Reinforcing Steel." Support all stainless reinforcing steel on solid plastic, stainless steel, or epoxy coated steel chairs. Do not use uncoated carbon steel chairs in contact with stainless reinforcing steel.

3.8. **Bending, Handling, Repairing, and Placing GFRP Bars**. Fabricate, handle, repair, and place GFRP bars in accordance with the AASHTO LRFD Bridge Design Guide Specifications for GFRP-Reinforced Concrete Bridge Decks and Traffic Railings, Section 5, Construction Specifications.

4. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be considered subsidiary to pertinent Items.

Item 441
Steel Structures

1. DESCRIPTION

Fabricate and erect structural steel and other metals used for steel structures or for steel portions of structures.

2. MATERIALS

2.1. **Base Metal**. Use metal that meets Item 442, "Metal for Structures."

2.2. **Approved Electrodes and Flux-Electrode Combinations**. Use only electrodes and flux-electrode combinations found on the Department's MPL. To request a product be added to this list or to renew an expired approval, electronically submit a current Certificate of Conformance containing all tests required by the applicable AWS A5 specification according to the applicable welding code (for most construction, AASHTO/AWS D1.5, *Bridge Welding Code*, or AWS D1.1, *Structural Welding Code—Steel*) to the Construction Division.

2.3. **High-Strength Bolts**. Use fasteners that meet Item 447, "Structural Bolting." Use galvanized fasteners on field connections of bridge members when ASTM A325 bolts are specified and steel is painted.

2.4. **Paint Systems**. Provide the paint system (surface preparation, primer, intermediate, and appearance coats as required) shown on the plans. Provide System IV if no system is specified.

2.4.1. **Standard Paint Systems**. Standard paint systems for painting new steel include the following:

2.4.1.1. **System III-B**. Provide paint in accordance with DMS-8101, "Structural Steel Paints-Performance." Provide inorganic zinc (IOZ) prime coat, epoxy intermediate coat, and urethane appearance coat for all outer surfaces except those to be in contact with concrete. Provide epoxy zinc prime coat for touchup of IOZ.

2.4.1.2. **System IV**. Provide paint in accordance with DMS-8101, "Structural Steel Paints-Performance." Provide IOZ prime coat and acrylic latex appearance coat for all outer surfaces except those to be in contact with concrete. Provide epoxy zinc prime coat for touchup of IOZ.

2.4.2. **Paint Inside Tub Girders and Closed Boxes**. Provide a white polyamide cured epoxy for all interior surfaces, including splice plate but excluding the faying surfaces, unless otherwise shown on the plans. Provide IOZ primer meeting the requirements of DMS-8101, "Structural Steel Paints—Performance," to all interior faying surfaces and splice plates.

2.4.3. **Special Protection System**. Provide the type of paint system shown on the plans or in special provisions to this Item. Special Protection Systems must have completed NTPEP Structural Steel Coatings (SSC) testing regimen as a complete system, with full data available through NTPEP.

2.4.4. **Galvanizing**. Provide galvanizing, as required, in accordance with Item 445, "Galvanizing."

2.4.5. **Paint over Galvanizing**. Paint over galvanized surfaces, when required, in accordance with Item 445, "Galvanizing."

2.4.6. **Field Painting**. Provide field paint, as required, in accordance with Item 446, "Field Cleaning and Painting Steel."

3. CONSTRUCTION

3.1. **General Requirements.**

3.1.1. **Applicable Codes.** Perform all fabrication of bridge members in accordance with AASHTO/NSBA Steel Bridge Collaboration S2.1. Follow all applicable provisions of the appropriate AWS code (D1.5 or D1.1) except as otherwise noted on the plans or in this Item. Weld sheet steel (thinner than 1/8 in.) in accordance with ANSI/AWS D1.3, Structural Welding Code—Sheet Steel. Unless otherwise stated, requirements of this Item are in addition to the requirements of S2.1 for bridge members. Follow the more stringent requirement in case of a conflict between this Item and S2.1. Perform all bolting in accordance with Item 447, "Structural Bolting."

Fabricate railroad underpass structures in accordance with the latest AREMA *Manual for Railway Engineering* and this Item. In the case of a conflict between this Item and the AREMA manual, the more stringent requirements apply.

3.1.2. **Notice of Fabrication.** Give adequate notice before commencing fabrication work as specified in Table 1. Include a schedule for all major fabrication processes and dates when inspections are to occur.

Table 1
Notice of Beginning Work

Plant Location	Notice Required
In Texas	7 days
In the contiguous United States	21 days
Outside the contiguous United States	60 days

Perform no Department work in the plant before the Engineer authorizes fabrication. The Contractor must bear all Department travel costs when changes to their fabrication or inspection schedules are not adequately conveyed to the Department.

When any structural steel is fabricated outside of the contiguous 48 states, the additional cost of inspection will be in accordance with Article 6.4., "Sampling, Testing, and Inspection."

3.1.3. **Bridge Members.** Primary bridge members include:

- web and flanges of plate, tub, and box girders;
- rolled beams and cover plates;
- floor beam webs and flanges;
- arch ribs and arch tie beams or girders;
- truss members;
- diaphragm members for curved plate girders or beams;
- pier diaphragm members for tub girders;
- splice plates for primary members; and
- any other member designated as "primary" or "main" on the plans.

Secondary bridge members include:

- bracing (diaphragms, cross frames, and lateral bracing); and
- all other miscellaneous bridge items not considered primary bridge members.

3.1.4. **Responsibility.** The Contractor is responsible for the correctness and completeness of shop drawings and for the fit of shop and field connections.

3.1.5. **Qualification of Plants and Personnel.**

3.1.5.1. **Plants.** Fabrication plants that produce bridge members must be approved in accordance with DMS-7370, "Steel Bridge Member Fabrication Plant Qualification." The Department's MPL has a list of approved bridge member fabrication plants.

Fabrication plants that produce non-bridge steel members listed below must be approved in accordance with DMS-7380, "Steel Non-Bridge Member Fabrication Plant Qualification." The Construction Division maintains a list of approved non-bridge fabrication plants for the following items:

- Roadway Illumination Poles
- High Mast Illumination Poles
- High Mast Rings and Support Assemblies
- Overhead Sign Support Structures
- Traffic Signal Poles
- Intelligent Transportation System (ITS) Poles

The Department will evaluate non-bridge member fabrication plants for competence of the plant, equipment, organization, experience, knowledge, and personnel to produce acceptable work.

3.1.5.2. **Personnel.** Provide a QC staff qualified in accordance with the applicable AWS code. Provide an adequate number of qualified QC personnel for each specific production operation. QC must be on-site and independent of production personnel, as the Engineer determines. QC personnel must be proficient in utilizing the applicable plans, specifications, and test methods, and in verifying compliance with the plant QC and production procedures. Welding inspectors must be current AWS Certified Welding Inspectors for bridge member plants, and for non-bridge member plants requiring Department approval per DMS-7380, "Steel Non-Bridge Member Fabrication Plant Qualification." The QC staff must provide inspection of all materials and workmanship before the Department's inspection. Provide the Department inspector with adequate personnel and equipment needed to move material for inspection access. QC is solely the Contractor's responsibility.

3.1.5.3. **Nondestructive Testing (NDT).** Personnel performing NDT must be qualified in accordance with the applicable AWS code and the employer's Written Practice. Level III personnel who qualify AS Level I and Level II inspectors must be certified by ASNT for which the NDT Level III is qualified. Testing agencies and individual third-party contractors must also successfully complete periodic audits for compliance, performed by the Department. In addition, ultrasound technicians must pass a hands-on test the Construction Division administers. This will remain current provided they continue to perform testing on Department materials as evidenced by test reports requiring their signature. A technician who fails the hands-on test must wait 6 months before taking the test again. Qualification to perform ultrasonic testing will be revoked when the technician's employment is terminated or when the technician goes 6 months without performing a test on a Department project. The technician must pass a new hands-on test to be re-certified.

3.1.5.4. **Welding Procedure Specifications Qualification Testing.** For bridge member fabrication, laboratories performing welding procedure specifications (WPSs) qualified by testing must be approved in accordance with DMS-7360, "Qualification Procedure for Laboratories Performing Welding Procedure Qualification Testing." The Department's MPL has a list of laboratories approved to perform WPS qualification testing.

3.1.6. **Drawings.**

3.1.6.1. **Erection Drawings.** Submit erection drawings prepared by a licensed professional engineer, including calculations, for approval in accordance with Item 5, "Control of the Work," at least 4 weeks before erecting any portion of field-spliced (welded or bolted) girders, railroad underpasses, trusses, arches, or other members for which erection drawings are required on the plans. Include drawings and calculations for any temporary structures used to support partially erected members. Erection drawings are not required for rolled I-beam units unless otherwise noted on the plans.

Prepare erection drawings following the procedures outlined in Section 2.2 of the AASHTO/NSBA Steel Bridge Collaboration S10.1. As a minimum, include:

- plan of work area showing structure location relative to supports and all obstructions;
- equipment to be used including allowable load information;
- erection sequence for all pieces;
- member weights and center of gravity location of pieces to be lifted;
- locations of cranes, holding cranes, and temporary supports (falsework), including when to release load from temporary supports and holding cranes;
- details of falsework including specific bracing requirements with maximum allowable design wind speed clearly indicated;
- girder lifting points;
- diaphragm and bracing requirements; and
- minimum connection requirements when more than the standard requirements.

Perform girder erection analyses using UT-Lift and UT-Bridge software available on the Department's website or other suitable commercial software. Ensure temporary stresses in members being erected will not cause permanent damage and that stability is maintained throughout the erection operations. Provide actual input files and output results from UT-Lift and UT-Bridge, or graphical and hard copy results from commercial software programs.

Do not proceed if site conditions differing from those depicted on the approved erection drawings could affect temporary support stresses, erected girders, or public safety in any manner. Revise erection drawings and resubmit to the Engineer for approval before proceeding if site conditions could affect these things.

3.1.6.2. **Shop Drawings**. Prepare and electronically submit shop drawings before fabrication for each detail of the general plans requiring the use of structural steel, forgings, wrought iron, or castings as documented in the *Guide to Electronic Shop Drawing Submittal* available on the Bridge Division website and as directed for other items the standard specifications require.

Indicate joint details on shop drawings for all welds. Provide a title block on each sheet in the lower right corner that includes:

- project identification data including federal and state project numbers,
- sheet numbering for the shop drawings,
- name of the structure or stream for bridge structures,
- name of owner or developer,
- name of the fabricator or supplier, and
- name of the Contractor.

Provide one set of 11 × 17-in. approved shop drawings in hardcopy to the Department for the inspector at the fabrication plant.

3.1.6.2.1. **Bridge Members**. Prepare drawings in accordance with AASHTO/NSBA Steel Bridge Collaboration G1.3, "Shop Detail Drawing Presentation" unless otherwise approved. Print a bill of material on each sheet, including the Charpy V-Notch (CVN) and fracture-critical requirements, if any, for each piece. Indicate fracture-critical areas of members.

3.1.6.2.2. **Non-Bridge Members**. Furnish shop drawings for non-bridge members when required by the plans or pertinent Items.

3.1.7. **Welding Procedure Specifications (WPSs)**. Submit WPSs and test reports in accordance with the applicable AWS code to the Construction Division before fabrication begins, and notify the Engineer which procedures will be used for each joint or joint type. Do not begin fabrication until the Engineer approves WPSs.

Post the approved WPSs for the welding being performed on each welding machine, or use another approved method of ensuring the welder has access to the procedure information at all times.

3.1.8. **Documentation**. Before beginning fabrication, provide a completed Material Statement Form 1818 (a.k.a. D-9-USA-1) with supporting documentation (such as mill test reports (MTRs)) that the producing mill issues and qualified personnel verifies. Ensure the documentation legibly reflects all information the applicable ASTM specifications require. Supply documents electronically to the Department.

Provide a copy of the shipping or storage invoice, as material is shipped or placed in approved storage, that reflects:

- member piece mark identification and calculated weight per piece from the contract drawings,
- number of pieces shipped or in storage,
- total calculated weight for each invoice per bid item, and
- the unique identification number of the shipping or storage invoice.

The inspector's acceptance of material or finished members will not prohibit subsequent rejection if the material or members are found to be damaged or defective. Replace rejected material promptly.

3.1.9. **Material Identification**. Assembly-mark individual pieces and issue cutting instructions to the shop using a system that will maintain identity of the original piece.

Identify structural steel by standard and grade of steel. Also differentiate between material toughness requirements (CVN, fracture-critical) as well as any other special physical requirements. In addition, identify structural steel for primary members by mill identification numbers (heat numbers). Use an approved identification system. Use either paint or low-stress stencils to make identification markings on the metal. Mark the material as soon as it enters the shop and carry the markings on all pieces through final fabrication. Transfer the markings before cutting steel for primary members of bridge structures into smaller pieces. Loss of identification marking on any piece, with no other positive identification, or loss of heat number identification on any primary member piece will render the piece unacceptable for use. Unidentifiable material may be approved for use after testing to establish acceptability to the satisfaction of the Engineer. Have an approved testing facility perform testing and a licensed professional engineer sign and seal the results.

3.2. **Welding**.

3.2.1. **Details**.

3.2.1.1. **Rolled Edges**. Trim plates with rolled edges used for webs by thermal cutting.

3.2.1.2. **Weld Tabs**. Use weld tabs at least 2 in. long for manual and semi-automatic processes, at least 3 in. long for automatic processes, and in all cases at least as long as the thickness of the material being welded. Use longer weld tabs as required for satisfactory work.

3.2.1.3. **Weld Termination**. Terminate fillet welds approximately 1/4 in. from the end of the attachment except for galvanized structures and flange-to-web welds, for which the fillet weld must run the full length of the attachment, unless otherwise shown on the plans.

3.2.1.4. **No-Paint Areas at Field-Welded Connections**. Keep surfaces within 4 in. of groove welds or within 2 in. of fillet welds free from shop paint.

3.2.1.5. **Galvanized Assemblies**. Completely seal all edges of tightly contacting surfaces by welding before galvanizing.

3.2.1.6. **Submerged-Arc Welding (SAW)**. Do not use hand-held semiautomatic SAW for welding bridge members unless altered to provide automatic guidance or otherwise approved.

3.2.1.7. **Tubular Stiffeners for Bridge Members**. Weld in accordance with AWS D1.5, using WPSs qualified based on tests on ASTM A709 Gr. 50W or Gr. 50 steel for non-weathering applications and ASTM A709 Gr. 50W steel for weathering applications.

3.2.1.8. **Non-Bridge Member Weathering Steel Welds**. Provide weld metal with atmospheric corrosion resistance and coloring characteristics similar to that of the base metal for weathering steel structures fabricated per AWS D1.1.

3.2.2. **Shop Splices**.

3.2.2.1. **Shop Splice Locations**. Keep at least 6 in. between shop splices and stiffeners or cross-frames. Obtain approval for shop splices added after shop drawings are approved.

3.2.2.2. **Grinding Splice Welds**. Grind shop groove welds in flange plates smooth and flush with the base metal on all surfaces whether the joined parts are of equal or unequal thickness. Grind so the finished grinding marks run in the direction of stress, and keep the metal below the blue brittle range (below 350°F). Groove welds in web plates, except at locations of intersecting welds, need not be ground unless shown on the plans except as required to meet AWS welding code requirements.

3.2.3. **Joint Restraint**. Never restrain a joint on both sides when welding.

3.2.4. **Stiffener Installation**.

3.2.4.1. **Flange Tilt**. Members must meet combined tilt and warpage tolerances before the installation of stiffeners. Cut stiffeners to fit acceptable flange tilt and cupping. Minor jacking or hammering that does not permanently deform the material will be permitted.

3.2.4.2. **Stiffeners Near Field Splices**. Tack weld intermediate stiffeners within 12 in. of a welded field splice point in the shop. Weld the stiffeners in the field in accordance with Item 448, "Structural Field Welding," after the splice is made.

3.2.5. **Nondestructive Testing (NDT)**. Perform magnetic particle testing (MT), radiographic testing (RT), or ultrasonic testing (UT) at the Contractor's expense as specified in D1.5 for bridge structures. The Engineer will periodically witness, examine, verify, and interpret NDT. Additional welds may be designated for NDT on the plans. Retest repaired groove welds per the applicable AWS code after repairs are made and have cooled to ambient temperature. Complete NDT and repairs before assembly of parts into a member, but after any heat-correction of weld distortion.

3.2.5.1. **Radiographic Testing**. Radiographs must have a density of at least 2.5 and no more than 3.5, as a radiographer confirms. The density in any single radiograph showing a continuous area of constant thickness must not vary in this area by more than 0.5. Use only ASTM System Class I radiographic film as described in ASTM E1815. Use low-stress stencils to make radiograph and location identification marks on the steel. The Engineer will examine and interpret all results of RT.

3.2.5.2. **Ultrasonic Testing**. Have UT equipment calibrated yearly by an authorized representative of the equipment manufacturer or by an approved testing laboratory.

3.2.5.3. **Magnetic Particle Testing**. Use half-wave rectified DC when using the yoke method unless otherwise approved. Welds may be further evaluated with prod method for detecting centerline cracking.

3.2.6. **Testing of Galvanized Weldments**. If problems develop during galvanizing of welded material, the Engineer may require a test of the compatibility of the combined galvanizing and welding procedures in accordance with this Section and may require modification of one or both of the galvanizing and welding procedures.

Prepare a test specimen with a minimum length of 12 in. using the same base material, with the same joint configuration, and using the welding procedure proposed for production work if testing is required. Clean and

galvanize this test specimen using the same conditions and procedure that will be applied to the production galvanizing.

Examine the test specimen after galvanizing. There must be no evidence of excessive buildup of zinc coating over the weld area. Excessive zinc coating buildup will require modification of the galvanizing procedure.

Remove the zinc from the weld area of the test specimen and visually examine the surface. There must be no evidence of loss of weld metal or any deterioration of the base metal due to the galvanizing or welding procedure. Modify the galvanizing or welding procedure as required if there is evidence of deterioration or loss of weld metal, and run a satisfactory retest on the modified procedures before production work. Report procedures and results on the galvanized weldment worksheet provided by the Department.

3.3. **Bolt Holes**. Detail holes on shop drawings 1/16 in. larger in diameter than the nominal bolt size shown on the plans unless another hole size is shown on the plans.

Thoroughly clean the contact surfaces of connection parts in accordance with Item 447, "Structural Bolting," before assembling them for hole fabrication. Make holes in primary members full-size (by reaming from a subsize hole, drilling full-size, or punching full-size where permissible) only in assembly unless otherwise approved.

Ream and drill with twist drills guided by mechanical means unless otherwise approved. If subpunching holes, punch them at least 3/16 in. smaller than the nominal bolt size. Submit the proposed procedures for approval to accomplish the work from initial drilling or punching through check assembly when numerically controlled (N/C) equipment is used. Use thermal cutting for holes only with permission of the Engineer. Permission for thermal cutting is not required for making slotted holes, when slotted holes are shown on the plans, by drilling or punching 2 holes and then thermally cutting the straight portion between them. Perform all thermal cutting in accordance with Section 441.3.5.1., "Thermal Cutting."

Slightly conical holes that naturally result from punching operations are acceptable provided they do not exceed the tolerances of S2.1. The tolerance for anchor bolt hole diameter for bridge bearing assemblies is +1/8 in., −0.

3.4. **Dimensional Tolerances**. Meet tolerances of the applicable AWS specifications and S2.1 except as modified in this Section.

3.4.1. **Rolled Sections**. Use ASTM A6 mill tolerances for rolled sections, except D1.5 camber tolerances apply to rolled sections with a specified camber.

3.4.2. **Flange Straightness**. Ensure flanges of completed girders are free of kinks, short bends, and waviness that depart from straightness or the specified camber by more than 1/8 in. in any 10 ft. along the flange. Rolled material must meet this straightness requirement before being laid out or worked. Plates must meet this requirement before assembly into a member. Inspect the surface of the metal for evidence of fracture after straightening a bend or buckle. The Engineer may require nondestructive testing.

3.4.3. **Alignment of Deep Webs in Welded Field Connections**. For girders 48 in. deep or deeper, the webs may be slightly restrained while checking compliance with tolerances of S2.1 for lateral alignment at field-welded connections. In the unrestrained condition, webs 48 in. deep or deeper must meet the tolerances of Table 2. Girders under 48 in. deep must meet the alignment tolerances of S2.1.

Table 2
Web Alignment Tolerances for Deep Girders

Web Depth (in.)	Maximum Web Misalignment (in.)
48	1/16
60	1/8
72	1/4
84	5/16
96	5/16
108	3/8
120	7/16
132	7/16
144	1/2

3.4.4. **Bearings**. Correct bearing areas of shoes, beams, and girders using heat, external pressure, or both. Grind or mill only if the actual thickness of the member is not reduced by more than 1/16 in. below the required thickness.

3.4.4.1. **I-Beams, Plate Girders, and Tub Girders**. The plane of the bearing area of beams and girders must be perpendicular to the vertical axis of the member within 1/16 in. in any 24 in.

3.4.4.2. **Closed Box Girders**. Meet these tolerances:

- The plane of the bearing areas of the box girder is perpendicular to the vertical axis of the girder within 1/16 in. across any horizontal dimension of the bearing.
- The planes of the beam supports on the box girder are true to the vertical axis of the supported beams or girders to 1/16 in. in any 24 in.

In the shop, verify the plane of all bearing areas with the box placed on its bearings to field grade, using an approved process for verification.

3.4.4.3. **Shoes**. Meet these tolerances:

- The top bolster has the center 75% of the long dimension (transverse to the girder) true to 1/32 in., with the remainder true to 1/16 in., and is true to 1/32 in. across its entire width in the short dimension (longitudinal to the girder).
- The bottom bolster is true to 1/16 in. across its diagonals.
- For a pin and rocker type expansion shoe, the axis of rotation coincides with the central axis of the pin.
- When the shoe is completely assembled, as the top bolster travels through its full anticipated range, no point in the top bolster plane changes elevation by more than 1/16 in. and the top bolster does not change inclination by more than 1 degree, for the full possible travel.

3.4.4.4. **Beam supports**. Fabricate beam support planes true to the box girder bearing to 1/16 in. in the short direction and true to the vertical axis of the nesting girders to 1/16 in.

3.4.5. **End Connection Angles**. For floor beams and girders with end connection angles, the tolerance for the length back to back of connection angles is ±1/32 in. Do not reduce the finished thickness of the angles below that shown on the shop drawings if end connections are faced.

3.5. **Other Fabrication Processes**.

3.5.1. **Thermal Cutting**. Use a mechanical guide to obtain a true profile. Hand-cut only where approved. Hand-cutting of radii for beam copes, weld access holes, and width transitions is permitted if acceptable profile and finish are produced by grinding. Provide a surface finish on thermal-cut surfaces, including holes, in accordance with D1.5 requirements for base metal preparation. Obtain approval before using other cutting processes.

3.5.2. **Oxygen-Gouging**. Do not oxygen-gouge quenched and tempered (Q&T), normalized, or thermo-mechanically controlled processed (TMCP) steel.

3.5.3. **Annealing and Normalizing**. Complete all annealing or normalizing (as defined in ASTM A941) before finished machining, boring, and straightening. Maintain the temperature uniformly throughout the furnace during heating and cooling so the range of temperatures at all points on the member is no more than 100°F.

3.5.4. **Machining**. Machine the surfaces of expansion bearings so the travel direction of the tool is in the direction of expansion.

3.5.5. **Camber**. Complete cambering in accordance with S2.1 before any heat-curving.

3.5.6. **Heat Curving**. Heat-curve in accordance with S2.1. The methods in the AASHTO bridge construction specifications are recommended. Attach cover plates to rolled beams before heat-curving only if the total thickness of one flange and cover plate is less than 2-1/2 in. and the radius of curvature is greater than 1,000 ft. Attach cover plates for other rolled beams only after heat-curving is completed. Locate and attach connection plates, diaphragm stiffeners, and bearing stiffeners after curving, unless girder shrinkage is accounted for.

3.5.7. **Bending of Quenched and Tempered Steels**. The cold-bending radius limitations for HPS 70W in S2.1 apply to all Q&T steels.

3.6. **Nonconformance Reports (NCRs)**. Submit an NCR to the Engineer for approval when the requirements of this Item are not met. Submit NCRs in accordance with the Construction Division's NCR guidelines document. Have readily available access to the services of a licensed professional engineer experienced in steel structures design and fabrication. This licensed professional engineer may be responsible for reviewing potentially structurally deficient members in accordance with the NCR guidelines document. Receive Department approval before beginning repairs. Perform all repair work in strict compliance with the approved NCR and repair procedure.

3.7. **Shop Assembly**.

3.7.1. **General Shop Assembly**. Shop-assemble field connections of primary members of trusses, arches, continuous beam spans, bents, towers (each face), plate girders, field connections of floor beams and stringers (including for railroad structures), field-bolted diaphragms for curved plate girders and railroad underpasses, and rigid frames. Field-bolted cross-frames and rolled-section diaphragms do not require shop assembly. Complete fabrication, welding (except for shear studs), and field splice preparation before members are removed from shop assembly. Obtain approval for any deviation from this procedure. The Contractor is responsible for accurate geometry.

Use a method and details of preassembly consistent with the erection procedure shown on the erection plans and camber diagrams. The sequence of assembly may start from any location in the structure and proceed in one or both directions. An approved method of sequential geometry control is required unless the full length of the structure is assembled.

Verify by shop assembly the fit of all bolted and welded field connections between bent cap girders and plate girders or between plate girders and floor beams.

Do not measure horizontal curvature and vertical camber for final acceptance until all welding and heating operations are completed and the steel has cooled to a uniform temperature. Check horizontal curvature and vertical camber in a no-load condition.

3.7.2. **Bolted Field Connections**. Each shop assembly, including camber, alignment, accuracy of holes, and fit of milled joints, must be approved before the assembly is dismantled.

Assemble with milled ends of compression members in full bearing. Assemble non-bearing connections to the specified gap. Ream all subsize holes to the specified size while the connections are assembled, or drill full size while the connections are assembled. Notify the Engineer before shipping if fill plates or shims are added. Adding or increasing the thickness of shims or fill plates in bearing connections requires approval. Use drift pins and snug-tight bolts during the drilling process to ensure all planes of the connection (webs and flanges) can be assembled simultaneously. Do not use tack welds to secure plates while drilling.

Secure parts not completely bolted in the shop with temporary bolts to prevent damage in shipment and handling. Never use tack welds in place of temporary bolts.

Match-mark connecting parts in field connections using low-stress stencils in accordance with the diagram in the erection drawings.

3.7.3. **Welded Field Connections**. Mill or grind bevels for groove welds. Do not cut into the web when cutting the flange bevel adjacent to the web. End preparation, backing, and tolerances for girder splices must be in accordance with Item 448, "Structural Field Welding." Details for all other field-welds must conform to the applicable AWS code unless otherwise shown on the plans.

In the shop, prepare ends of beams or girders to be field-welded taking into account their relative positions in the finished structure due to grade, camber, and curvature. Completely shop-assemble and check each splice. Match-mark the splice while it is assembled with low-stress stencils in accordance with the diagram in the erection drawings.

3.8. **Finish and Painting**.

3.8.1. **Shop Painting**. Perform shop painting as required in DMS-8104, "Paint, Shop Application for Steel Bridge Members." Grind corners on new steel items to be painted (except for the coatings on box and tub girder interiors) that are sharp or form essentially 90° angles to an approximately 1/16 in. flat surface before blast cleaning. (A corner is the intersection of 2 plane faces.) This requirement does not apply to punched or drilled holes. Do not omit shop paint to preserve original markings.

Ensure painted faying surfaces meet the required slip and creep coefficients for bolted connections as outlined in DMS-8104, "Paint, Shop Application for Steel Bridge Members."

Use a Class A slip (minimum slip coefficient of 0.33) if no slip coefficient or corresponding surface condition is specified Perform all required testing at no expense to the Department.

Surface preparation and painting the interiors of Tub Girders and Closed Boxes is in accordance with DMS-8104, "Paint, Shop Application for Steel Bridge Members."

3.8.2. **Weathering Steel**. Provide an SSPC-SP 6 blast in the shop to all fascia surfaces of unpainted weathering steel beams. Fascia surfaces include:

- exterior sides of outermost webs and undersides of bottom flanges of plate girders and rolled beams,
- all outer surfaces of tub girders and box girders,
- all surfaces of truss members,
- webs and undersides of bottom flanges of plate diaphragms,
- bottom surfaces of floor beams, and
- any other surfaces designated as "fascia" on the plans.

Do not mark fascia surfaces. Use one of the following methods as soon as possible to remove any markings or any other foreign material that adheres to the steel during fabrication and could inhibit the formation of oxide film:

- SSPC-SP 1, "Solvent Cleaning"
- SSPC-SP 2, "Hand Tool Cleaning"
- SSPC-SP 3, "Power Tool Cleaning"

- SSPC-SP 7, "Brush-off Blast Cleaning"

Do not use acids to remove stains or scales. Feather out touched-up areas over several feet.

3.8.3. **Machined Surfaces**. Clean and coat machine-finished surfaces that are in sliding contact, particularly pins and pinholes, with a non-drying, water-repellent grease-type material containing rust-inhibitive compounds. Ensure the coating material contains no ingredients that might damage the steel. Protect machined surfaces from abrasive blasting.

3.9. **Handling and Storage of Materials**. Prevent damage when storing or handling girders or other materials. Remove or repair material damaged by handling devices or improper storage by acceptable means in accordance with ASTM A6 and the applicable AWS code.

Place stored materials on skids or acceptable dunnage above the ground. Keep materials clean. Shore girders and beams to keep them upright and free of standing water. Place support skids close enough to prevent excessive deflection in long members such as columns. Do not stack completed girders or beams at the jobsite.

Protect structural steel from salt water or other corrosive environments during storage and transit.

3.10. **Marking and Shipping**. Mark all structural members in accordance with the erection drawings. If a surface is painted, make the marks over the paint. Do not use impact-applied stencils to mark painted surfaces.

Mark the weight directly on all members weighing more than 3 tons.

Keep material clean and free from injury during loading, transportation, unloading, and storage. Pack bolts of each length and diameter, and loose nuts or washers of each size, separately and ship them in boxes, crates, kegs, or barrels. Plainly mark a list and description of the contents on the outside of each package.

3.11. **Field Erection**. Do not lift and place any steel member, including girders and diaphragms, over an open highway or other open travel way unless otherwise approved. Do not allow traffic to travel under erected members until sufficiently stable as shown on approved erection drawings.

3.11.1. **Pre-Erection Conference**. Schedule and attend a pre-erection conference with the Engineer at least 7 days before commencing steel erection operations. Do not install falsework or perform any erection operations before the meeting.

3.11.2. **Methods and Equipment**. Do not tack-weld parts instead of using erection bolts. Do not tack-weld parts to hold them in place for bolting. Provide falsework, tools, machinery, and appliances, including drift pins and erection bolts. Provide enough drift pins, 1/32 in. larger than the connection bolts, to fill at least 1/4 of the bolt holes for primary connections. Use erection bolts of the same diameter as the connection bolts.

Securely tie, brace, or shore steel beams or girders immediately after erection as shown on the erection drawings. Maintain bracing or shoring until the diaphragms are in place and as specified in the erection drawings. Protect railroad, roadway, and marine traffic underneath previously erected girders or beams from falling objects associated with other construction activities.

Only welders certified or working directly under the supervision of a foreman certified in accordance with Item 448, "Structural Field Welding," may handle torches when applying heat to permanent structural steel members.

3.11.3. **Falsework**. Construct falsework in accordance with the erection plan. Construct foundations for shore towers as shown on erection drawings. Do not use timber mats with deteriorated timbers or soil to construct shore tower foundations. Notify the Engineer of completed falsework to obtain approval before opening roadway to traffic or starting girder erection activities. Ensure falsework is protected from potential vehicle impact.

Inspect and maintain falsework daily. Use screw jacks or other approved methods to control vertical adjustment of falsework to minimize the use of shims.

3.11.4. **Handling and Assembly**. Accurately assemble all parts as shown on the plans and the approved shop drawings. Verify match-marks. Handle parts carefully to prevent bending or other damage. Do not hammer if doing so damages or distorts members. Do not weld any member for transportation or erection unless noted on the plans or approved by the Engineer.

3.11.4.1. **Welded Connections**. Weld flange splices to 50% of their thickness and meet the minimum erection bracing and support requirements before releasing the erection cranes, as shown on the plans and on the approved erection plans. Field-weld in accordance with Item 448, "Structural Field Welding."

3.11.4.2. **Bolted Connections**. Before releasing the erection cranes:

- install 50% of the bolts in the top and bottom flanges and the web with all nuts finger-tight,
- meet the minimum erection bracing and support requirements shown on the plans and on the approved erection plans, and
- install top lateral bracing across the connection for tub girders, and fully tension the bolts connecting the bracing to the top flanges.

Install high-strength bolts, including erection bolts, in accordance with Item 447, "Structural Bolting." Clean bearing and faying surfaces for bolted connections in accordance with Item 447, "Structural Bolting." Clean the areas of the outside ply under washers, nuts, and bolt heads before bolt installation. Ensure the required faying surface condition is present at the time of bolting.

3.11.5. **Misfits**. Correct minor misfits. Ream no more than 10% of the holes in a plate connection (flange or web), and ensure no single hole is more than 1/8 in. larger than the nominal bolt diameter. Submit proposed correction methods for members with defects that exceed these limits or prevent the proper assembly of parts. Straighten structural members in accordance with S2.1. Make all corrections in the presence of the Engineer at no expense to the Department. Do not remove and reweld gusset plates without approval.

3.11.6. **Bearing and Anchorage Devices**. Place all bearing devices such as elastomeric pads, castings, bearing plates, or shoes on properly finished bearing areas with full and even bearing on the concrete. Place metallic bearing devices on 1/4 in.-thick preformed fabric pads manufactured in accordance with DMS-6160, "Water Stops, Nylon-Reinforced Neoprene Sheet, and Elastomeric Pads," to the dimensions shown on the plans. Provide holes in the pad that are no more than 1/4 in. larger than the bolt diameter.

Build the concrete bearing area up to the correct elevation once it has been placed below grade using mortar that meets Item 420, "Concrete Substructures," and provide adequate curing. Use only mortar for build-ups between 1/8 in. and 3/8 in. thick. Use galvanized steel shims or other approved shim materials in conjunction with mortar if the bearing area must be raised more than 3/8 in.

Provide at least 75% contact of flange to shoe with no separation greater than 1/32 in. for beams and girders. Make corrections using heat or pressure in accordance with S2.1, or with galvanized shims. Correct small irregularities by grinding.

Provide at least 85% contact between the rocker plate and the base plate. Adjust the location of slotted holes in expansion bearings for the prevailing temperature. Adjust the nuts on the anchor bolts at the expansion ends of spans to permit free movement of the span. Provide lock nuts or burr the threads.

Remove all foreign matter from sliding or machine-finished surfaces before placing them in the structure.

Restore distorted bearing pads or expansion bearings to an equivalent 70°F position after completion of all welded or bolted splices, using an approved method of relieving the load on the bearing devices.

3.11.7. **Erecting Forms**. Do not erect forms until all welding or bolting is complete and the unit is positioned and properly set on the bearings unless otherwise noted on the plans.

3.11.8. **Field Finish**. Paint in accordance with Item 446, "Field Cleaning and Painting Steel." Restore weathering steel that will remain unpainted to a uniform appearance by solvent cleaning, hand cleaning, power brush, or blast cleaning after all welding and slab concrete placement has been completed. Remove from all unpainted weathering steel fascia surfaces (see Section 441.3.8.2., "Weathering Steel,") any foreign material, including markings, that adheres to the steel and could inhibit formation of oxide film as soon as possible. Feather out touched-up areas over several feet. Do not use acids to remove stains or scales.

4. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items.

Item 442
Metal for Structures

1. DESCRIPTION

Provide structural steel, high-strength bolts, forgings, steel castings, iron castings, wrought iron, steel pipe and tubing, aluminum castings and tubing, or other metals used in structures, except reinforcing steel and metal culvert pipe.

2. MATERIALS

Furnish mill test reports (MTRs), supplemental test documentation, and certifications required by this and other pertinent Items.

2.1. **Structural Steel**. The Engineer may sample and test steel in accordance with ASTM A370.

2.1.1. **Bridge Structures**. Provide the grade of ASTM A709 steel shown on the plans. Grade 50W, 50S, or HPS 50W may be substituted for Grade 50 at no additional cost to the Department. Use Zone 1 if no AASHTO temperature zone is shown on the plans.

2.1.2. **Non-Bridge Structures**.

2.1.2.1. **Steel Classifications**. Provide the types and grades of steel listed in this Section unless otherwise shown on the plans.

2.1.2.1.1. **Carbon Steel**. Meet ASTM A36.

2.1.2.1.2. **Low-Alloy Steel**. Meet the requirements of one of the following standards:

- ASTM A529 Grade 50;
- ASTM A572 Grade 50 or 55;
- ASTM A588;
- ASTM A709 Grade 50, 50S, 50W, or HPS 50W; or
- ASTM A992.

Specify ASTM A6 supplemental requirement S18, "Maximum Tensile Strength," for material used for sign, signal, and luminaire supports.

2.1.2.2. **Impact Testing**. Tension members and components of the following structure types, if more than 1/2 in. thick. Other members designated on the plans must meet the Charpy V-notch (CVN) requirements of Table 1:

- base plates for roadway illumination assemblies, traffic signal pole assemblies, high mast illumination poles, camera poles, and overhead sign supports;
- pole mounting plates, arm mounting plates, and clamp-on plates for traffic signal pole assemblies;
- arm stiffeners, pole gussets, and stiffeners for traffic signal pole long mast arm assemblies (50 ft. to 65 ft.);
- pole shafts, ground sleeves, and handhole frames for high mast illumination poles;
- W-columns, tower pipes, multiple-sided shafts, tower pipe and multiple-sided shaft connection plates, chord angles, chord splice plates or angles, and truss bearing angles for truss type overhead sign supports; and

- pipe posts, pipe arms, post and arm flange plates, and handhole frames for monotube overhead sign supports.

Table 1
CVN Requirements for Non-Bridge Steel

Material	Thickness	Minimum CVN Toughness
ASTM A36, A53, A242, A500, A501, A709 Gr. 36, any other steel with minimum specified yield point below 40 ksi	up to 4"	15 ft.-lb. at 70°F
ASTM A572,[1] A588,[1] A633,[1] any other steel with minimum specified yield point between 40 and 65 ksi, inclusive	up to 2"	15 ft.-lb. at 70°F
	over 2" to 4", mechanically fastened	15 ft.-lb. at 70°F
	over 2" to 4", welded	20 ft.-lb. at 70°F
Any steel with minimum specified yield point over 65 ksi and under 90 ksi[2]	up to 2-1/2"	20 ft.-lb. at 50°F
	over 2-1/2" to 4", mechanically fastened	20 ft.-lb. at 50°F
	over 2-1/2" to 4", welded	25 ft.-lb. at 50°F

1. Reduce the testing temperature by 15°F for each 10-ksi increment or fraction thereof above 65 ksi if the yield point of the material given on the MTR exceeds 65 ksi.
2. Reduce the testing temperature by 15°F for each 10-ksi increment or fraction thereof above 85 ksi if the yield point of the material given on the MTR exceeds 85 ksi.

Use the (H) frequency of testing for material with minimum specified yield point up to 50 ksi. Use the (P) frequency of testing for material with minimum specified yield point over 50 ksi. Ensure steel is sampled and tested in accordance with ASTM A673.

2.1.3. **Other Components**.

2.1.3.1. **Miscellaneous Bridge Components**. Provide steel that meets ASTM A36, A709 Grade 36, or A500 Grade B for members such as steel bearing components not bid under other Items, steel diaphragms for use with concrete bridges, and armor and finger joints, unless otherwise shown on the plans.

2.1.3.2. **Shear Connectors and Anchors**. Provide cold-drawn bars for stud shear connectors, slab anchors, and anchors on armor and finger joints that meet the requirements of ASTM A108, Grade 1010, 1015, 1018, or 1020, either semi-killed or killed, and have the tensile properties given in Table 2 after drawing or finishing. Determine tensile properties in accordance with ASTM A370.

Table 2
Minimum Tensile Properties for Bar Stock

Tensile strength	60 ksi
Yield strength	50 ksi
Elongation	20% (2")
Reduction of area	50%

Provide certification from the manufacturer that the studs or anchors as delivered have the required material properties.

2.1.3.3. **Fasteners**. Provide high-strength bolts that meet ASTM A325 or A490 as shown on the plans. The Department may sample high-strength bolts, nuts, and washers for structural connections in accordance with Tex-719-I.

Follow the requirements of Item 447, "Structural Bolting," for tests, test reports, and supplemental requirements for high-strength bolts, nuts, and washers.

Use bolts that meet ASTM A307 and nuts that meet ASTM A563 when ASTM A325 or A490 bolts are not shown on the plans.

2.1.3.4. **Slip-Resistant Deck Plates**. Furnish steel for deck plates that meets ASTM A786 and one of A242, A588, or A709 Gr. 50W. State the type and trade name of material to be used on the shop drawings.

2.1.3.5. **Rail Posts**. Provide material for rail posts that meets ASTM A36 or ASTM A709 Grade 36 unless otherwise shown on the plans.

2.2. **Steel Forgings**. Provide steel forgings for pins, rollers, trunnions, or other forged parts that meet ASTM A668, Class C, D, F, or G, as shown on the plans. For pins 4 in. or smaller in diameter for non-railroad structures, material that meets ASTM A108, Grades 1016 to 1030, with a minimum yield strength of 36 ksi, may be used instead.

2.3. **Steel Castings**. Provide steel castings that meet ASTM A27, Grade 70-36.

2.4. **Iron Castings**. Provide iron castings that are true to pattern in form and dimensions; free from pouring faults, sponginess, cracks, blow holes, and other defects in positions affecting their strength and value for the service intended; and meet the standards shown in Table 3.

Table 3
Standards for Iron Castings

Casting Material	ASTM Standard	Grade or Class
Gray iron	A48	35B
Malleable iron	A47	32510
Ductile iron	A536	70-50-05

2.5. **Steel Tubing**. Provide steel tubing that meets ASTM A500, Grade B unless otherwise shown on the plans. Tubing that meets API Standard 5L, Grade X52 may be used if produced by a mill listed in the standard API specifications as authorized to produce pipe with the API monogram. Hydrostatic tests are not required for API 5L steel, and instead of an MTR, the manufacturer may furnish a certificate for each lot or shipment certifying the tubing meets the requirements of this Section.

2.6. **Pipe Rail**. "Pipe" includes special extruded and bent shapes. Provide pipe that is rolled, extruded, or cold-pressed from a round pipe or flat plate, and of the section shown on the plans.

Ensure the design of the cold press and dies results in a pipe of uniform section-free from die marks. Cut the pipe to the lengths required once it has been formed to the required section. Make the end cuts and notches at the angles to the axis of the pipe required to produce vertical end faces and plumb posts when required by the plans. Provide a neat and workmanlike finish when cutting and notching pipe.

2.7. **Aluminum**. Provide aluminum materials that meet the standards shown in Table 4 unless otherwise shown on the plans.

Table 4
Aluminum Standards

Material	ASTM Standard	Alloy-Temper
Castings	B108	A444.0-T4
Extrusions	B221	6061-T6
Sheet or plate	B209	6061-T6

When testing is required, cut test specimens from castings from the lower 14 in. of the tension flange, but not at the junction of the rib or base. Flatten the curved surfaces before machining. Provide standard test specimens in conformance with ASTM E8.

3. CONSTRUCTION

3.1. **Fabrication, Erection, and Painting**. Fabricate, weld, and erect structural metal in accordance with Item 441, "Steel Structures," Item 447, "Structural Bolting," Item 448, "Structural Field Welding," and the applicable AWS welding code. Paint in accordance with Item 446, "Field Cleaning and Painting Steel." Aluminum or galvanized steel members do not require painting unless otherwise shown on the plans.

3.2. **Galvanizing**. Galvanize fabricated steel items, steel castings, bolts, nuts, screws, washers, and other miscellaneous hardware in accordance with Item 445, "Galvanizing." Galvanizing is not required unless specified.

4. MEASUREMENT

This Item will be measured by the pound of structural metal furnished and placed in a complete structure not including the weight of erection bolts, paint, or weld metal.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

The maximum percent variance from the plans quantity will be as given in Table 5.

Table 5
Percent Variance

Quantity	Variance
Over 1,000,000 lb.	1/2%
100,000 through 1,000,000 lb.	1%
Under 100,000 lb.	1-1/2%

If the requests for increases in sizes or weights of members are approved, measurement will be made on the sizes or weights shown on the plans.

Castings, bearing plates, anchor bolts, drains, deck plates, armor and finger joints, and other metal for which no separate measurement is specified will be included in the total quantity of structural steel.

The weights of rolled materials (such as structural shapes and plate) will be computed on the basis of nominal weights and dimensions using measurements shown on the plans. Deductions will not be made for material that is removed for copes, clips, planing, or weld preparation. The weight of castings will be computed from the dimensions shown on the approved shop drawings. Shoes will be measured by the weights shown on the plans.

Weight of high-strength fasteners will be based on Table 6. Weight of other metal will be based on Table 7.

Splices will be measured as follows:

- No additional weight will be allowed for weld metal in a welded splice.
- Where a bolted splice is permitted as an alternate for a welded splice, measurement will be made on the basis of a welded splice.
- Where a bolted splice is required, the weight of the splice material, bolt heads, washers, and nuts will be measured with no deduction for holes.

Table 6
Pay Weight for High-Strength Fasteners, Pounds per Hundred Units

Diameter	Item		
	Bolt heads	Nuts	Washers
3/4"	15	19	4.8
7/8"	23	30	7.0
1"	32	43	9.4
1-1/8"	45	59	11
1-1/4"	64	79	14

Table 7
Pay Weight for Metals

Material	Weight (lb./cu. in.)
Steel	0.2836
Cast iron	0.2604
Wrought iron	0.2777

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Structural Steel" of the type (Rolled Beam, Plate Girder, Tub Girder, Box Girder, Railroad Through-Girder, Railroad Deck-Girder, Miscellaneous Bridge, Miscellaneous Non-Bridge) specified. This price is full compensation for materials, fabrication, transportation, erection, paint, painting, galvanizing, equipment, tools, labor, and incidentals.

Item 445
Galvanizing

1. DESCRIPTION

Galvanize or repair galvanizing on metal items.

2. MATERIALS

Provide galvanized metal items that meet the standards in Table 1.

Table 1
Galvanizing Standards

Item	Standard
Fabricated items, rolled, pressed, or forged steel shapes, plates, pipes, tubular items, and bars	ASTM A123
Steel or iron castings	ASTM A153, Class A
Bolts, nuts, screws, washers, and other miscellaneous hardware	ASTM A153, Class C or D or ASTM B695, Class 50
Miscellaneous fasteners	ASTM B633, Class Fe/Zn 8
Rail elements for metal beam guard fence or bridge railing	AASHTO M 180
Permanent metal deck forms, supporting angles, and incidental items	ASTM A653, Coating Designation G165

3. CONSTRUCTION

3.1. **General**. Provide for proper filling, venting, and draining during cleaning and galvanizing if fabricated members or assemblies are required to be hot-dip galvanized. Provide drain holes or slots as required, except where prohibited by the plans. Provide a surface finish on the thermal-cut drain holes or slots in accordance with AWS D1.1 requirements for base metal preparation. Drain to the small end of tapered sections that are assembled using slip-joint splices. Ensure cleaning and galvanizing does not produce hydrogen embrittlement.

Remove weld flux, weld slag, and any other weld residue or impurities before galvanizing. Before galvanizing material 1/4 in. or greater in thickness:

- remove all sharp burrs and
- chamfer to approximately 1/16 in. all edges.

3.2. **Painting Galvanized Materials**. Provide a paint system if painting is specified on galvanized materials in accordance with DMS-8102 "Paint Systems for Galvanized Steel." Follow all manufacturer instructions for surface preparation and application including the following:

3.2.1. **Surface Preparation**. Do not water-quench or chromate-quench galvanized surfaces to be painted. Prepare the surface in accordance with ASTM D6386. Apply coating within 12 hr. of cleaning. Re-clean the surface if more than 12 hr. elapse before initial painting.

3.2.2. **Coating Application**. Ensure the coating is smooth, even, continuous, and free of drips, runs, sags, holidays, wrinkles, or other coating defects. Ensure the coating has a uniform appearance within all portions of the painted piece and all related pieces and components of a project. Ensure all repairs are smooth, even, and visually match the remainder of the coated piece by use of feathering and other appropriate techniques to avoid sharp transitions.

3.3. **Galvanizing Weldments.** If problems develop during galvanizing of welded material, the Engineer may require a compatibility test of the combined galvanizing and welding procedures in accordance with Section 441.3.2.6., "Testing of Galvanized Weldments," and may require modification of one or both of the galvanizing and welding procedures.

3.4. **Workmanship.**

3.4.1. **Coverage.** Bare spots no more than 1/8 in. across are acceptable unless numerous. Repair larger bare spots in accordance with Section 445.3.5., "Repairs." Local runs or drips of zinc coating are acceptable unless they interfere with the intended use of the product. Carefully remove plainly visible excessive zinc accumulations.

3.4.2. **Adhesion.** Tap the coated area with a small hammer to test coating adhesion. The coating is acceptable if it is not brittle and does not scale or flake.

3.4.3. **Appearance.**

3.4.3.1. **White Rust.** A white powdery residue indicates moisture. Remove heavy layers of white rust that have caused the coating to pit. Light coatings may remain unless the Engineer requires chemical removal. Remove white rust from articles that will be in direct contact with soil.

3.4.3.2. **Red Rust.** Red rust on galvanized items indicates uncoated areas. See Section 445.3.4.1., "Coverage," for acceptance criteria.

3.4.3.3. **Alligator Cracking or Spider Webbing.** The composition of the base metal may cause dark lines resembling alligator skin. See Section 445.3.4.2., "Adhesion," to determine whether the coating is acceptable.

3.4.3.4. **Dull Gray Coating.** The composition of the base metal can cause a dull gray color. See Section 445.3.4.2., "Adhesion," to determine whether the coating is acceptable.

3.4.4. **Coating Thickness.** Galvanize to the thickness specified. Use Tex-728-I to determine coating thickness.

3.5. **Repairs.** Use zinc-based solders, sprayed zinc, or zinc-rich paints for repairs in accordance with this Section.

3.5.1. **Materials.**

3.5.1.1. **Zinc-Based Solders.** Solders used in rod form or as powders:

- zinc-tin-lead alloys with liquidus temperatures in the range of 446°F to 500°F or
- zinc-cadmium alloys with liquidus temperatures in the range of 518°F to 527°F.

3.5.1.2. **Sprayed Zinc (Metallizing).** Zinc coating applied by spraying with droplets of molten metal using wire, ribbon, or powder processes.

3.5.1.3. **Organic Zinc-Rich Paints.** Zinc-rich paints based on organic binders that meet the requirements of DMS-8103, "Galvanizing Repair Paints." The Department's MPL has a list of approved repair paints for galvanized coatings.

3.5.2. **Repair Processes.**

3.5.2.1. **Zinc-Based Solders.** Remove moisture, oil, grease, dirt, corrosion products, and welding slag or flux from surfaces to be repaired. Clean surface to white metal by wire-brushing, light grinding, or mild blasting extending into the surrounding undamaged galvanized coating. Preheat cleaned areas to at least 600°F, but not more than 750°F. Wire-brush while heating and evenly distribute a layer of zinc solder. Flush the repaired area with water or wipe with a damp cloth to remove flux residue when repair is completed.

3.5.2.2. **Sprayed Zinc (Metallizing)**. Remove oil, grease, corrosion products, and any welding slag or flux from surfaces to be repaired, and ensure the surfaces are dry. Clean surface to white metal by wire-brushing, light grinding, or mild blasting extending into the surrounding undamaged galvanized coating. Apply coating by metal-spraying pistols fed with either zinc wire, ribbon, or powder. Provide a coating that is uniform and free of lumps, coarse areas, or loose particles.

3.5.2.3. **Organic Zinc-Rich Paints**. Remove oil, grease, corrosion products, and welding slag or flux from surfaces to be repaired, and ensure the surfaces are clean and dry. Clean surface to near-white metal by wire-brushing, light grinding, or mild blasting extending into the surrounding undamaged coating to provide a smooth repair. Spray or brush-apply the paint to the prepared area in accordance with the paint manufacturer's instructions to attain the required dry-film thickness. Provide multiple passes when using spray application.

3.6. **Repair Coating Thickness**. Measure thickness in the repaired area using Tex-728-I after completing repair and cooling or curing. The minimum thickness required is the same as that required for the specified galvanizing. However, if the repair uses zinc-rich paints, the minimum coating thickness is 50% higher than the specified galvanizing thickness but not greater than 4.0 mils.

4. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be considered subsidiary to pertinent Items.

Item 520
Weighing and Measuring Equipment

1. DESCRIPTION

Provide weighing and measuring equipment for materials measured or proportioned by weight or volume.

2. EQUIPMENT

Provide certified scales, scale installations, and measuring equipment meeting the requirements of *NIST Handbook 44*, except that the required accuracy must be 0.4% of the material being weighed or measured.

Provide personnel, facilities, and equipment for checking the scales as approved. Check all weighing and measuring equipment after each move and at least once each 6 mo. or when requested.

Calibrate all scales using weights certified by the Texas Department of Agriculture (TDA) or an equivalent agency as approved. Provide a written calibration report from a scale mechanic for all calibrations. Cease plant operations during the checking operation. Do not use inaccurate or inadequate scales. Bring performance errors as close to zero as practicable when adjusting equipment.

Furnish enough certified weights to check the accuracy and sensitivity of the scales. Insulate scales against shock, vibrations, or movement of other operating equipment. Provide an automated ticket printout for each truckload of material on a daily basis where payment is determined by weight. Each loading ticket must show the ticket number, truck number, gross weight, tare weight, and net weight.

Provide a summary spreadsheet that lists separately the ticket number, truck number, gross weight, tare weight, net weight, overload weight, and payment weight amounts as shown in Table 1 if required on the plans for materials paid by the ton. Provide this spreadsheet:

- for each lot when materials are paid for in increments of sublots or lots, and
- daily for other materials.

Provide the totals for net weight and overload amounts to be deducted for all summary sheets within 2 days of delivery of materials. Include the overload deduction in the total amount reported for payment. Submissions are subject to verification.

Table 1
Example Spreadsheet

Ticket No.	Truck No.	Gross Wt.	Tare Wt.	Net Wt.	Overload Wt.	Payment Wt.
				Totals	Totals	Totals

Furnish leak-free weighing containers large enough to hold a complete batch of the material being measured.

2.1. **Truck Scales**. Furnish platform truck scales capable of weighing the entire truck or truck–trailer combination in a single draft.

2.2. **Aggregate Batching Scales**. Equip scales used for weighing aggregate with a quick adjustment at zero that provides for any change in tare. Provide a visual means that indicates the required weight for each aggregate.

2.3. **Suspended Hopper**. Provide a means for the addition or the removal of small amounts of material to adjust the quantity to the exact weight per batch. Ensure the scale equipment is level.

2.4. **Belt Scales**. Use belt scales for proportioning aggregate that are accurate to within 1.0% based on the average of 3 test runs, where no individual test run exceeds 2.0% when checked in accordance with Tex-920-K.

2.5. **Asphalt Material Meter**. Provide an asphalt material meter with an automatic digital display of the volume or weight of asphalt material. Verify the accuracy of the meter in accordance with Tex-921-K. Ensure the accuracy of the meter is within 0.4% when using the asphalt meter for payment purposes. Ensure the accuracy of the meter is within 1.0% when used to measure component materials only and not for payment.

2.6. **Liquid Asphalt Additive Meters**. Provide a means to check the accuracy of meter output for asphalt primer, fluxing material, and liquid additives. Furnish a meter that reads in increments of 0.1 gal. or less. Verify accuracy of the meter in accordance with Tex-923-K. Ensure the accuracy of the meter within 5.0%.

2.7. **Particulate Solid and Slurry Additive Meters**. Provide a means to check the accuracy of meter output for particulate solids (such as hydrated lime or mineral filler) and slurries (such as hydrated lime slurry). Ensure the accuracy of the meter within 5.0%.

3. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items.

Item 560
Mailbox Assemblies

1. DESCRIPTION

Install, remove, temporarily relocate, or replace mailbox assemblies of the type specified.

2. MATERIAL

Furnish mailbox assemblies in accordance with the plans. An assembly does not include the mailbox unless shown otherwise on the plans. Provide new mailbox assemblies for permanent installations.

3. CONSTRUCTION

Temporarily relocate mailbox assemblies as shown on the plans or as directed. Furnish and install approved mailbox assemblies and mount mailboxes on those assemblies. Maintain mailbox assemblies in a serviceable condition. Furnish and install additional mailbox assemblies as directed. Relocate mailbox and assemblies to permanent locations upon completion of construction work.

4. MEASUREMENT

This Item will be measured by each permanent mailbox assembly installed.

5. PAYMENT

The work performed, materials furnished, and measured according to "Measurement" will be paid at the unit price bid for "Mailbox Installation (Single)," of the type specified; "Mailbox Installation (Double)," of the type specified; or "Mailbox Installation (Multiple)," of the type specified. This price is full compensation for installing mailboxes and reflectors in permanent locations, materials, equipment, labor, tools, and incidentals. Removing existing or installing and moving temporary mailbox assemblies will not be paid directly but will be subsidiary to pertinent Items.

Item 585
Ride Quality for Pavement Surfaces

1. DESCRIPTION

Measure and evaluate the ride quality of pavement surfaces.

2. EQUIPMENT

2.1. **Surface Test Type A**. Provide a 10-ft. straightedge or where allowed, a high-speed or lightweight inertial profiler, certified at the Texas A&M Transportation Institute.

2.2. **Surface Test Type B**. Provide a high-speed or lightweight inertial profiler, certified at the Texas A&M Transportation Institute. Provide equipment certification documentation. Display a current decal on the equipment indicating the certification expiration date.

Use a certified profiler operator from the Department's MPL. When requested, furnish documentation for the person certified to operate the profiler.

2.3. **Diamond Grinding Equipment**. Provide self-propelled powered grinding equipment specifically designed to smooth and texture pavements using circular diamond blades when grinding is required. Provide equipment with automatic grade control capable of grinding at least 3 ft. of width longitudinally in each pass without damaging the pavement.

3. WORK METHODS

Measure and evaluate profiles using Surface Test Types A and B on surfaces as described below unless otherwise shown on the plans.

3.1. **Transverse Profile**. Measure the transverse profile of the finished riding surface in accordance with Surface Test Type A.

3.2. **Longitudinal Profile**. Measure the longitudinal profile of the surface, including horizontal curves.

3.2.1. **Travel Lanes**. Use Surface Test Type B on the final riding surface of all travel lanes except as follows unless otherwise shown on the plans.

3.2.1.1. **Service Roads and Ramps**. Use Surface Test Type A on service roads and ramps unless Surface Test Type B is shown on the plans.

3.2.1.2. **Short Projects**. Use Surface Test Type A when project pavement length is less than 2,500 ft. unless otherwise shown on the plans.

3.2.1.3. **Bridge Structures**. Measure the profile in accordance with the pertinent item or use Surface Test Type A for span type bridge structures, approach slabs, and the 100 ft. leading into and away from such structures.

3.2.1.4. **Leave-Out Sections**. Use Surface Test Type A for leave-out sections and areas between leave-out sections that are less than 100 ft.

3.2.1.5. **Ends**. Use Surface Test Type A on the first and last 100 ft. of the project pavement length.

3.2.2. **Shoulders and Other Areas**. Use Surface Test Type A for shoulders and all other areas including intermediate pavement layers.

3.3. **Profile Measurements**. Measure the finished surface in accordance with Surface Test Type A or B in accordance with Section 585.3.1., "Transverse Profile," Section 585.3.2., "Longitudinal Profile," and the plans.

3.3.1. **Surface Test Type A**. Test the surface with a 10-ft. straightedge as directed. Use an inertial profiler to measure the surface when allowed. The Engineer will use Department software to evaluate the surface.

3.3.2. **Surface Test Type B**.

3.3.2.1. **QC Testing**. Perform QC tests on a daily basis throughout the duration of the project. Use a 10-ft. straightedge, inertial profiler, profilograph, or any other means to perform QC tests.

3.3.2.2. **QA Testing**. Perform QA tests using either a high-speed or lightweight inertial profiler. Coordinate with and obtain authorization from the Engineer before starting QA testing. Perform QA tests on the finished surface of the completed project or at the completion of a major stage of construction, as approved. Perform QA tests within 7 days after receiving authorization.

The Engineer may require QA testing to be performed at times of off-peak traffic flow. Operate the inertial profiler in a manner that does not unduly disrupt traffic flow as directed. When using a lightweight inertial profiler to measure a surface that is open to traffic, use a moving traffic control plan in accordance with Part 6 of the TMUTCD and the plans.

In accordance with Tex-1001-S, operate the inertial profiler and deliver test results within 24 hr. of testing. Provide all profile measurements in electronic data files using the format specified in Tex-1001-S.

3.3.2.2.1. **Verification Testing**. The Engineer may perform ride quality verification testing within 10 working days after the Contractor's QA testing is complete for the project or major stage of construction. When the Department's profiler produces an overall average international roughness index (IRI) value over 3.0 in. per mile higher than the value calculated using Contractor data, the Engineer will decide whether to accept the Contractor's data, use the Department's data, use an average of both parties' data, or request a referee test. Referee testing is mandatory if the difference is greater than 6.0 in. per mile.

3.3.2.2.2. **Referee Testing**. The Construction Division will conduct referee testing, and the results are final. The Construction Division may require recertification for the Contractor's or Department's inertial profiler.

3.4. **Acceptance Plan and Pay Adjustments**. The Engineer will evaluate profiles for determining acceptance, bonus, penalty, and corrective action.

3.4.1. **Surface Test Type A**. Use diamond grinding or other approved work methods to correct surface areas that have more than 1/8-in. variation between any 2 contacts on a 10-ft. straightedge. For asphalt concrete pavements, fog seal the aggregate exposed from diamond grinding. Following corrective action, retest the area to verify compliance with this Item.

3.4.2. **Surface Test Type B**. The Engineer will use the QA test results to determine pay adjustments for ride quality using Department software. IRI values will be calculated using the average of both wheel paths. When taking corrective actions to improve a deficient 0.1-mi. section, pay adjustments will be based on the data obtained from reprofiling the corrected area.

3.4.2.1. **IRI Pay Adjustment for 0.1-mi. Sections**. Unless pay adjustment Schedule 1 or 2 is shown on the plans, Schedule 3 from Table 1 and Table 2 will be used to determine the level of pay adjustment for each 0.1-mi. section on the project.

No bonus will be paid for any 0.1-mi. section that contains localized roughness.

3.4.2.2. **IRI Deficient 0.1-mi. Sections**. When pay adjustment Schedule 1 or 2 is specified, correct any 0.1-mi. section with an average IRI over 95.0 in. per mile. Correct the deficient section to an IRI of 65 in. per mile or less when Schedule 1 is specified or correct to an IRI of 75 in. per mile or less when Schedule 2 is specified. No corrective action is required for Schedule 3. After making corrections, reprofile the pavement section to verify that corrections have produced the required improvements.

The associated bonus shown in Table 1 applies when successful corrective action improves the IRI of a deficient 0.1-mi. section.

If corrective action does not produce the required improvement, the Engineer may require:

- continued corrective action, or
- apply the pertinent schedule penalty shown in Table 2 if the reprofiled IRI is greater than 65 in. per mile.

3.4.2.2.1. **Corrective Action**. Use diamond grinding or other approved work methods to correct any deficient 0.1-mi. section. For asphalt concrete pavements, fog seal the aggregate exposed from diamond grinding or other approved work methods allowed.

3.4.2.3. **Localized Roughness**. Measure localized roughness using an inertial profiler in accordance with Tex-1001-S. The Engineer will determine areas of localized roughness using the individual profile from each wheel path.

Use a 10-ft. straightedge, when allowed, to locate areas that have more than 1/8-in. variation between any 2 contacts on the straightedge when Schedule 3 is specified.

The Engineer may waive localized roughness requirements for deficiencies resulting from manholes or other similar appurtenances near the wheel paths.

3.4.2.3.1. **Corrective Action**. Use diamond grinding or other approved work methods to correct localized roughness. For asphalt concrete pavements, fog seal the aggregate exposed from diamond grinding or other approved work methods allowed. Reprofile the corrected area, and provide results that show the corrective action was successful. If the corrective action is not successful, the Engineer will require continued corrective action or apply a localized roughness penalty.

3.4.2.3.2. **Localized Roughness Penalty**. Instead of continued corrective action, the Engineer may assess a penalty for each occurrence of localized roughness. No more than one penalty will be applied for any 5 ft. of longitudinal distance. For Schedule 1, a localized roughness penalty of $500 per occurrence will be applied. For Schedule 2, a localized roughness penalty of $250 per occurrence will be applied. For Schedule 3, localized roughness penalties will not be applied.

Localized roughness penalties will be evaluated within 0.1-mi. sections and applied unless the IRI deficient 0.1-mi. section penalty is greater. When the IRI deficient penalty is greater, the pay adjustment in Table 2 will be applied.

4. MEASUREMENT AND PAYMENT

The work performed, materials furnished, certification and recertification, traffic control for all testing, materials and work needed for corrective action, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items. Sections shorter than 0.1 mi. and longer than 50 ft. will be prorated in accordance with Tex-1001-S.

Table 1
Bonus Pay Adjustments for Ride Quality

Average IRI for each 0.10 mi. of Traffic Lane	Pay Adjustment $/0.10 mi. of Traffic Lane	
(in./mi.)	Schedule 1 and Schedule 2	Schedule 3
≤ 30	600	300
31	580	290
32	560	280
33	540	270
34	520	260
35	500	250
36	480	240
37	460	230
38	440	220
39	420	210
40	400	200
41	380	190
42	360	180
43	340	170
44	320	160
45	300	150
46	280	140
47	260	130
48	240	120
49	220	110
50	200	100
51	180	90
52	160	80
53	140	70
54	120	60
55	100	50
56	80	40
57	60	30
58	40	20
59	20	10
60 to 65	0	0

Table 2
Penalty Pay Adjustments for Ride Quality

Average IRI for each 0.10 mi. of Traffic Lane	**Pay Adjustment** $/0.10 mi. of Traffic Lane	
(in./mi.)	**Schedule 1**	**Schedule 2**
66	-20	0
67	-40	0
68	-60	0
69	-80	0
70	-100	0
71	-120	0
72	-140	0
73	-160	0
74	-180	0
75	-200	0
76	-220	-20
77	-240	-40
78	-260	-60
79	-280	-80
80	-300	-100
81	-320	-120
82	-340	-140
83	-360	-160
84	-380	-180
85	-400	-200
86	-420	-220
87	-440	-240
88	-460	-260
89	-480	-280
90	-500	-300
91	-520	-320
92	-540	-340
93	-560	-360
94	-580	-380
95	-600	-400
> 95	-3,000	

Item 636
Signs

1. DESCRIPTION

- **Installation**. Furnish, fabricate, and erect aluminum signs. Sign supports are provided for under other Items.
- **Replacement**. Replace existing signs on existing sign supports.
- **Refurbishing**. Refurbish existing aluminum signs on existing sign supports.

2. MATERIALS

2.1. **Sign Blanks**. Furnish sign blank substrates in accordance with DMS-7110, "Aluminum Sign Blanks," and in accordance with the types shown on the plans. Use single-piece sheet-aluminum substrates for Type A (small) signs and extruded aluminum substrates for Type G (ground-mounted) or Type O (overhead-mounted) signs.

2.2. **Sign Face Retroreflectorization**. Retroreflectorize the sign faces with flat surface reflective sheeting. Furnish sheeting that meets DMS-8300, "Sign Face Materials." Use retroreflective sheeting from the same manufacturer for the entire sign face background. Ensure that sign legend, symbols, borders, and background exhibit uniform color, appearance, and retroreflectivity when viewed both day and night.

2.3. **Sign Messages**. Fabricate sign messages to the sizes, types, and colors shown on the plans. Use sign message material from the same manufacturer for the entire message of a sign. Use screen ink and background reflective sheeting that are from the same manufacturer when fabricating signs.

- Ensure that the screened messages have clean, sharp edges and exhibit uniform color and retroreflectivity. Prevent runs, sags, and voids. Furnish screen inks in accordance with DMS-8300, "Sign Face Materials."
- Fabricate colored, transparent film legend, and retroreflectorized sheeting legend from materials that meet DMS-8300, "Sign Face Materials."
- Fabricate non-reflective black film legend from materials meeting DMS-8300, "Sign Face Materials."
- Furnish direct-applied route markers and other attachments within the parent sign face unless otherwise specified on the plans.

2.4. **Hardware**. Use galvanized steel, stainless steel, or dichromate-sealed aluminum for bolts, nuts, washers, lock washers, screws, and other sign assembly hardware. Use plastic or nylon washers to avoid tearing the reflective sheeting. Furnish steel or aluminum products in accordance with DMS-7120, "Sign Hardware."

When dissimilar metals are used, select or insulate metals to prevent corrosion.

3. CONSTRUCTION

3.1. **Fabrication**. Sign fabrication plants that produce permanent highway signs must be approved in accordance with DMS-7390, "Permanent Highway Sign Fabrication Plant Qualification." Furnish signs from prequalified fabrication plants listed in the Department's MPL.

3.1.1. **Sign Blanks**. Furnish sign blanks to the sizes and shapes shown on the plans and that are free of buckles, warps, burrs, dents, cockles, or other defects. Do not splice individual extruded aluminum panels.

Complete the fabrication of sign blanks, including the cutting and drilling or punching of holes, before cleaning and degreasing. After cleaning and degreasing, ensure the substrate does not come into contact with grease, oils, or other contaminants before the application of the reflective sheeting.

3.1.2. **Sheeting Application**. Apply sheeting to sign blanks in conformance with the sheeting manufacturer's recommended procedures.

When using rotational sensitive white sheeting, fabricate signs by applying the sheeting for cut-out legend, symbols, borders, and route marker attachments within the parent sign face with the identification marks or other orientation features in the optimum rotation as identified by the sheeting manufacturer.

Clean and prepare the outside surface of extruded aluminum flanges in the same manner as the sign panel face.

Minimize the number of splices in the sheeting. Overlap the lap-splices by at least 1/4 in. for encapsulated glass bead sheeting unless otherwise recommended by the reflective sheeting manufacturer. Use butt splices for prismatic reflective sheeting. Provide a 1 ft. minimum dimension for any piece of sheeting. Do not splice sheeting for signs fabricated with transparent screen inks or colored transparent films.

3.1.3. **Sign Assembly**. Assemble extruded aluminum signs in accordance with the details shown on the plans. Sign face surface variation must not exceed 1/8 in. per foot. Surface misalignment between panels in multi-panel signs must not exceed 1/16 in. at any point.

3.1.4. **Decals**. Code and apply sign identification decals in accordance with Item 643, "Sign Identification Decals."

3.2. **Storage and Handling**. Ship, handle, and store completed sign blanks and completed signs so that corners, edges, and faces are not damaged. Damage to the sign face that is not visible when viewed at a distance of 50 ft., night or day, will be acceptable. Replace unacceptable signs.

Store all finished signs off the ground and in a vertical position until erected. Store finished sheet aluminum substrate signs in a weatherproof building. Extruded aluminum substrate signs may be stored outside.

Stockpile salvageable materials at the location shown on the plans or as directed. Accept ownership of unsalvageable materials and dispose of them in accordance with federal, state, and local regulations.

3.3. **Cleaning**. Wash completed signs in the fabrication shop with a biodegradable cleaning solution acceptable to the manufacturers of the sheeting, colored transparent film, and screen ink to remove grease, oil, dirt, smears, streaks, finger marks, and other foreign material. Wash again before final inspection after erection.

3.4. **Installation**. Install signs as shown on the plans or as directed.

3.5. **Replacement**. Remove the existing signs from the existing supports and replace with new signs, including mounting hardware, as shown on the plans.

3.6. **Refurbishing**. Refurbish existing signs by providing and installing new messages and mounting hardware. Install new retroreflectorized legend and supplemental signs as shown on the plans.

3.7. **Documentation**. Provide the following documentation from the sign fabricator with each shipment of furnished signs:

- A notarized original of the Signing Material Statement (Form 2273) with the proper attachments for verification of compliance, and
- A notarized certification stating that the completed signs were fabricated in accordance with this Item and the plans.

4. MEASUREMENT

Signs installed or replaced will be measured by the square foot of the sign face. Signs refurbished will be measured by each sign.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Aluminum Signs," "Replacing Existing Aluminum Signs," or "Refurbishing Aluminum Signs," of the type specified.

5.1. **Installation**. This price is full compensation for furnishing and installing new signs and hardware; fabrication of sign panels; treatment of sign panels required before application of the background materials; application of the background materials and messages to the sign panels; furnishing and fabricating frames, wind beams and stiffeners; furnishing bolts, rivets, screws, fasteners, clamps, brackets, and sign support connections; assembling and erecting the signs; preparing and cleaning the signs; and materials, equipment, labor, tools, and incidentals.

5.2. **Replacement**. This price is full compensation for furnishing and installing new aluminum signs and hardware; removal of existing signs; fabrication of sign panels; treatment of sign panels required before application of the background materials; application of the background materials and messages to the sign panels; furnishing and fabricating frames, wind beams and stiffeners; furnishing bolts, rivets, screws, fasteners, clamps, brackets, and sign support connections; assembling and erecting the signs; preparing and cleaning the signs; salvaging and disposing of unsalvageable materials; and materials, equipment, labor, tools, and incidentals.

5.3. **Refurbishing**. This price is full compensation for modifying existing sign messages; removing and replacing existing route markers, reflectorized legend, or supplemental signs attached to the parent sign; preparing and cleaning the signs; furnishing sheeting and hardware; salvaging and disposing of unsalvageable materials; and materials, equipment, labor, tools, and incidentals.

Item 643
Sign Identification Decals

1. DESCRIPTION

Furnish and install sign identification decals.

2. MATERIALS

Furnish materials that meet the requirements of DMS-8315, "Sign Identification Decals."

Figure 1 shows the sign identification decal design. Table 1 describes the information required in each row of the decal.

Texas Department of Transportation												
C	**Fabrication Date**										T	1
J	F	M	A	M	J	J	A	S	O	N	D	2
	201		202		203		204		205			3
	0	1	2	3	4	5	6	7	8	9		4
Sheeting MFR - Substrate												
A	B	C	D	E	F	G	H	J	K	L	M	5
Film MFR												
A	B	C	D	E	F	G	H	J	K	L	M	6
Sheeting MFR - Legend												
A	B	C	D	E	F	G	H	J	K	L	M	7
Installation Date												
				0	1	2	3					8
	0	1	2	3	4	5	6	7	8	9		9
J	F	M	A	M	J	J	A	S	O	N	D	10
	201		202		203		204		205			11
	0	1	2	3	4	5	6	7	8	9		12

Figure 1
Decal Design (Row numbers explained in Table 1.)

Table 1
Decal Description

Row Explanation
1 – Sign Fabricator
2 – Month Fabricated
3 – First 3 Digits of Year Fabricated
4 – Last Digit of Year Fabricated
5 – Manufacturer of the Sheeting Applied to the Substrate
6 – Film (colored transparent or non-reflective black) Manufacturer
7 – Manufacturer of the Sheeting for the Legend
8 – Tens digit of Date Installed
9 – Ones Digit of Date Installed
10 – Month Installed
11 – First 3 Digits of Year Installed
12 – Last Digit of Year Installed

3. CONSTRUCTION

3.1. **Sign Fabricator**. Code the decal by punching out the following:

- "C" if fabricated by a commercial sign fabricator or "T" if fabricated by the Department or the Texas Department of Criminal Justice;
- month fabricated;
- first 3 digits of the year fabricated;
- fourth digit of the year fabricated; and
- sheeting, film, and ink manufacturers. (Codes for these manufacturers are located in the Department's MPL.)

Affix decal to lower left corner of the sign back in an upright position.

4. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items.

Item 644
Small Roadside Sign Assemblies

1. DESCRIPTION

- **Installation.** Furnish, fabricate, and erect small roadside sign assemblies or bridge mounted clearance sign assemblies consisting of the signs, sign supports, foundations (when required), and associated mounting hardware.
- **Relocation.** Relocate existing small roadside sign assemblies or bridge mounted clearance sign assemblies, and furnish and fabricate material as required.
- **Removal.** Remove existing small roadside sign assemblies or bridge mounted clearance sign assemblies.

2. MATERIALS

Furnish all materials unless otherwise shown on the plans. Furnish only new materials. Furnish and fabricate materials that comply with the following Items and details shown on the plans:

- Item 421, "Hydraulic Cement Concrete"
- Item 440, "Reinforcement for Concrete"
- Item 441, "Steel Structures"
- Item 442, "Metal for Structures"
- Item 445, "Galvanizing"
- Item 636, "Signs"
- Item 643, "Sign Identification Decals"
- Item 656, "Foundations for Traffic Control Devices"

Use galvanized steel, stainless steel, dichromate sealed aluminum, or other materials shown on the plans for pipe, bolts, nuts, washers, lock washers, screws, and other sign assembly hardware. When dissimilar metals are used, select or insulate metals to prevent corrosion.

3. CONSTRUCTION

Construct foundations in accordance with Item 656, "Foundations for Traffic Control Devices." Plumb sign supports. Do not spring or rake posts to secure proper alignment. Use established safety practices when working near underground or overhead utilities. Consult the appropriate utility company before beginning work.

3.1. **Fabrication.** Fabricate sign supports in accordance with Item 441, "Steel Structures." Ensure all components fit properly.

Verify the length of each post for each sign before fabrication to meet field conditions and sign-mounting heights shown on the plans.

Hot-dip galvanize fabricated parts in accordance with Item 445, "Galvanizing." Punch or drill any holes in steel parts or members before galvanizing. Repair galvanizing for any steel part or member damaged during assembly, transit, erection; or for any steel part or member welded, when permitted, after galvanizing. Perform all galvanizing repairs in accordance with Section 445.3.5., "Repairs."

3.2. **Installation**. Locate and install sign supports as shown on the plans, unless directed to shift the sign supports within design guidelines to secure a more desirable location or avoid conflict with utilities and underground appurtenances. Stake sign support locations for verification by the Engineer.

Install stub posts of the type, spacing, orientation, and projection shown on the plans. Remove and replace posts damaged during installation at the Contractor's expense.

Connect the upper post sections to the stub post sections as shown on the plans. Torque connection bolts as shown on the plans.

Attach signs to supports in accordance with the plans and pertinent Items.

3.3. **Relocation**. Reuse the existing signs as required unless otherwise shown on the plans. Furnish and install new stub posts in new foundations for relocated sign assemblies. Erect the new supports on the new stub posts, and attach the existing signs to the supports in accordance with the plans and pertinent Items. Remove existing foundations to be abandoned in accordance with Section 644.3.4., "Removal."

3.4. **Removal**. Remove abandoned concrete foundations to 2 ft. below finish grade unless otherwise shown on the plans. Cut off and remove steel protruding from the remaining concrete. Backfill the remaining hole with material equal in composition and density to the surrounding area. Replace any surfacing with like material to equivalent condition.

3.5. **Handling and Storage**. Handle and store existing signs or portions of signs removed so they are not damaged. Prevent any damage to the various sign assembly components. Replace any portion of the sign damaged by the Contractor designated for reuse or salvage, including messages removed.

Stockpile all removed sign components that will be reused or become the property of the Department at designated locations. Accept ownership of unsalvageable materials, and dispose of them in accordance with federal, state, and local regulations.

3.6. **Cleaning**. Wash the entire sign after installation with a biodegradable cleaning solution acceptable to the sign face materials manufacturer to remove dirt, grease, oil smears, streaks, finger marks, and other foreign materials.

4. MEASUREMENT

This Item will be measured as each small roadside assembly or bridge mounted clearance sign assembly installed, removed, or relocated.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Install Small Roadside Sign Assemblies" of the type specified, "Install Bridge Mounted Clearance Sign Assemblies" of the type specified, "Relocate Small Roadside Sign Assemblies" of the type specified, "Relocate Bridge Mounted Clearance Sign Assemblies" of the type specified, "Remove Small Roadside Sign Assemblies," or "Remove Bridge Mounted Clearance Sign Assemblies."

5.1. **Installation**. This price is full compensation for furnishing, fabricating, galvanizing, and erecting the supports; constructing foundations including concrete (when required); furnishing complete signs including sign connections and all hardware; attaching the signs to the supports; preparing and cleaning the signs; and materials, equipment, labor, tools, and incidentals.

5.2. **Relocation**. This price is full compensation for removing existing sign assemblies and related materials; furnishing and installing new stub posts and new sign supports; constructing foundations including concrete (when required); and new hardware; reinstallation of signs; preparing and cleaning the signs; salvaging;

disposal of unsalvageable materials; removing existing foundations, backfilling, and surface placement; and materials, equipment, labor, tools, and incidentals.

5.3. **Removal**. This price is full compensation for removing existing sign assemblies and related materials; salvaging; disposal of unsalvageable materials; removing existing foundations, backfilling, and surface placement; and materials, equipment, labor, tools, and incidentals.

Item 656
Foundations for Traffic Control Devices

1. DESCRIPTION

Construct concrete foundations for small roadside signs, traffic signal controllers, pedestal poles, roadside flashing beacon assemblies, electrical services, and other small traffic control devices.

2. MATERIALS

Ensure materials and construction methods conform to the requirements of this Item and the pertinent requirements of the following Items:

- Item 400, "Excavation and Backfill for Structures"
- Item 416, "Drilled Shaft Foundations"
- Item 420, "Concrete Substructures"
- Item 421, "Hydraulic Cement Concrete"
- Item 432, "Riprap"
- Item 440, "Reinforcement for Concrete"
- Item 441, "Steel Structures"
- Item 442, "Metal for Structures"
- Item 445, "Galvanizing"
- Item 447, "Structural Bolting"
- Item 449, "Anchor Bolts"
- Item 618, "Conduit"

Use Class A concrete for non-reinforced drilled shafts. Use Class C concrete for reinforced drilled shafts. Use Class B concrete or polymer concrete composed of borosilicate glass fiber, catalyzed polyester resin, and aggregate for traffic signal controller foundations. Use drilled shaft or galvanized steel screw-in type foundations for roadside flashing beacon assemblies.

Use reinforcing steel when required.

3. CONSTRUCTION

Stake and install foundations as shown on the plans. The Engineer may shift the foundation locations within design guidelines where necessary to secure a more desirable location or avoid conflict with utilities. Use established industry and utility safety practices when working near underground or overhead utilities. Consult the appropriate utility before beginning work.

Hold anchor bolts in place with templates during concrete placement. Hold embedded items such as conduit or other hardware in place during concrete placement with templates or other approved means. Cap conduits before placing concrete. Ream conduit to remove burrs and sharp edges. Install bell ends or bushings on the conduit.

Carefully align foundation, posts, and anchor bolts. Do not spring or rake posts or anchor bolts.

Remove the top template after concrete has achieved initial set. Keep forms and other bracing intact until the concrete has cured at least one curing day.

Allow concrete for pedestal poles and roadside flashing beacon assemblies to cure at least 7 days before placing bases and poles on the foundation unless otherwise permitted in writing.

Allow concrete for traffic signal controller foundations and small roadside signs to cure at least 4 days before placing cabinets and posts on the foundation unless otherwise permitted.

Provide an ordinary surface finish to the concrete foundation extending above ground in accordance with Section 420.4.13., "Ordinary Surface Finish."

Place concrete riprap around the foundation in accordance with the plans.

Backfill disturbed surface with material equal in composition and density to the surrounding area. Replace surfacing material with similar material to an equivalent condition.

4. MEASUREMENT AND PAYMENT

The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly but will be subsidiary to pertinent Items.

Item 662
Work Zone Pavement Markings

1. DESCRIPTION

Furnish, place, and maintain work zone pavement markings.

2. MATERIALS

Provide thermoplastic, paint and beads, raised pavement markers (RPMs), prefabricated pavement markings, temporary flexible reflective roadway marker tabs, or other approved materials for work zone pavement markings.

Supply materials meeting:

- DMS-4200, "Pavement Markers (Reflectorized),"
- DMS-4300, "Traffic Buttons,"
- DMS-8200, "Traffic Paint,"
- DMS-8220, "Hot Applied Thermoplastic,"
- DMS-8240, "Permanent Prefabricated Pavement Markings,"
- DMS-8241, "Temporary (Removable) Prefabricated Pavement Markings,"
- DMS-8242, "Temporary Flexible, Reflective Roadway Marker Tabs," and
- DMS-8290, "Glass Traffic Beads."

2.1. **Nonremovable Markings**. Use hot-applied thermoplastic or permanent prefabricated pavement markings for nonremovable markings. Paint and beads or other materials are not allowed for nonremovable markings unless shown on the plans.

2.2. **Removable and Short-Term Markings**. Use RPMs, removable prefabricated pavement markings, temporary flexible reflective roadway marker tabs, or other approved materials for removable and short-term markings. Do not use hot-applied thermoplastic or traffic paint for removable markings. Use removable prefabricated pavement markings on the final pavement surface when the plans specify removable markings.

3. CONSTRUCTION

Apply pavement markings in accordance with the following Items.

- Item 666, "Retroreflectorized Pavement Markings"
- Item 668, "Prefabricated Pavement Markings"
- Item 672, "Raised Pavement Markers"

3.1. **Placement**. Install longitudinal markings on pavement surfaces before opening to traffic. Maintain lane alignment traffic control devices and operations until markings are installed. Install markings in proper alignment in accordance with the TMUTCD and as shown on the plans. Short-term markings will be allowed when standard markings (removable or nonremovable) cannot be placed before opening to traffic, if shown on the plans or directed.

When short-term markings are allowed for opening to traffic, place standard longitudinal markings no later than 14 calendar days after the placement of the surface. When inclement weather prohibits placement of markings, the 14-day period may be extended until weather permits proper application.

Place standard longitudinal markings no sooner than 3 calendar days after the placement of a surface treatment, unless otherwise shown on the plans.

Apply thermoplastic markings to a minimum thickness of 0.060 in. (60 mils). When paint and beads are allowed, apply to a minimum dry thickness of 0.012 in. (12 mils).

Place short-term markings in proper alignment with the location of the final pavement markings. Remove and replace short-term markings not in alignment at the Contractor's expense.

For removable placements, use of RPMs to simulate longitudinal markings is at the Contractor's option. Use side-by-side RPMs to simulate longitudinal lines wider than 4 in. Do not use RPMs for words, symbols, shapes, or diagonal or transverse lines.

3.2. **Marking Removal**. Remove markings that conflict with succeeding markings in accordance with Item 677, "Eliminating Existing Pavement Markings and Markers." Remove short-term markings that interfere or conflict with final marking placement immediately before placing final pavement markings, unless otherwise directed. Remove the remainder of the short-term markings before final acceptance.

Remove all temporary markings with minimal damage to the roadway to the satisfaction of the Engineer.

3.3. **Performance Requirements**. Ensure all markings are visible from a distance at least 300 ft. in daylight conditions and at least 160 ft. in nighttime conditions when illuminated by automobile low-beam headlights. Determine visibility distances using an automobile traveling on the roadway under dry conditions.

Maintain the markings for 30 calendar days after installation. The end of the 30-day maintenance period does not relieve the Contractor from the performance deficiencies requiring corrective action identified during the 30-day period. Remove and replace markings at the Contractor's expense if they fail to meet the requirements of this Item during the 30-day period. The 30-calendar day performance requirement will begin again after replacement of the markings.

Ensure daytime and nighttime reflected color of the markings are distinctly white or yellow. Ensure markings exhibit uniform retroreflective characteristics.

4. MEASUREMENT

This Item will be measured by the foot or each word, shape, symbol, or temporary flexible reflective roadway marker tab. Each stripe will be measured separately. RPMs used to simulate a marking will be measured by the foot of marking or each RPM.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Work Zone Pavement Markings" of the type and color specified and the shape, width, and size specified as applicable. This price is full compensation for furnishing, placing, maintaining, and removing work zone pavement markings and for materials, equipment, labor, tools, and incidentals.

Elimination of nonremovable markings will be paid for under Item 677, "Eliminating Existing Pavement Markings and Markers." Removal of short-term and removable markings will not be paid for directly but will be subsidiary to this Item.

Type II work zone pavement markings (paint and beads) used as a sealer for Type I pavement markings (thermoplastic) will be paid for under this Item.

Item 666
Retroreflectorized Pavement Markings

1. DESCRIPTION

Furnish and place retroreflectorized, non-retroreflectorized (shadow) and profile pavement markings.

2. MATERIALS

2.1. **Type I Marking Materials**. Furnish in accordance with DMS-8220, "Hot Applied Thermoplastic."

Furnish pavement marking material used for Type I profile markings and shadow markings that have been approved by the Construction Division, and in accordance with DMS-8220, "Hot Applied Thermoplastic."

2.2. **Type II Marking Materials**. Furnish in accordance with DMS-8200, "Traffic Paint."

2.3. **Glass Traffic Beads**. Furnish drop-on glass beads in accordance with DMS-8290, "Glass Traffic Beads" or as approved. Furnish a double-drop of Type II and Type III drop-on glass beads where each type bead is applied separately in equal portions (by weight), unless otherwise approved. Apply the Type III beads before applying the Type II beads.

2.4. **Labeling**. Use clearly marked containers that indicate color, mass, material type, manufacturer, and batch number.

3. EQUIPMENT

3.1. **General Requirements**. Use equipment that:

- is maintained in satisfactory condition,
- meets or exceeds the requirements of the National Board of Fire Underwriters and the Texas Railroad Commission for this application,
- applies beads by an automatic bead dispenser attached to the pavement marking equipment in such a manner that the beads are dispensed uniformly and almost instantly upon the marking as the marking is being applied to the road surface. The bead dispenser must have an automatic cut-off control, synchronized with the cut-off of the pavement marking equipment,
- has an automatic cut-off device with manual operating capabilities to provide clean, square marking ends,
- is capable of producing the types and shapes of profiles specified, and
- can provide continuous mixing and agitation of the pavement marking material. The use of pans, aprons, or similar appliances which the die overruns will not be permitted for longitudinal striping applications.

Provide a hand-held thermometer capable of measuring the temperature of the marking material when applying Type I material.

When pavement markings are required to meet minimum retroreflectivity requirements on the plans:

- Use a mobile retroreflectometer approved by the Construction Division and certified by the Texas A&M Transportation Institute Mobile Retroreflectometer Certification Program.
- Use a portable retroreflectometer that:
  - uses 30-meter geometry and meets the requirements described in ASTM E1710;
  - has either an internal global positioning system (GPS) or the ability to be linked with an external GPS with a minimum accuracy rating of 16 ft. 5 in., in accordance with the circular error probability

(CEP) method (CEP is the radius of the circle with its origin at a known position that encompasses 50% of the readings returned from the GPS instrument);

- can record and print the GPS location and retroreflectivity reading for each location where readings are taken.

3.2. **Material Placement Requirements**. Use equipment that can place:

- at least 40,000 ft. of 4-in. solid or broken non-profile markings per working day at the specified thickness;
- at least 15,000 ft. of solid or broken profile pavement markings per working day at the specified thickness;
- linear non-profile markings up to 8 in. wide in a single pass;
- non-profile pavement markings other than solid or broken lines at an approved production rate;
- a centerline and no-passing barrier-line configuration consisting of 1 broken line and 2 solid lines at the same time to the alignment, spacing, and thickness for non-profile pavement markings shown on the plans;
- solid and broken lines simultaneously;
- white line from both sides;
- lines with clean edges, uniform cross-section with a tolerance of ±1/8 in. per 4 in. width, uniform thickness, and reasonably square ends;
- skip lines between 10 and 10-1/2 ft., a stripe-to-gap ratio of 10 to 30, and a stripe-gap cycle between 39-1/2 ft. and 40-1/2 ft., automatically;
- beads uniformly and almost instantly on the marking as the marking is being applied;
- beads uniformly during the application of all lines (each line must have an equivalent bead yield rate and embedment); and
- double-drop bead applications using both Type II and Type III beads from separate independent bead applicators, unless otherwise approved by the Engineer.

4. CONSTRUCTION

Place markings before opening to traffic unless short-term or work zone markings are allowed.

4.1. **General**. Obtain approval for the sequence of work and estimated daily production. Minimize interference to roadway operations when placing markings on roadways open to traffic. Use traffic control as shown on the plans or as approved. Protect all markings placed under open-traffic conditions from traffic damage and disfigurement.

Establish guides to mark the lateral location of pavement markings as shown on the plans or as directed, and have guide locations verified. Use material for guides that will not leave a permanent mark on the roadway.

Apply markings on pavement that is completely dry and passes the following tests:

- Type I Marking Application—Place a sample of Type I marking material on a piece of tarpaper placed on the pavement. Allow the material to cool to ambient temperature, and then inspect the underside of the tarpaper in contact with the pavement. Pavement will be considered dry if there is no condensation on the tarpaper.
- Type II Marking Application—Place a 1-sq. ft. piece of clear plastic on the pavement, and weight down the edges. The pavement is considered dry if, when inspected after 15 min., no condensation has occurred on the underside of the plastic.

Apply markings:

- that meet the requirements of Tex-828-B,

- that meet minimum retroreflectivity requirements when specified on the plans (applies to Type I markings only),
- using widths and colors shown on the plans,
- at locations shown on the plans,
- in proper alignment with the guides without deviating from the alignment more than 1 in. per 200 ft. of roadway or more than 2 in. maximum,
- without abrupt deviations,
- free of blisters and with no more than 5% by area of holes or voids,
- with uniform cross-section, density and thickness,
- with clean and reasonably square ends,
- that are retroreflectorized with drop-on glass beads, and
- using personnel skilled and experienced with installation of pavement markings.

Remove all applied markings that are not in alignment or sequence as stated on the plans, or in the specifications, at the Contractor's expense in accordance with Item 677, "Eliminating Existing Pavement Markings and Markers," except for measurement and payment.

4.2. **Surface Preparation**. Prepare surfaces in accordance with this Section unless otherwise shown on the plans.

4.2.1. **Cleaning for New Asphalt Surfaces and Retracing of All Surfaces**. Air blast or broom the pavement surface for new asphalt surfaces (less than 3 years old) and for retracing of all surfaces to remove loose material, unless otherwise shown on the plans. A sealer for Type I markings is not required unless otherwise shown on the plans.

4.2.2. **Cleaning for Old Asphalt and Concrete Surfaces (Excludes Retracing)**. Clean old asphalt surfaces (more than 3 years old) and all concrete surfaces in accordance with Item 678, "Pavement Surface Preparation for Markings," to remove curing membrane, dirt, grease, loose and flaking existing construction markings, and other forms of contamination.

4.2.3. **Sealer for Type I Markings**. Apply a pavement sealer to old asphalt surfaces (more than 3 years old) and to all concrete surfaces before placing Type I markings on locations that do not have existing markings, unless otherwise approved. The pavement sealer may be either a Type II marking or an acrylic or epoxy sealer as recommended by the Type I marking manufacturer unless otherwise shown on the plans. Follow the manufacturer's directions for application of acrylic or epoxy sealers. Clean sealer that becomes dirty after placement by washing or in accordance with Section 666.4.2.1., "Cleaning for New Asphalt Surfaces and Retracing of All Surfaces," as directed. Place the sealer in the same configuration and color (unless clear) as the Type I markings unless otherwise shown on the plans.

4.3. **Application**. Apply markings during good weather unless otherwise directed. If markings are placed at Contractor option when inclement weather is impending and the markings are damaged by subsequent precipitation, the Contractor is responsible for all required replacement costs.

4.3.1. **Type I Markings**. Place the Type I marking after the sealer cures. Apply within the temperature limits recommended by the material manufacturer. Flush the spray head if spray application operations cease for 5 min or longer by spraying marking material into a pan or similar container until the material being applied is at the recommended temperature.

Apply on clean, dry pavements passing the moisture test described in Section 666.4.1., "General," and with a surface temperature above 50°F when measured in accordance with Tex-829-B.

4.3.1.1. **Non-Profile Pavement Markings**. Apply Type I non-profile markings with a minimum thickness of:

- 0.100 in. (100 mils) for new markings and retracing water-based markings on surface treatments involving Item 316, "Seal Coat,"

- 0.060 in. (60 mils) for retracing on thermoplastic pavement markings, or
- 0.090 in. (90 mils) for all other Type I markings.

The maximum thickness for Type I non-profile markings is 0.180 in. (180 mils). Measure thickness for markings in accordance with Tex-854-B using the tape method.

4.3.1.2. **Profile Pavement Markings**. Apply Type I profile markings with a minimum thickness of:

- 0.060 in. (60 mil) for edgeline markings, or
- 0.090 in. (90 mil) for gore and centerline/no-passing barrier line markings.

In addition, at a longitudinal spacing indicated on the plans, the markings must be profiled in a vertical manner such that the profile is transverse to the longitudinal marking direction. The profile must not be less than 0.30 in. (300 mil) nor greater than 0.50 in. (500 mil) in height when measured above the normal top surface plane of the roadway. The transverse width of the profile must not be less than 3.25 in., and the longitudinal width not less than 1 in., when measured at the top surface plane of the profile bar. The profile may be either a 1 or 2 transverse bar profile. When the 2 transverse bar profile is used, the spacing between the bases of the profile bars must not exceed 0.50 in. The above transverse bar width is for each 4 in. of line width.

4.3.2. **Type II Markings**. Apply on surfaces with a minimum surface temperature of 50°F. Apply at least 20 gal. per mile on concrete and asphalt surfaces and at least 22 gal. per mile on surface treatments for a solid 4-in. line. Adjust application rates proportionally for other widths. When Type II markings are used as a sealer for Type I markings, apply at least 15 gal. per mile using Type II drop-on beads.

4.3.3. **Bead Coverage**. Provide a uniform distribution of beads across the surface of the stripe for Type I and Type II markings, with 40% to 60% bead embedment.

4.4. **Retroreflectivity Requirements**. When specified on the plans, Type I markings must meet the following minimum retroreflectivity values for edgeline markings, centerline or no passing barrier-line, and lane lines when measured any time after 3 days, but not later than 10 days after application:

- White markings: 250 millicandelas per square meter per lux ($mcd/m^2/lx$)
- Yellow markings: 175 $mcd/m^2/lx$

4.5. **Retroreflectivity Measurements**. Use a mobile retroreflectometer for projects requiring minimum retroreflectivity requirements to measure retroreflectivity for Contracts totaling more than 200,000 ft. of pavement markings, unless otherwise shown on the plans. For Contracts with less than 200,000 ft. of pavement markings or Contracts with callout work, mobile or portable retroreflectometers may be used at the Contractor's discretion.

4.5.1. **Mobile Retroreflectometer Measurements**. Provide mobile measurements averages for every 0.1 miles unless otherwise specified or approved. Take measurements on each section of roadway for each series of markings (i.e., edgeline, center skip line, each line of a double line, etc.) and for each direction of traffic flow. Measure each line in both directions for centerlines on two-way roadways (i.e., measure both double solid lines in both directions and measure all center skip lines in both directions). Furnish measurements in compliance with Special Specification, "Mobile Retroreflectivity Data Collection for Pavement Markings," unless otherwise approved. The Engineer may require an occasional field comparison check with a portable retroreflectometer meeting the requirements listed above to ensure accuracy. Use all equipment in accordance with the manufacturer's recommendations and directions. Inform the Engineer at least 24 hr. before taking any measurements.

A marking meets the retroreflectivity requirements if:

- the combined average retroreflectivity measurement for a one-mile segment meets the minimum retroreflectivity values specified, and
- no more than 30% of the retroreflectivity measurement values are below the minimum retroreflectivity requirements value within the one-mile segment.

The Engineer may accept failing one-mile segments if no more than 20% of the retroreflectivity measurements within that mile segment are below the minimum retroreflectivity requirement value.

The one-mile segment will start from the beginning of the data collection and end after a mile worth of measurements have been taken; each subsequent mile of measurements will be a new segment. Centerlines with 2 stripes (either solid or broken) will result in 2 miles of data for each mile segment. Each centerline stripe must be tested for compliance as a stand-alone stripe.

Restripe at the Contractor's expense with a minimum of 0.060 in. (60 mils) of Type I marking if the marking fails retroreflectivity requirements. Take measurements every 0.1 miles a minimum of 10 days after this second application within that mile segment for that series of markings.

If the markings do not meet minimum retroreflectivity after 10 days of this second application, the Engineer may require removal of all existing markings, a new application as initially specified, and a repeat of the application process until minimum retroreflectivity requirements are met.

4.5.2. **Portable Retroreflectometer Measurements**. Take a minimum of 20 measurements for each 1-mi. section of roadway for each series of markings (i.e., edgeline, center skip line, each line of a double line, etc.) and direction of traffic flow when using a portable reflectometer. Measure each line in both directions for centerlines on two-way roadways (i.e., measure both double solid lines in both directions and measure all center skip lines in both directions). The spacing between each measurement must be at least 100 ft. The Engineer may decrease the mileage frequency for measurements if the previous measurements provide satisfactory results. The Engineer may require the original number of measurements if concerns arise.

Restripe once at the Contractor's expense with a minimum of 0.060 in. (60 mils) of Type I marking material if the average of these measurements fails. Take a minimum of 10 more measurements after 10 days of this second application within that mile segment for that series of markings. Restripe again at the Contractor's expense with a minimum of 0.060 in. (60 mils) of Type I marking material if the average of these measurements fall below the minimum retroreflectivity requirements. If the markings do not meet minimum retroreflectivity after this third application, the Engineer may require removal of all existing markings, a new application as initially specified, and a repeat of the application process until minimum retroreflectivity requirements are met.

4.5.3. **Traffic Control**. Provide traffic control, as required, when taking retroreflectivity measurements after marking application. On low volume roadways (as defined on the plans), refer to the figure, "Temporary Road Closure" in Part 6 of the *Texas Manual on Uniform Traffic Control Devices* for the minimum traffic control requirements. For all other roadways, the minimum traffic control requirements will be as shown on the Traffic Control Plan (TCP) standard sheets TCP (3-1) and TCP (3-2). The lead vehicle will not be required on divided highways. The TCP and traffic control devices must meet the requirements listed in Item 502, "Barricades, Signs, and Traffic Handling." Time restrictions that apply during striping application will also apply during the retroreflectivity inspections except when using the mobile retroreflectometer unless otherwise shown on the plans or approved.

4.6. **Performance Period**. All markings must meet the requirements of this specification for at least 30 calendar days after installation. Unless otherwise directed, remove pavement markings that fail to meet requirements, and replace at the Contractor's expense. Replace failing markings within 30 days of notification. All replacement markings must also meet all requirements of this Item for a minimum of 30 calendar days after installation.

5. MEASUREMENT

This Item will be measured by the foot; by each word, symbol, or shape; or by any other unit shown on the plans. Each stripe will be measured separately.

This is a plans quantity measurement item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

Acrylic or epoxy sealer, or Type II markings when used as a sealer for Type I markings, will be measured by the foot; by each word, symbol, or shape; or by any other unit shown on the plans.

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Pavement Sealer" of the size specified, "Retroreflectorized Pavement Markings" of the type and color specified and the shape, width, size, and thickness specified as applicable, "Retroreflectorized Pavement Markings with Retroreflective Requirements" of the types, colors, sizes, widths, and thicknesses specified or "Retroreflectorized Profile Pavement Markings" of the various types, colors, shapes, sizes, and widths specified.

This price is full compensation for application of pavement markings, materials, equipment, labor, tools, and incidentals.

Surface preparation of new concrete and asphalt concrete pavements more than 3 years old, where no stripe exists, will be paid for under Item 678, "Pavement Surface Preparation for Markings." Surface preparation of all other asphalt and old concrete pavement, except for sealing, will not be paid for directly but is subsidiary to this Item.

Work zone pavement markings (Type II, paint and beads) used as a sealer for Type I markings (thermoplastic) will be paid for under Item 662, "Work Zone Pavement Markings."

If the Engineer requires that markings be placed in inclement weather, repair or replacement of markings damaged by the inclement weather will be paid for in addition to the original plans quantity.

Item 677
Eliminating Existing Pavement Markings and Markers

1. DESCRIPTION

Eliminate existing pavement markings and raised pavement markers (RPMs).

2. MATERIALS

Furnish surface treatment materials in accordance with the following Items:

- Item 300, "Asphalts, Oils, and Emulsions"
- Item 302, "Aggregates for Surface Treatments"
- Item 316, "Seal Coat"

Use approved patching materials for repairing damaged surfaces.

Use a commercial abrasive blasting medium capable of producing the specified surface cleanliness. Use potable water when water is required.

3. EQUIPMENT

Furnish and maintain equipment in good working condition. Use moisture and oil traps in air compression equipment to remove all contaminants from the blasting air and prevent the deposition of moisture, oil, or other contaminants on the roadway surface.

4. CONSTRUCTION

Eliminate existing pavement markings and markers on both concrete and asphaltic surfaces in such a manner that color and texture contrast of the pavement surface will be held to a minimum. Remove all markings and markers with minimal damage to the roadway to the satisfaction of the Engineer. Repair damage to asphaltic surfaces, such as spalling, shelling, etc., greater than 1/4 in. deep resulting from the removal of pavement markings and markers. Dispose of markers in accordance with federal, state, and local regulations. Use any of the following methods unless otherwise shown on the plans:

4.1. **Surface Treatment Method**. Apply surface treatment material at rates shown on the plans, or as directed. Place a surface treatment a minimum of 2 ft. wide to cover the existing marking. Place a surface treatment, thin overlay, or microsurfacing a minimum of one lane in width in areas where directional changes of traffic are involved or other areas as directed.

4.2. **Burn Method**. Use an approved burning method. For thermoplastic pavement markings or prefabricated pavement markings, heat may be applied to remove the bulk of the marking material before blast cleaning. When using heat, avoid spalling pavement surfaces. Sweeping or light blast cleaning may be used to remove minor residue.

4.3. **Blasting Method**. Use a blasting method such as water blasting, abrasive blasting, water abrasive blasting, shot blasting, slurry blasting, water-injected abrasive blasting, or brush blasting as approved. Remove pavement markings on concrete surfaces by a blasting method.

4.4. **Mechanical Method**. Use any mechanical method except grinding. Flail milling is acceptable in the removal of markings on asphalt and concrete surfaces.

5. MEASUREMENT

This Item will be measured by each word, symbol, or shape eliminated; by the foot of marking eliminated; or by any other unit shown on the plans.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Eliminating Existing Pavement Markings and Markers" of the type and width as applicable. This price is full compensation for the elimination method used and materials, equipment, tools, labor, and incidentals. Removal of RPMs will not be paid for directly but will be subsidiary to the pertinent bid items.

Item 678
Pavement Surface Preparation for Markings

1. DESCRIPTION

Prepare pavement surface areas before placement of pavement markings and raised pavement markers (RPMs). Item 677, "Eliminating Existing Pavement Markings and Markers," governs removal of existing markings.

2. MATERIALS

Use a commercial abrasive blasting medium capable of producing the specified surface cleanliness. Use potable water, when water is required.

3. EQUIPMENT

Furnish and maintain equipment in good working condition. Use moisture and oil traps in air compression equipment to remove all contaminants from the blasting air and prevent the deposition of moisture, oil, or other contaminants on the roadway surface.

4. CONSTRUCTION

Prepare enough pavement surface for the pavement markings or RPMs shown on the plans. Remove all contamination and loose material. Avoid damaging the pavement surface. Remove loose and flaking material when existing pavement markings are present. Approved pavement surface preparation methods are sweeping, air blasting, flail milling, and blast cleaning unless otherwise specified on the plans.

Air blast concrete pavement surfaces, in addition to the above, after the removal of contamination or existing material and just before placing the stripe. Perform air blasting with a compressor capable of generating compressed air at a minimum of 150 cu. ft. per minute and 100 psi using 5/16 in. or larger hosing.

Contaminants up to 0.5 sq. in. may remain if they are not removed by the following test, performed just before application of markings:

- **Step 1**. Air blast the surface to be tested, to simulate blasting during application of markings.
- **Step 2**. Firmly press a 10-in. long, 2-in. wide strip of monofilament tape onto the surface, leaving approximately 2 in. free.
- **Step 3**. Grasp the free end and remove the tape with a sharp pull.

5. MEASUREMENT

This Item will be measured by the foot for each width specified; by each word, shape, or symbol; or by any other unit except lump sum.

This is a plans quantity measurement Item. The quantity to be paid is the quantity shown in the proposal, unless modified by Article 9.2., "Plans Quantity Measurement." Additional measurements or calculations will be made if adjustments of quantities are required.

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Pavement Surface Preparation for Markings" of the type and width as applicable. This price is full compensation for the cleaning method used, materials, equipment, labor, tools, and incidentals.

Item 760
Cleaning and Reshaping Ditches

1. DESCRIPTION

Clean and reshape ditches.

2. WORK METHODS

Excavate and remove excess material from ditches and from around fixtures within the limits of the excavation or reshape by cleaning silt from the ditch and spreading on backslope as approved. Reshape ditches in conformance with the lines, grades, and typical cross-sections shown on the plans, or as directed. Dispose of excess material in accordance with applicable federal, state, and local regulations, or place on right of way, as directed. Maintain ditch drainage during cleaning and reshaping work.

3. MEASUREMENT

Measurement will be as follows:

3.1. **Foot**. By the foot, measured along the centerline of the ditch.

3.2. **Cubic Yard in Place**. By the cubic yard in its original position computed by the method of average end areas.

3.3. **Cubic Yard in Vehicle**. By the cubic yard in vehicles measured at the point of excavation.

4. PAYMENT

The work performed in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Ditch Reshaping (Foot)," "Ditch Cleaning and Reshaping (Cubic Yard in Place)," or "Ditch Cleaning and Reshaping (Cubic Yard in Vehicle)." This price is full compensation for excavation, disposal of removed materials, reshaping, equipment, labor, tools, and incidentals.

SPECIAL PROVISIONS

The following special provisions to the standard specifications are enclosed herewith, and are listed as follows:

SPECIAL SPECIFICATIONS

The following special specifications are listed as follows, and enclosed herewith:

SPECIAL SPECIFICATION

Item 7000

Surface Water Pollution Prevention Plan (SW3P) & Implementation

1. DESCRIPTION

The Contractor will provide the following for this item:

- An SW3P plan that is approved by the Engineer/Owner
- Necessary permits (i.e. – NOI) and associated fees
- All BMPs as indicated on the approved SW3P plan
- Maintenance and inspection of the SW3P upon its implementation and until a NOT (Notice of Termination) has been filed and accepted by the TCEQ

2. MATERIALS

Furnish materials shown in the contractor provided SW3P and as approved by the engineer/owner.

3. CONSTRUCTION

The Contractor will maintain the SW3P in accordance with TCEQ requirements throughout construction and until the NOT has been filed by the contractor with the TCEQ.

4. MEASUREMENT

This Item will be paid as a Lump Sum Item

5. PAYMENT

Payment for Storm Water Pollution Prevention Plan will include all labor, equipment and materials to complete the work as described in the approved SW3P plan and any necessary permits and associated fees.

SPECIAL SPECIFICATION

Item 8000

Traffic Control Plan and Barricades, Signs, and Traffic Handling

1. DESCRIPTION

Provide a Traffic Control Plan (TCP) that has been signed and sealed by a Licensed Professional Engineer. Submit the TCP to the owner and/or project engineer for review and approval prior to implementation of the TCP.

Provide, install, move, replace, maintain, clean, and remove all traffic control devices shown on the plans and as directed.

2. CONSTRUCTION

Comply with all local, state and federal safety requirements.

Implement the traffic control plan (TCP) shown on the plans.

Install traffic control devices straight and plumb. Make changes to the TCP only as approved. Minor adjustments to meet field conditions are allowed.

Submit any Contractor-proposed TCP changes, signed and sealed by a licensed professional engineer, for approval. Changes must conform to guidelines established in the TMUTCD using approved products from the Texas Department of Transportation's Compliant Work Zone Traffic Control Device List or County approved equivalents.

Maintain traffic control devices by taking corrective action when notified. Corrective actions include, but are not limited to, cleaning, replacing, straightening, covering, and removing devices. Maintain the devices such that they are properly positioned and spaced, legible, and have retroreflective characteristics that meet requirements day or night and in all weather conditions.

The Engineer may authorize or direct in writing the removal or relocation of project limit advance warning signs. When project limit advance warning signs are removed before final acceptance, provide traffic control in accordance with the TMUTCD for minor operations as approved.

Remove all traffic control devices upon completion of the work as shown on the plans or as directed.

3. MEASUREMENT

Traffic Control Plan and Barricades, Signs, and Traffic Handling will be measured by the Estimated Duration in Months as shown on the plans and will be paid 50% on initial implementation and 50% on upon finalization of the associated street.

4. PAYMENT

4.1. **Traffic Control Plan and Barricades, Signs, and Traffic Handling.** Except for Contracts with callout work and work orders, the work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Traffic Control Plan and Barricades, Signs, and Traffic Handling." This price is full compensation for a signed/sealed TCP, installation of traffic control devices, maintenance, adjustments, replacements, removal, materials, equipment, labor, tools, and incidentals.

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Traffic Control Plan and Barricades, Signs, and Traffic Handling." This price is full compensation for development of a signed/sealed TCP, installation, maintenance, adjustments, replacements, removal, materials, equipment, labor, tools, and incidentals.

When the plans establish pay items for particular work in the TCP, that work will be subsidiary to the pertinent Items.

4.1.1. **Initiation of Payment**. Payment for this Item will begin after the signed/sealed TCP has been submitted to the County for review and/or approval. Payment for this Lump sum item will be in accordance with the following table:

Submittal of Sign/Sealed TCP for review/approval	**30% of lump sum**
Approval of TCP	**10% of lump sum**
Implementation of TCP	**30% of lump sum**
Removal of TCP upon completion of construction	**30% of lump sum**

If the Contractor fails to provide or properly maintain signs and barricades in compliance with the approved TCP, the Contractor will be considered in noncompliance with this Item. No payment will be made until the contractor is in compliance with the approved TCP.

II.4 GENERAL NOTES

The general notes for this Contract are located on the plan sheets for the Indian Hills Project.

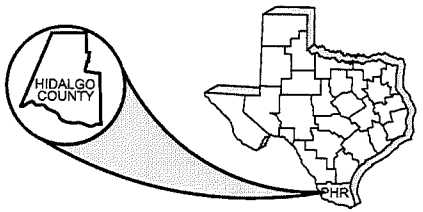
PART III

CONSTRUCTION DRAWINGS

HIDALGO COUNTY PCT. 1

CONSTRUCTION PLANS
INDIAN HILLS

Hidalgo County Precinct 1



PROJECT LIMITS:
INDIAN HILLS

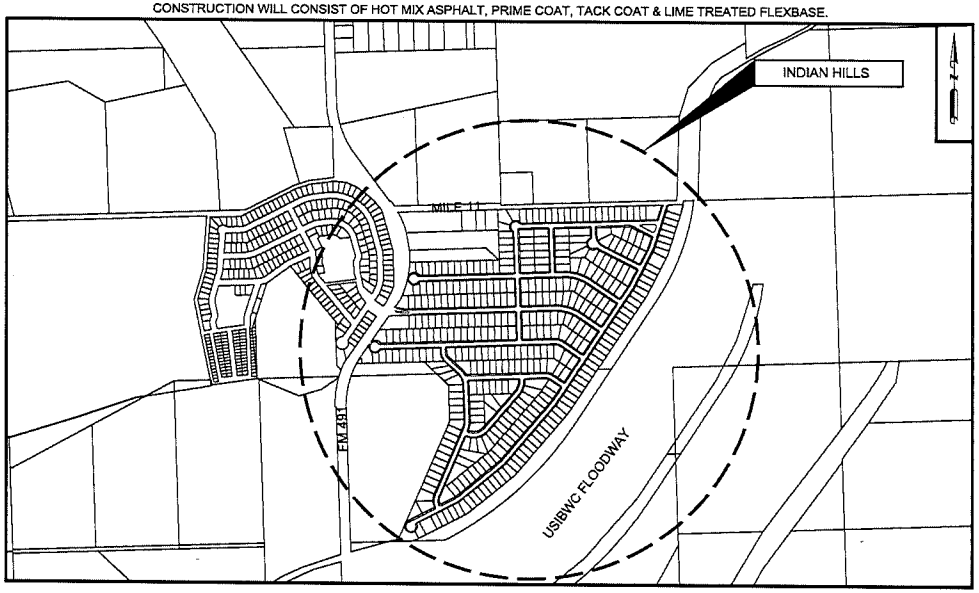
TOTAL AREA OF PROJECT = 48,381 SQYD

CONSTRUCTION WILL CONSIST OF HOT MIX ASPHALT, PRIME COAT, TACK COAT & LIME TREATED FLEXBASE.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	GENERAL NOTES
4-5	SUMMARY OF ESTIMATED QUANTITIES
6	PAVING LAYOUT
7-18	(S)-BC (1-12)-14

(D)- DENOTES DISTRICT STANDARD
(S)- DENOTES STATE STANDARD



LOCATION MAP
N.T.S.

STATE OF TEXAS
MARK D CORBITT
101980
LICENSED
PROFESSIONAL ENGINEER

MARK D. CORBITT DATE 11/8/2016

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE, HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

HIDALGO COUNTY COMMISSIONER'S COURT

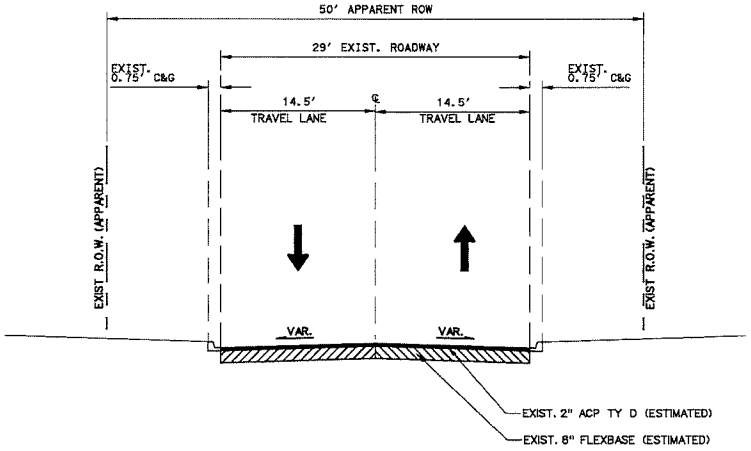
RAMON GARCIA	- COUNTY JUDGE
A.C. CUELLAR, JR.	- COMMISSIONER, PCT 1
EDUARDO "EDDIE" CANTU	- COMMISSIONER, PCT 2
JOE M. FLORES	- COMMISSIONER, PCT 3
JOSEPH PALACIOS	- COMMISSIONER, PCT 4

THE COUNTY OF HIDALGO TEXAS

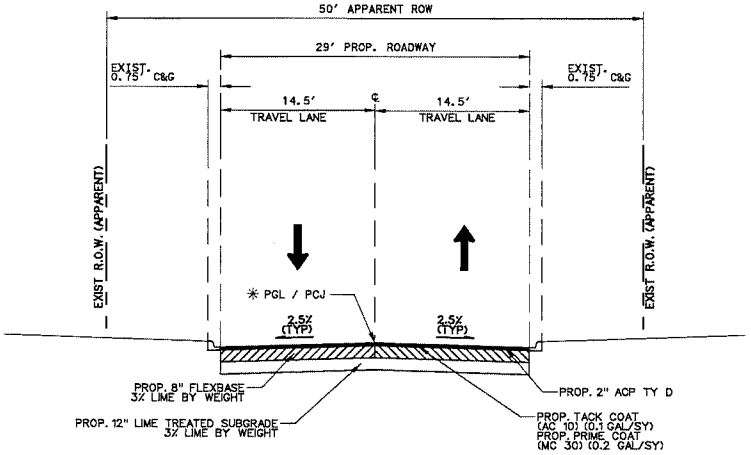
TEDSI INFRASTRUCTURE GROUP
Consulting Engineers
TEDSI
TBPE FIRM No. 1640
1201 E. Expressway 83 • Mission, Texas 78572
(956) 424-7898

COUNTY HIDALGO PROJ. NO.
HWY. NO. NITTLER ROAD LETTING DATE
DATE ACCEPTED

DATE:
FILE:



EXISTING INDIAN HILLS TYPICAL SECTION
(ALL STREETS)



* THE CONTRACTOR SHALL ESTABLISH THE CENTERLINE OF THE ROAD BASED ON THE LOCATION OF THE EXISTING C&G.

PROPOSED INDIAN HILLS TYPICAL SECTION
(ALL STREETS)

GENERAL NOTES

1. PCJ - DENOTES PERMISSIBLE CONSTRUCTION JOINT
2. PGL - DENOTES PROFILE GRADE LINE
3. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE UTILITY COMPANIES AT LEAST 72 HR PRIOR TO WORKING IN THIS AREA. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
4. 114 LBS/SY IS EQUIVALENT TO 1" ACP
5. PRIME COAT MC-30 0.2 GAL/SY (APPROX.)
5. TACK COAT AC-10 0.1 GAL/SY (APPROX.)
6. FLEXIBLE BASE WT - 3375 LB/CY (APPROX.)
7. SUBGRADE WT - 2970 LBS/CY (APPROX.)
8. ANY DAMAGE TO EXISTING ELEMENTS (SUCH AS CURB & GUTTER, SIGNING, MAILBOXES, EXISTING DRIVEWAYS, ETC...) SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
9. SPRINKLING (DUST CONTROL) 2 GAL/SQYD (APPROX.)

STATE OF TEXAS
MARK D. CORBITT
101980
LICENSED PROFESSIONAL ENGINEER

MARK D CORBITT DATE 11/8/2016

Hidalgo County Precinct 1

TEDSI INFRASTRUCTURE GROUP
Consulting Engineers
TEDSI
TBPE F-1640
1201 E. Expressway 83
Mission, Texas 78572
(956) 424-7898

INDIAN HILLS EXISTING & PROPOSED TYPICAL SECTIONS

SCALE: 1" = 10' SHEET 1 OF 1

DN:	CONT	SECT	JOB	HIGHWAY
CKDN:				
DW:				INDIAN HILLS
CKDW:	DIST	COUNTY		SHEET NO
TR:		HIDALGO		2
CKTR:				

COUNTY HIDALGO PROJ. NO.
HWY. NO. NITTLER ROAD LETTING DATE
DATE ACCEPTED

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For all pits or quarries, comply with the "Texas Aggregate Quarry and Pit Safety Act."

The 1-800 call services for utility locations do not include TxDOT facilities. Contact the Pharr District Signal Section (956-702-6225) for coordination with TxDOT underground lines.

ITEM 8. Prosecution and Progress

Working days will be computed and charged in accordance with Article 8.3.1.5 Calendar Day.

ITEM 110. Excavation

Excavate areas as shown on the plans or as directed. Remove materials encountered to the lines, grades, and typical sections shown on the plans and cross-sections.

All excavated material shall become the property of the contractor and shall be disposed of in accordance with all local, state, and Federal rules, regulations and requirements.

ITEM 132: Embankment

Embankment (DENS CONT) shall be Type C with a max. PI of 40. Material used as embankment material in the top two feet below the bottom of Flexible Base shall meet the following requirements based on preliminary tests and such other tests found necessary by the Engineer.

1. The material shall be such as to produce a well-bonded embankment and shall have a minimum PI of 8 and a maximum PI of 30.

It is the Contractor's responsibility to advise the Engineer of the location of the source sufficiently in advance to avoid delay.

ITEM 247: Flexible Base

Flexible Base Type E will be composed of caliche (argillaceous Limestone, calcareous or calcareous clay particles) and may contain stone, conglomerate, gravel, sand or granular materials when these materials are in situ with the caliche.

Flexible Base (TY E GR 4) or (TY D GR 4) crushed concrete shall conform to the following requirements:

Retained on Sq. Sieve	Percent Retained
2"	0
½"	20-60
No. 4	40-75
No. 40	70-90
Max. PI:	15
Max. Wet Ball PI:	15
Wet Ball Mill Max Amount:	50
Min. Comp. Strength PSI:	150 at 15 PSI lateral pressure
Triaxial Test	Tex-117-E

The Wet Ball Test (Tex-116-E) shall be run and the Plasticity Index of the material passing the No. 40 sieve shall be determined (Wet Ball PI).

Two (2) percent lime (by weight) will be incorporated into the Flexible Base in the field at the Contractor's expense in accordance with the provisions of Items 260.

The percent of density as determined by Compaction Ratio (Tex-113-E) for the new Flexible Base shall be a minimum of 98%.

The Contractor's attention is called to the fact that certain existing and/or proposed structures may be within the limits of the Flexible Base. It shall be the Contractor's responsibility to perform construction oeprartions without damage to these structures.

For water added under Item 247, the sulfate content will not exceed 3000-ppm and the chloride content will not exceed 3000-ppm.

ITEM 260: Lime Treatment (Road Mixed)

The Contractor's attention is called to the fact that certain existing and/or proposed structures may be within the limits of the lime-treated Subgrade.
It shall be the Contractor's responsibility to perform the proper lime treating operation without damages to any structures.
The slurry method of applying lime will be required, except when the lime is to be added to naturally wet materials as directed by the Engineer.

For this project, the Engineer will direct a random number of lime trucks to be check weighed.

The percent of density as determined by Tex-121-E for the new and salvage Flexible Base shall be a minimum of 98% for all courses.

In order to avoid damaging the Geogrid, add lime to the first lift of new base and/or salvage base at a central mixing site or mixing plant away from the construction area. The Engineer shall approve the site or plant location and method of mixing.

ITEM 301: Asphalt Antistripping Agents

Hydrated Lime shall be added as an Antistripping additive between the rates of 1 % minimum and 2.0% maximum by weight for item 341. If the Hamburg wheel test cannot be met within these limits, Liquid Antistripping agents as approved by the Engineer may be used in conjunction with lime for item 341.

ITEM 310: Prime Coat

The Contractor shall exercise diligence in the application of asphalt by the use of flagging and rolling procedures to keep from spraying or splattering the traveling public with asphaltic material.

All existing Flexible Base, which may become exposed by the milling operation, shall be primed at the rate of 0.2 Gal/SY.

Do not apply subsequent courses over the initial prime coat any earlier than the day after the prime coat was applied, unless otherwise authorized or directed by the Engineer.

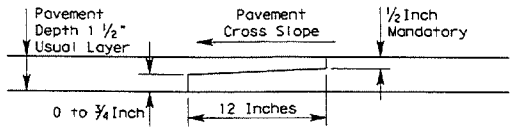
ITEM 341: Dense-Graded Hot-Mix Asphalt

The contractor shall exercise diligence in the application of "Tack Coat" by the use of flagging and rolling procedures to keep from spraying or splattering the traveling public with asphaltic material.

This project will require the following minimum surface aggregate Classifications:

County	Highway	Classification
Hidalgo	INDIAN HILLS	A

All unconfined longitudinal joints shall be constructed with a joint maker providing a maximum ½-inch vertical edge and a minimum 6:1 edge taper or as approved by the Engineer.



NOTCHED WEDGE JOINT

The engineer may allow for variances to the dimensions shown.

The Hamburg wheel Test requirement for PG 64 binder will be 5,000 passes @ 0.5 inch rut depth.

Target Lab Molded Density for this project shall be 97%.

The use of RAP and RAS will not be allowed as part of the mix design for the final riding surface.

Use a release agent from the Department's MPL to clean and to coat the inside of truck beds for hauling equipment. Hauling equipment shall be cleaned prior to hauling material to job site. Submit a copy of the bill of lading to the Engineer as part of the QCP. Ensure the pavement is free from any spillage of hydraulic oil or diesel from construction equipment. The Department may reject trucks that contain any foreign material and suspend production if the pavement is contaminated by any pollutants mentioned above.

COUNTY HIDALGO PROJ. NO.
HWY. NO. NITTLER ROAD LETTING DATE
DATE ACCEPTED

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STATE OF TEXAS
MARK D. CORBITT
101980
LICENSED PROFESSIONAL ENGINEER

MARK D. CORBITT DATE 11/8/2016

Hidalgo County Precinct 1

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Mission, Texas 78572
(956) 424-7898
TEDSI TBPE F-1640

INDIAN HILLS GENERAL NOTES

SHEET 1 OF 1

DN:		CONT	SECT	JOB	HIGHWAY
CK DN:					
DW:					INDIAN HILLS
CK DW:		DIST	COUNTY		SHEET NO
TR:					
CK TR:			HIDALGO		3

INDIAN HILLS	110	204	216	247	260	260	260	310	316	341	8000 [2]	7000 [1]
	EXCAVATION (ROADWAY)	SPRINKLING (DUST CONTROL)	PROOF ROLLING	FL BS (RDWY DEL)(TY E GR 4)(FNAL POS)	LIME TRT (EXST MATL) (12")	LIME TRT (NEW BASE)(8")	LIME (HYD, COM OR QK)(SLURRY)	PRIME COAT (MC-30)	ASPH (AC-10)	D-GR HMA TY-D SAC-A PG76-22	TRAFFIC CONTROL PLAN (TCP)	STORMWATER POLLUTION PREVENTION PLAN (SW3P)
STREETS	CY	MG	HR	CY	SY	SY	TON	GAL	GAL	TON	MO	LS
CADDOE	1207	8.7	3.2	966	4346	4346	116	869	435	495	0.5	
KICKAPOO	593	4.3	1.6	475	2136	2136	57	427	214	244	0.2	
WICHITA	332	2.4	1.1	265	1194	1194	32	239	119	136	0.2	
SANTAWAN	818	5.9	2.5	654	2944	2944	79	589	294	336	0.4	
TEJAS	3099	22.3	9.2	2479	11157	11157	299	2231	1116	1272	1.4	
CHEROKEE	1635	11.8	4.7	1308	5887	5887	158	1177	589	671	0.7	
CAMPACUAS	1544	11.1	4.9	1235	5557	5557	149	1111	556	633	0.7	
CHEYENNE	1625	11.7	4.7	1300	5850	5850	157	1170	585	667	0.7	
SEMINOLE	718	5.2	2.2	574	2584	2584	69	517	258	295	0.3	
CREEK	615	4.4	1.9	492	2213	2213	59	443	221	252	0.3	
SHAWNEE	1254	9.0	4.0	1003	4513	4513	121	903	451	515	0.6	
ALL STREETS FOR INDIAN HILLS PROJECT												1
TOTALS =	13,439	97	40.0	10,751	48,381	48,381	1,295	9,676	4,838	5,515	6.0	1

[1] --THE CONTRACTOR SHALL PROVIDE AN SW3P PLAN IN ACCORDANCE WITH ITEM 7000

[2] --THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH ITEM 8000

Hidalgo County Precinct 1

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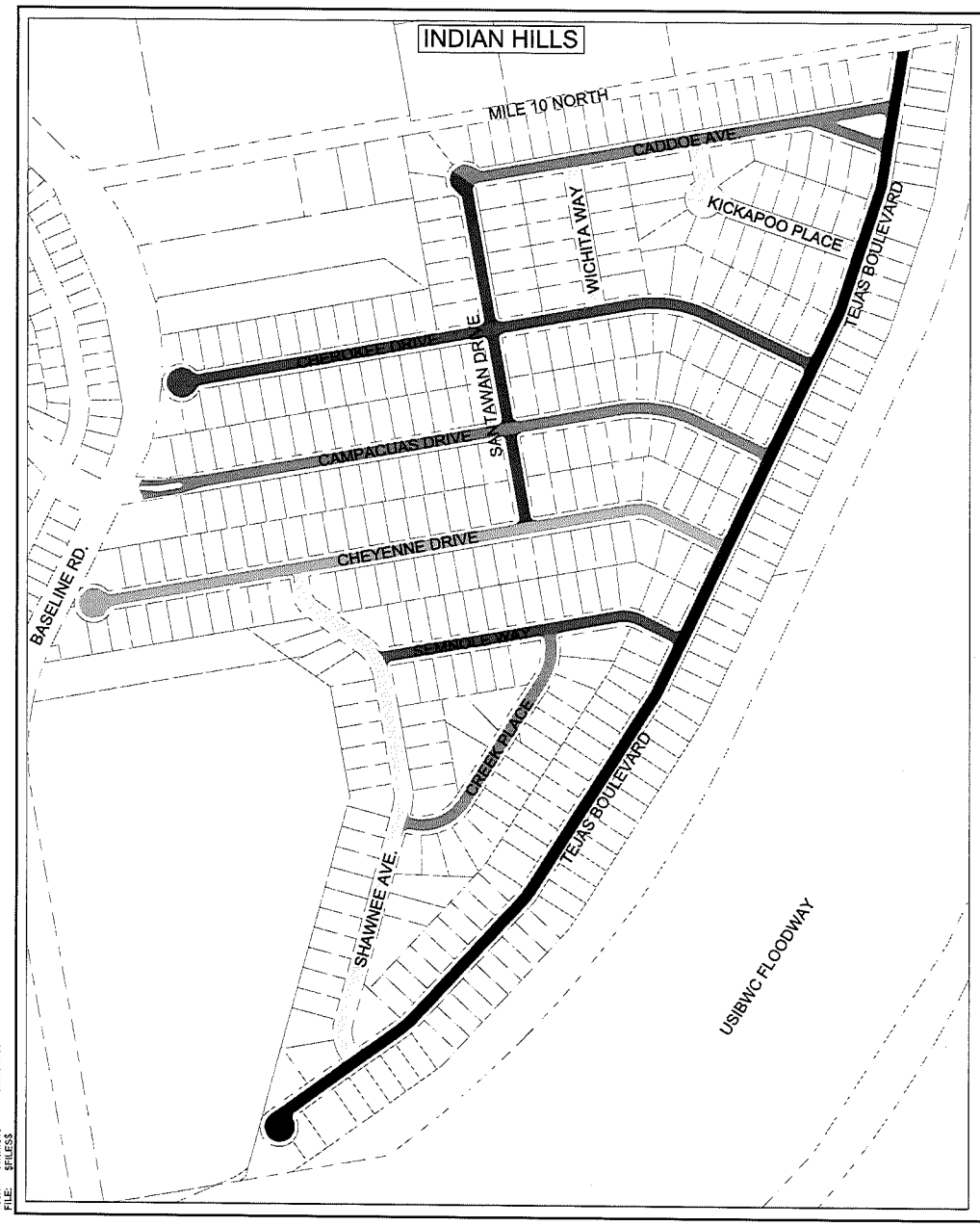
INDIAN HILLS
SUMMARY OF
ESTIMATED QUANTITIES

SHEET 1 OF 1

DN:		CONT	SECT	JOB	HIGHWAY
CK DN:					
DW:					INDIAN HILLS
CK DW:		DIST	COUNTY		SHEET NO.
TR:			HIDALGO		4
CK TR:					

COUNTY HIDALGO PROJ. NO.
HWY. NO. NITTLER ROAD LETTING DATE
DATE ACCEPTED

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LEGEND

APPARENT ROW

INDIAN HILLS

STREET	AREA	
- CADDOE	4345.836	SQYD
- KICKAPOO	2136.376	SQYD
- WICHITA	1194.028	SQYD
- SANTAWAN	2944.172	SQYD
- TEJAS	11156.684	SQYD
- CHEROKEE	5887.376	SQYD
- CAMPACUAS	5556.804	SQYD
- CHEYENNE	5849.624	SQYD
- SEMINOLE	2583.592	SQYD
- CREEK	2213.332	SQYD
- SHAWNEE	4513.3	SQYD
TOTAL	48381.124	

NOTES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING WITH UTILITY COMPANIES TO ESTABLISH THE EXACT LOCATION, DEPTH, AND SIZE OF UTILITY LINES. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES FOR REPLACEMENT OR REPAIRS OF ALL UTILITIES DAMAGED BY THE CONTRACTOR.
2. UNLESS OTHERWISE SPECIFIED IN THE PLANS ANY OBSTRUCTIONS IN CONFLICT WITH CONSTRUCTION SHALL BE REMOVED. REMOVAL WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS ITEMS.
3. CONTRACTOR SHALL PERFORM THEIR OWN CONSTRUCTION STAKING.
4. RE- LOCATE ANY MAILBOXES IN CONFLICT WITH THE PROPOSED ROADWAY. RE -LOCATION OF MAILBOXES IS SUBSIDIARY TO PERTINENT BID ITEMS.
5. CONNECT ALL DRIVEWAYS AND TURNOUTS WITH A SMOOTH TRANSITION FROM PAVEMENT EDGE.
6. FOR INFORMATION REGARDING PROJECT BENCHMARKS PLEASE CONTACT THE PROJECT ENGINEER.
7. CONTRACTOR TO PROVIDE A PROPOSED TRAFFIC CONTROL PLAN (TCP) IN ACCORDANCE WITH ITEM 7000. TCP SHALL BE APPROVED BY OWNER/ENGINEER PRIOR TO IMPLEMENTATION.

STATE OF TEXAS
MARK D. CORBITT
101980
LICENSED PROFESSIONAL ENGINEER

MARK D. CORBITT DATE 11/8/2016

Hidalgo County Precinct 1

TEDSI INFRASTRUCTURE GROUP
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Mission, Texas 78572
(956) 424-7898
TEDSI TBPE F-1640

INDIAN HILLS PAVING LAYOUT

SCALE:
HOR: 1" = 150'

SHEET 1 OF 1

DR:	CONT	SECT	JOB	HIGHWAY
CK DR:				
DW:				INDIAN HILLS
CK DW:	DIST		COUNTY	SHEET NO
TR:			HIDALGO	5
CK TR:				

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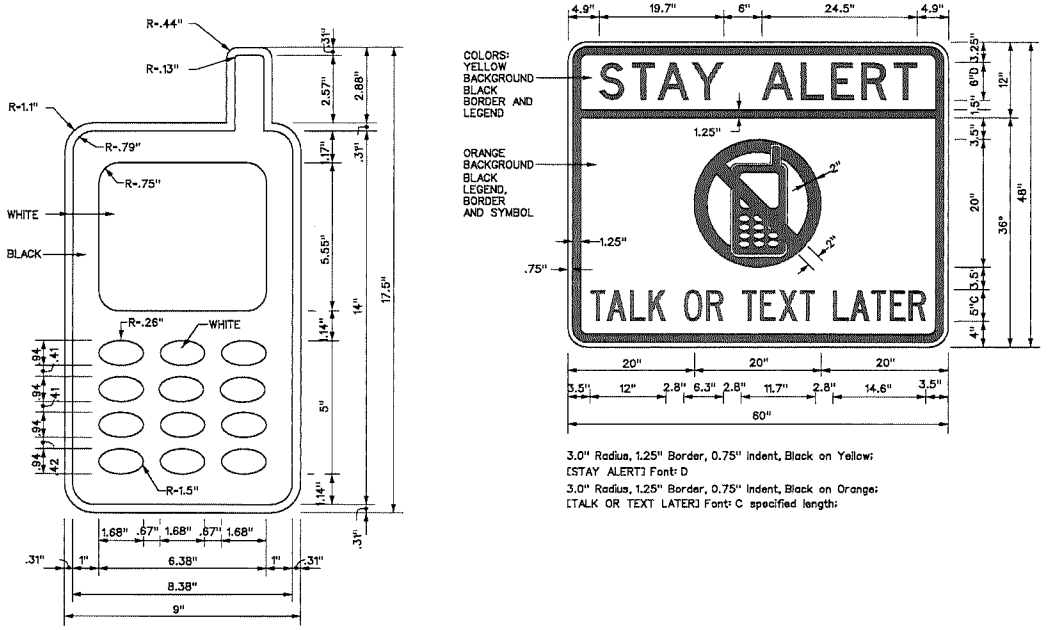
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BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. The development and design of the Traffic Control Plan (TCP)is the responsibility of the Engineer.
3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.
4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.
5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.
6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.
7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.
8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.
9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.
10. As shown on BC(2), the OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER (see Sign Detail G20-10T) and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. However, the TRAFFIC FINES DOUBLE sign will not be required on projects consisting solely of mobile operation work, such as striping or milling edgeline rumble strips. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits.
11. Except for devices required by Note 10, traffic control devices should be in place only while work is actually in progress or a definite need exists.
12. The Engineer has the final decision on the location of all traffic control devices.
13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY APPAREL NOTES:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.



SIGN DETAIL (G20-10T)

Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be found on-line at the web address given below or by contacting:

Texas Department of Transportation
Traffic Operations Division - TE
Phone (512) 416-3118

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

Texas Department of Transportation — Traffic Operations Division Standard

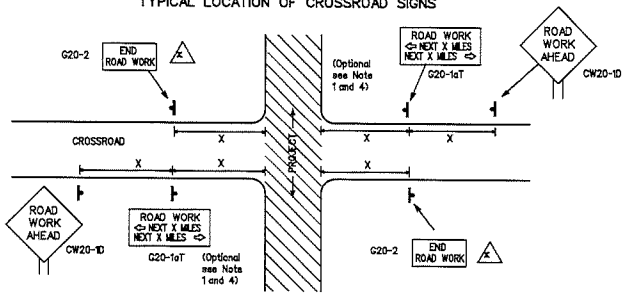
BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS 4-03 5-10 8-14 9-07 7-13	DIST	COUNTY		INDIAN HILLS
				SHEET NO. 6

65

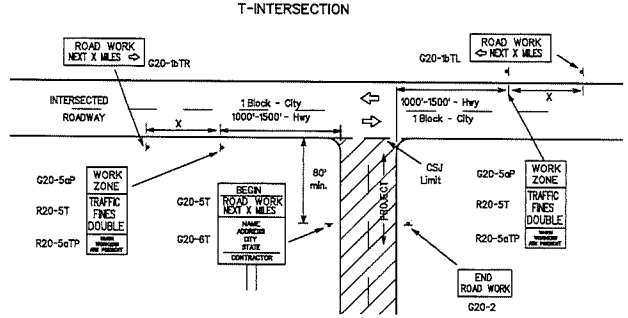
TYPICAL LOCATION OF CROSSROAD SIGNS



⁂ May be mounted on back of "ROAD WORK AHEAD"(CW20-1D) sign with approval of Engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a "ROAD WORK AHEAD" (CW20-1D)sign and a (G20-2) "END ROAD WORK" sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" "END ROAD WORK"(G20-2) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The "ROAD WORK NEXT X MILES"(G20-1aT)sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection the Contractor shall place the "CONTRACTOR NAME"(G20-6T) sign behind the Type 3 Barricades for the road closure (see BC(10) also). The "ROAD WORK NEXT X MILES" left arrow(G20-1bTL) and "ROAD WORK NEXT X MILES" right arrow (G20-1bTR)" signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING

L5,6

SIZE

Sign Number or Series	Conventional Road	Expressway/ Freeway
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

SPACING

Posted Speed	Sign Spacing "X" Δ
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500[2]
60	600[2]
65	700[2]
70	800[2]
75	900[2]
80	1000[2]
*	*[3]

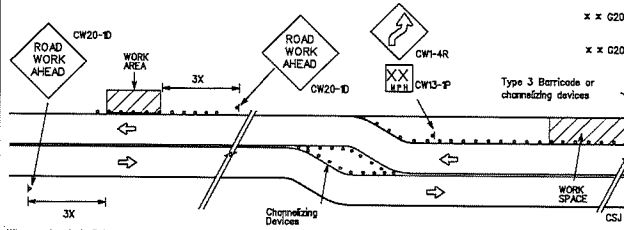
* For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

Δ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

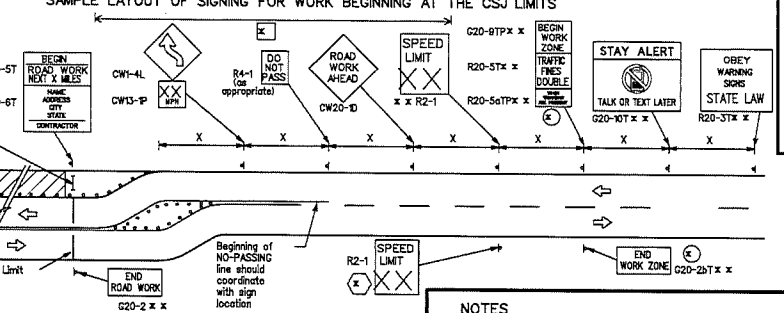
1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have 1/2 mile or more advance warning.
4. 36" x 36" "ROAD WORK AHEAD" (CW20-1D)signs may be used on low volume crossroads at the discretion of the Engineer. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS

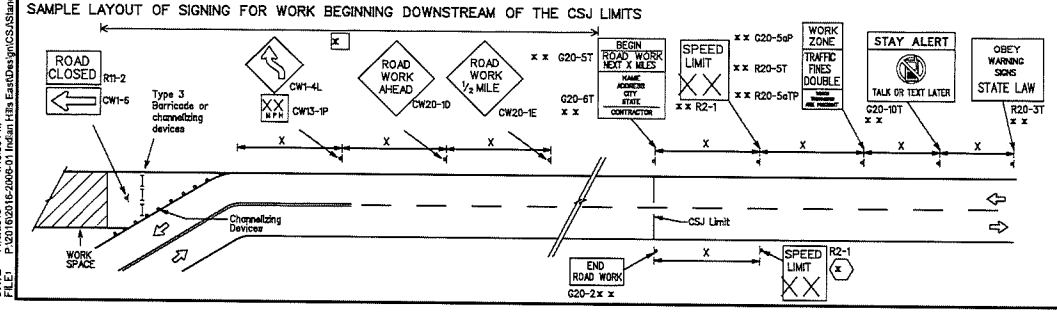


When extended distances occur between minimal work spaces, the Engineer/Inspector should ensure additional "ROAD WORK AHEAD"(CW20-1D)signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS



SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and "BEGIN ROAD WORK NEXT X MILES"(G20-5T)sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

(x) The "BEGIN WORK ZONE"(G20-9TP) and "END WORK ZONE" (G20-2bT) shall be used as shown on the sample layout when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a part of the work zone lying outside the CSJ Limits where traffic fines may double if workers are present.

x x Required CSJ Limit signing. See Note 10 on BC(1). TRAFFIC FINES DOUBLE signs will not be required on projects consisting solely of mobile operations work.

[x] Area for placement of "ROAD WORK AHEAD" (CW20-1D)sign and other signs or devices as called for on the Traffic Control Plan.

⟨x⟩ Contractor will install a regulatory speed limit sign at the end of the work zone.

LEGEND	
⊢⊣	Type 3 Barricade
○ ○ ○	Channelizing Devices
▬	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

SHEET 2 OF 12

Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-14

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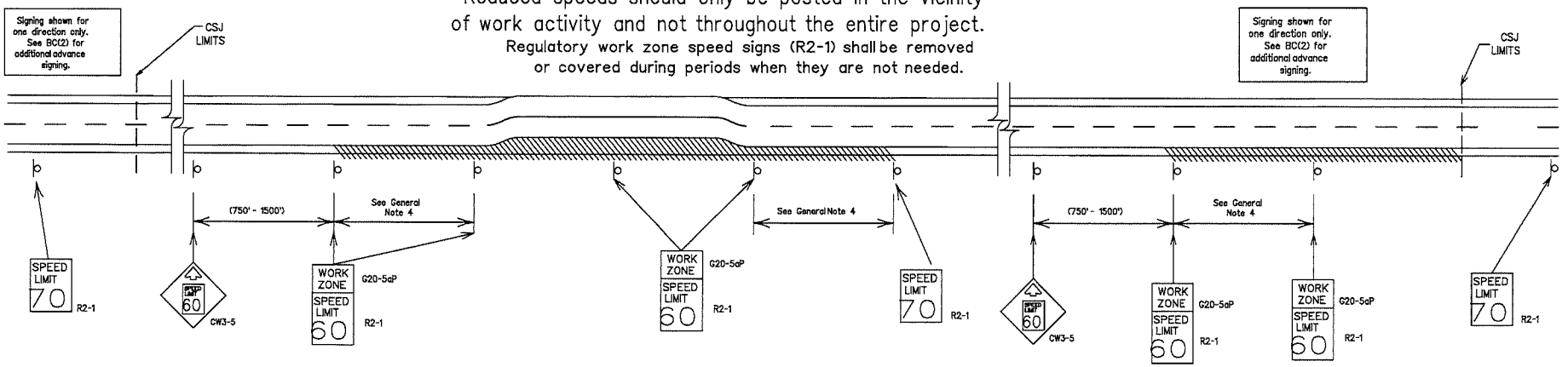
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TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

Work zone speed limits shall be regulatory, established in accordance with the "Procedures for Establishing Speed Zones," and approved by the Texas Transportation Commission, or by City Ordinance when within incorporated City Limits.

Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.

Regulatory work zone speed signs (R2-1) shall be removed or covered during periods when they are not needed.



GUIDANCE FOR USE:

LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

a) rough road or damaged pavement surface
b) substantial alteration of roadway geometrics (diversions)
c) construction detours
d) grade
e) width
f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit may be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 10 feet of the traveled way or actually in the traveled way.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered.
(See Removing or Covering on BC(4)).

GENERAL NOTES

1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
4. Frequency of work zone speed limit signs should be:
   40 mph and greater 0.2 to 2 miles
   35 mph and less 0.2 to 1 mile
5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
6. Fabrication, erection and maintenance of the "ADVANCE SPEED LIMIT" (CW3-5) sign, "WORK ZONE" (G20-5aP) plaque and the "SPEED LIMIT" (R2-1) signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
7. Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
8. Techniques that may help reduce traffic speeds include but are not limited to:
   A. Law enforcement.
   B. Flagger stationed next to sign.
   C. Portable changeable message sign (PCMS).
   D. Low-power (drone) radar transmitter.
   E. Speed monitor trailers or signs.
9. Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
10. For more specific guidance concerning the type of work, work zone conditions and factors impacting allowable regulatory construction speed zone reduction see TxDOT form #1204 in the TxDOT e-form system.

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Texas Department of Transportation | Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

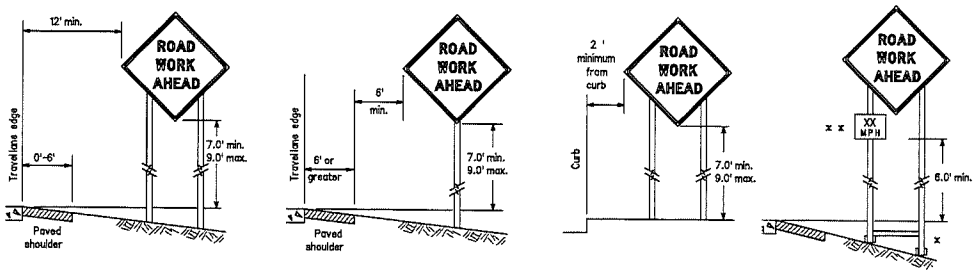
BC(3)-14

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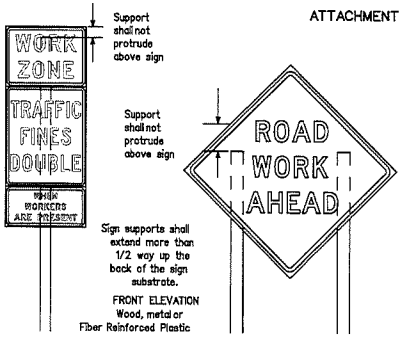
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS



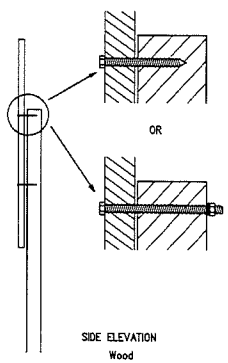
x When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

x x When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS



Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the splice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

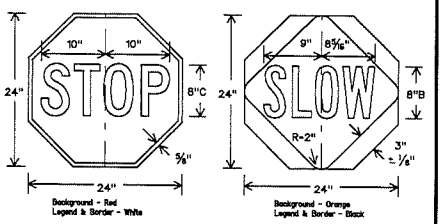


Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24" as detailed below.
2. When used at night, the STOP/SLOW paddle shall be retroreflectorized.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC sheets or the CWZTCD. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
6. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD). The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
7. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
9. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height, the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type B or Type C_L, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
6. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
7. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

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Texas Department of Transportation — Traffic Operations Division Standard

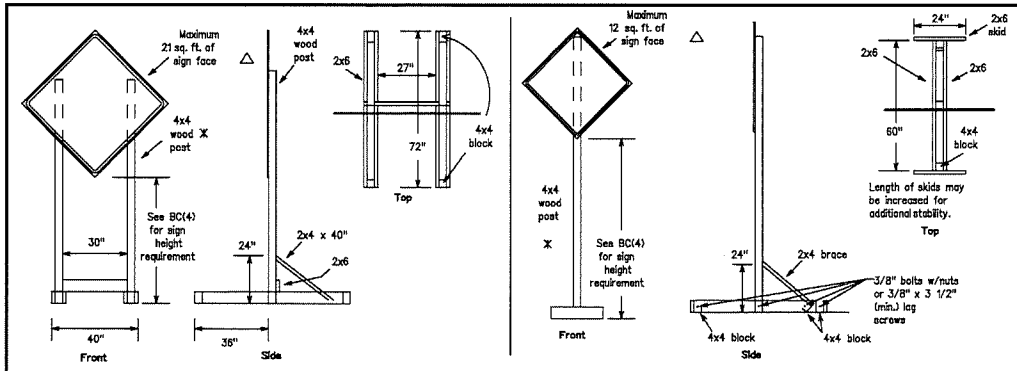
BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

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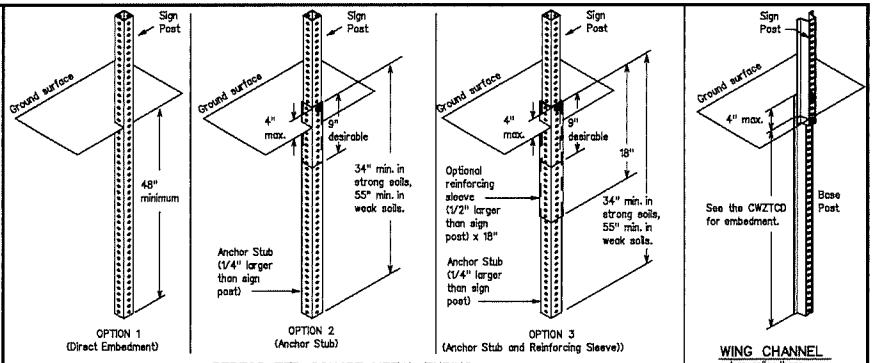
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SKID MOUNTED WOOD SIGN SUPPORTS

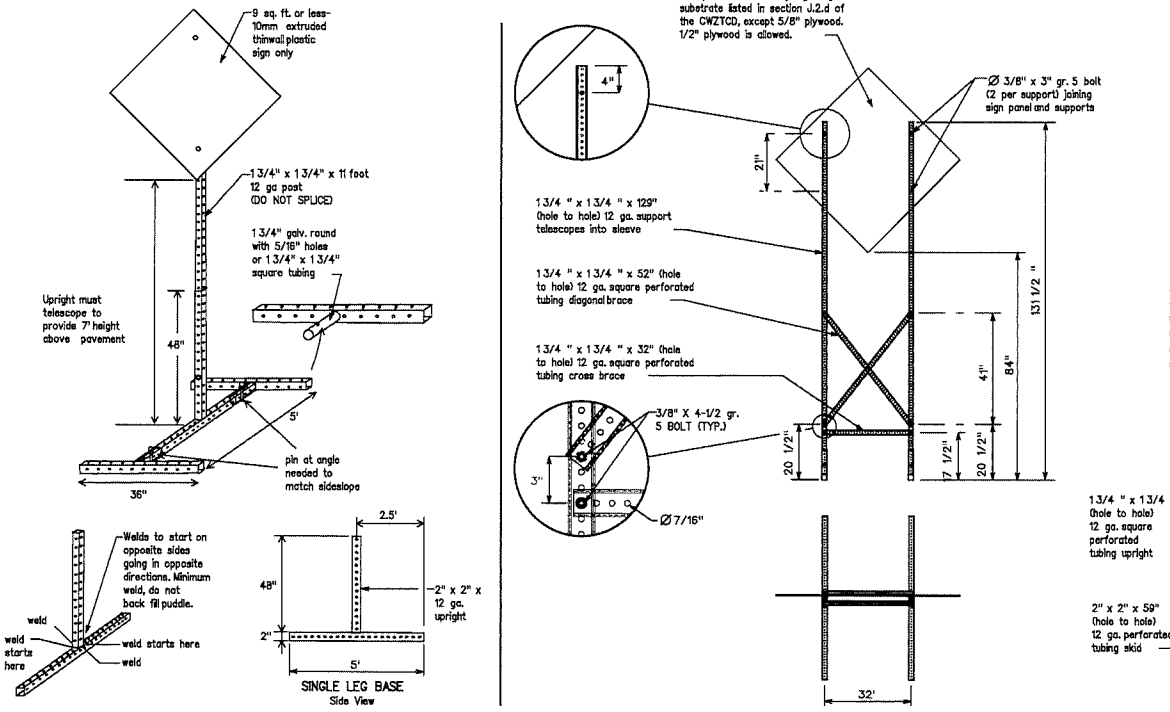
LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS □



PERFORATED SQUARE METAL TUBING

GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support. The maximum sign square footage shall adhere to the manufacturer's recommendation. Two post installations can be used for larger signs.



Nominal Post Size	Number of Posts	Maximum Sq. feet of Sign Face	Minimum Soil Embedment	Drilled Hole(s) Required
4 x 4	1	12	36"	NO
4 x 4	2	21	36"	NO
4 x 6	1	21	36"	YES
4 x 6	2	36	36"	YES

WOOD POST SYSTEM FOR GROUND MOUNTED SIGN SUPPORTS

SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

□ See BC(4) for definition of "Work Duration."

x Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

△ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

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Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-14

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WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGNS

1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
3. Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
6. When in use the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
7. The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
11. Do not use the word "Danger" in message.
12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
13. Do not display messages that scroll horizontally or vertically across the face of the sign.
14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated, unless shown in the TMUTCD.
15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 600 feet at night and 800 feet in daylight. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
16. Each line of text should be centered on the message board rather than left or right justified.
17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

WORD OR PHRASE	ABBREVIATION	WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD	Major	MAJ
Alternate	ALT	Miles	MI
Avenue	AVE	Miles Per Hour	MPH
Best Route	BEST RTE	Minor	MNR
Boulevard	BLVD	Monday	MON
Bridge	BRDG	Normal	NORM
Cannot	CANT	North	N
Center	CTR	Northbound	(route) N
Construction Ahead	CONST AHD	Parking	PKING
CROSSING	XING	Road	RD
Detour Route	DETOUR RTE	Right Lane	RT LN
Do Not	DONT	Saturday	SAT
East	E	Service Road	SERV RD
Eastbound	(route) E	Shoulder	SHLDR
Emergency	EMER	Slippery	SLIP
Emergency Vehicle	EMER VEH	South	S
Entrance, Enter	ENT	Southbound	(route) S
Express Lane	EXP LN	Speed	SPD
Expressway	EXPWY	Street	ST
XXXX Feet	XXXX FT	Sunday	SUN
Fog Ahead	FOG AHD	Telephone	PHONE
Freeway	FRWY, FWY	Temporary	TEMP
Freeway Blocked	FWY BLKD	Thursday	THURS
Friday	FRI	To Downtown	TO DWNTN
Hazardous Driving	HAZ DRIVING	Traffic	TRAF
Hazardous Material	HAZMAT	Travelers	TRVLRS
High-Occupancy Vehicle	HOV	Tuesday	TUES
Highway	HWY	Time Minutes	TIME MIN
Hour(s)	HR, HRS	Upper Level	UPR LEVEL
Information	INFO	Vehicles (s)	VEH, VEHS
It Is	ITS	Warning	WARN
Junction	JCT	Wednesday	WED
Left	LFT	Weight Limit	WT LIMIT
Left Lane	LFT LN	West	W
Lane Closed	LN CLOSED	Westbound	(route) W
Lower Level	LWR LEVEL	Wet Pavement	WET PVMT
Maintenance	MAINT	Will Not	WONT

Roadway designation * IH-number, US-number, SH-number, FM-number

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

- FREEWAY CLOSED X MILE
- ROAD CLOSED AT SH XXX
- ROAD CLSD AT FM XXXX
- RIGHT X LANES CLOSED
- CENTER LANE CLOSED
- NIGHT LANE CLOSURES
- VARIOUS LANES CLOSED
- EXIT CLOSED
- MALL DRIVEWAY CLOSED
- XXXXXXXX BLVD CLOSED
- FRONTAGE ROAD CLOSED
- SHOULDER CLOSED XXX FT
- RIGHT LN CLOSED XXX FT
- RIGHT X LANES OPEN
- DAYTIME LANE CLOSURES
- I-XX SOUTH EXIT CLOSED
- EXIT XXX CLOSED X MILE
- RIGHT LN TO BE CLOSED
- X LANES CLOSED TUE - FRI

Other Condition List

- ROADWORK XXX FT
- FLAGGER XXXX FT
- RIGHT LN NARROWS XXXX FT
- MERGING TRAFFIC XXXX FT
- LOOSE GRAVEL XXXX FT
- DETOUR X MILE
- ROADWORK PAST SH XXXX
- BUMP XXXX FT
- TRAFFIC SIGNAL XXXX FT
- ROAD REPAIRS XXXX FT
- LANE NARROWS XXXX FT
- TWO-WAY TRAFFIC XX MILE
- CONST TRAFFIC XXX FT
- UNEVEN LANES XXXX FT
- ROUGH ROAD XXXX FT
- ROADWORK NEXT FRI-SUN
- US XXX EXIT X MILES
- LANES SHIFT x

x LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

Phase 2: Possible Component Lists

Action to Take/Effect on Travel List

- MERGE RIGHT
- DETOUR NEXT X EXITS
- USE EXIT XXX
- STAY ON US XXX SOUTH
- TRUCKS USE US XXX N
- WATCH FOR TRUCKS
- EXPECT DELAYS
- REDUCE SPEED XXX FT
- USE OTHER ROUTES
- STAY IN LANE x
- FORM X LINES RIGHT
- USE XXXXX RD EXIT
- USE EXIT I-XX NORTH
- USE I-XX E TO I-XX N
- WATCH FOR TRUCKS
- EXPECT DELAYS
- PREPARE TO STOP
- END SHOULDER USE
- WATCH FOR WORKERS

Location List

- AT FM XXXX
- BEFORE RAILROAD CROSSING
- NEXT X MILES
- PAST US XXX EXIT
- XXXXXXX TO XXXXXXX
- US XXX TO FM XXXX

Warning List

- SPEED LIMIT XX MPH
- MAXIMUM SPEED XX MPH
- MINIMUM SPEED XX MPH
- ADVISORY SPEED XX MPH
- RIGHT LANE EXIT
- USE CAUTION
- DRIVE SAFELY
- DRIVE WITH CARE

xx Advance Notice List

- TUE-FRI XX AM- X PM
- APR XX-XX X PM-X AM
- BEGINS MONDAY
- BEGINS MAY XX
- MAY X-X XX PM - XX AM
- NEXT FRI-SUN
- XX AM TO XX PM
- NEXT TUE AUG XX
- TONIGHT XX PM- XX AM

x See Application Guidelines Note 6.

APPLICATION GUIDELINES

1. Only 1 or 2 phases are to be used on a PCMS.
2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
4. A Location Phase is necessary only if a distance or location is not included in the first phase selected.
5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limited to two phases, and should be understandable by themselves.
6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work.

WORDING ALTERNATIVES

1. The words RIGHT, LEFT and ALL can be interchanged as appropriate.
2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
4. Highway names and numbers replaced as appropriate.
5. ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
6. AHEAD may be used instead of distances if necessary.
7. FT and MI, MILE and MILES interchanged as appropriate.
8. AT, BEFORE and PAST interchanged as needed.
9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS, WHEN EXPOSED TO ONE DIRECTION OF TRAFFIC. WHEN EXPOSED TO TWO WAY TRAFFIC, THE FOUR DRUMS SHOULD BE PLACED WITH ONE DRUM AT EACH OF THE FOUR CORNERS OF THE UNIT.

FULL MATRIX PCMS SIGNS

1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE CHANGEABLE MESSAGE SIGNS" above.
2. When symbol signs, such as the "Flagger Symbol" (CW20-7) are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it shall maintain the legibility/visibility requirement listed above.
3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute for, or replace that sign.
4. A full matrix PCMS may be used to simulate a flashing arrow board provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

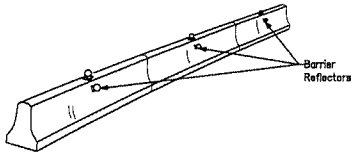
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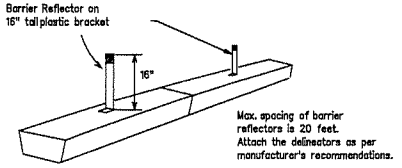
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1. Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.

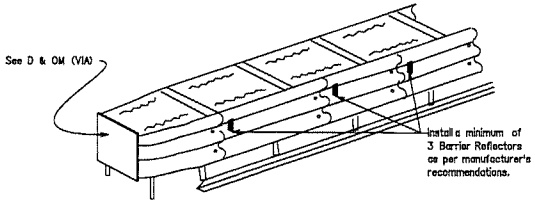


CONCRETE TRAFFIC BARRIER (CTB)

3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional) while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
7. Maximum spacing of Barrier Reflectors is forty (40) feet.
8. Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
10. Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
11. Single slope barriers shall be delineated as shown on the above detail.



LOW PROFILE CONCRETE BARRIER (LPCB)

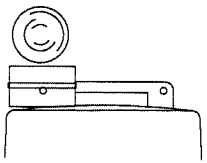


DELINEATION OF END TREATMENTS

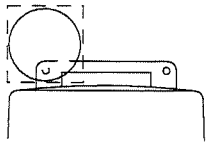
END TREATMENTS FOR
CTB'S USED
IN WORK ZONES

End treatments used on CTB's in work zones shall meet crashworthy standards as defined in the National Cooperative Highway Research Report 350. Refer to the CWZTCD List for approved end treatments and manufacturers.

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



Type C Warning Light or approved substitute mounted on a drum adjacent to the travelway.



Warning reflector may be round or square. Must have a yellow reflective surface area of at least 30 square inches

WARNING LIGHTS

1. Warning lights shall meet the requirements of the TMUTCD.
2. Warning lights shall NOT be installed on barricades.
3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type B or C sheeting meeting the requirements of Departmental Material Specification DMS-8300.
4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.
7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.
8. The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

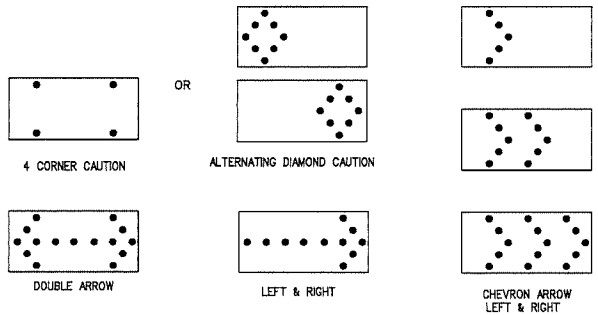
1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travellane on detours, on lane changes, on lane closures, and on other similar conditions.
5. Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type B or Type C.
7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

Arrow Boards may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Board should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
2. Flashing Arrow Boards should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Board.
4. The Flashing Arrow Board should be able to display the following symbols:



5. The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Board shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
9. The sequential arrow display is NOT ALLOWED.
10. The flashing arrow display is the TxDOT standard; however, the sequential Chevron display may be used during daylight operations.
11. The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Board provided it meets visibility, flash rate and dimming requirements on this sheet for the same size arrow.
14. Minimum mounting height of trailer mounted Arrow Boards should be 7 feet from roadway to bottom of panel.

REQUIREMENTS			
TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

ATTENTION
Flashing Arrow Boards shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW BOARD FROM THE RIGHT-OF-WAY OR PLACE THE ARROW BOARD BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

FLASHING ARROW BOARDS

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the National Cooperative Highway Research Report No. 350 (NCHRP 350) or the Manual for Assessing Safety Hardware (MASH).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the CWZTCD for a list of approved TMAs.
4. TMAs are required on freeways unless otherwise noted in the plans.
5. A TMA should be used anytime that it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
6. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

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Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR

BC(7)-14

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GENERAL NOTES

1. For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
2. For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
3. For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones or one-piece cones as approved by the Engineer.
4. Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
5. Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
6. The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

Pre-qualified plastic drums shall meet the following requirements:

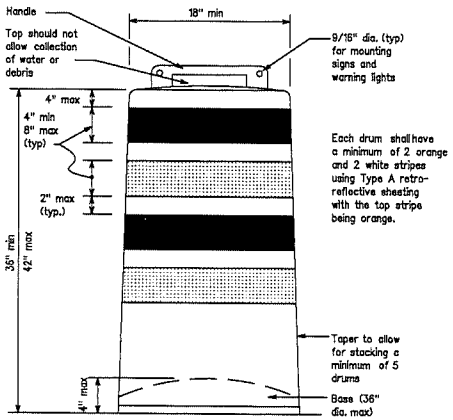
1. Plastic drums shall be a two-piece design: the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
3. Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
4. Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
5. The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
6. The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectorized space between any two adjacent stripes shall not exceed 2 inches in width.
7. Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
8. Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
9. Drum body shall have a maximum unballasted weight of 11 lbs.
10. Drum and base shall be marked with manufacturer's name and model number.

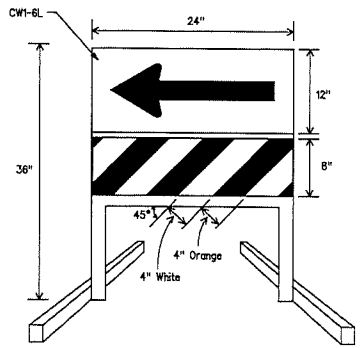
RETROREFLECTIVE SHEETING

1. The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Sign Face Materials." Type A reflective sheeting shall be supplied unless otherwise specified in the plans.
2. The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

BALLAST

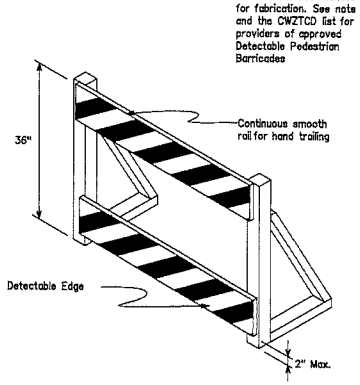
1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
2. Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
3. Recycled truck tire sidewalls may be used for ballast on drums approved for this type of ballast on the CWZTCD list.
4. The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
5. When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
6. Ballast shall not be placed on top of drums.
7. Adhesives may be used to secure base of drums to pavement.





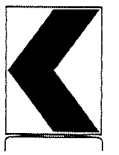
DIRECTION INDICATOR BARRICADE

1. The Direction Indicator Barricade may be used in tapers, transitions, and other areas where specific directional guidance to drivers is necessary.
2. If used, the Direction Indicator Barricade should be used in series to direct the driver through the transition and into the intended travel lane.
3. The Direction Indicator Barricade shall consist of One-Direction Large Arrow (CW1-6) sign in the size shown with a black arrow on a background of Type B or Type C Orange retroreflective sheeting above a rail with Type A retroreflective sheeting in alternating 4" white and orange stripes sloping downward at an angle of 45 degrees in the direction road users are to pass. Sheeting types shall be as per DMS 8300.
4. Double arrows on the Direction Indicator Barricade will not be allowed.
5. Approved manufacturers are shown on the CWZTCD List. Ballast shall be as approved by the manufacturers instructions.



DETECTABLE PEDESTRIAN BARRICADES

1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.
2. Where pedestrians with visual disabilities normally use the closed sidewalk, a device that is detectable by a person with a visual disability traveling with the aid of a long cane shall be placed across the full width of the closed sidewalk.
3. Detectable pedestrian barricades similar to the one pictured above, longitudinal channelizing devices, some concrete barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian path.
4. Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)" and should not be used as a control for pedestrian movements.
5. Warning lights shall not be attached to detectable pedestrian barricades.
6. Detectable pedestrian barricades may use 8" nominal barricade rails as shown on BC(10) provided that the top rail provides a smooth continuous rail suitable for hand trailing with no splinters, burrs, or sharp edges.



18" x 24" Sign (Maximum Sign Dimension) Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24" Vertical Panel mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

1. Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
2. Chevrons and other work zone signs with an orange background shall be manufactured with Type B or Type C Orange sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
3. Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type A Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
4. Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height, except for the R9 series signs discussed in note 8 below.
5. Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
6. Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.
7. Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations they may be placed on every drum or spaced not more than on every third drum. A minimum of three (3) should be used at each location called for in the plans.
8. R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

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Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

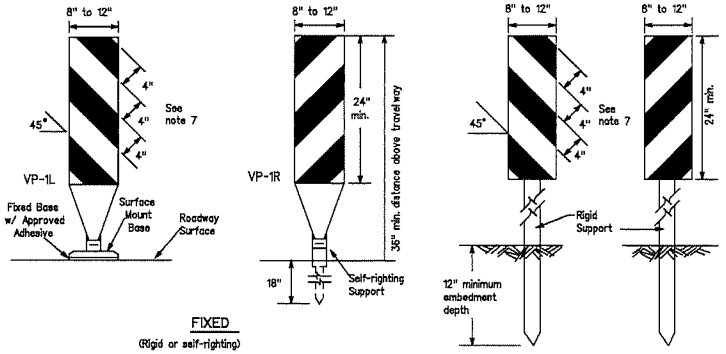
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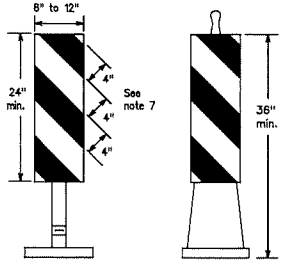
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FIXED
(Rigid or self-righting)

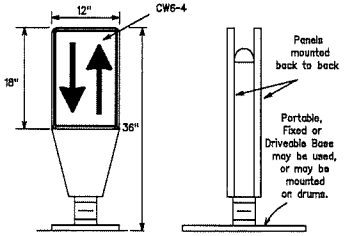
DRIVEABLE



PORTABLE

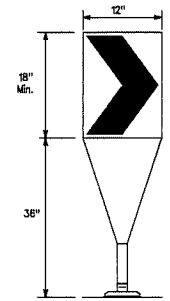
1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual Appendix B "Treatment of Pavement Drop-offs in Work Zones" for additional guidelines on the use of VP's for drop-offs.
3. VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
4. VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
5. Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
6. Sheeting for the VP's shall be retroreflective Type A conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.

VERTICAL PANELS (VPs)



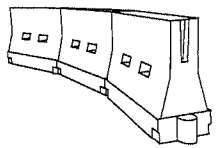
1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
2. The OTLD may be used in combination with 42" cones or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type B or Type C conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)



1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
4. To be effective, the chevron should be visible for at least 500 feet.
5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type B or Type C conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
6. For Long Term Stationary use on tapers or transitions on freeways and divided highways self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

CHEVRONS



LONGITUDINAL CHANNELIZING DEVICES (LCD)

1. LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
2. LCDs may be used instead of a line of cones or drums.
3. LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
5. LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
6. LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10) placed near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS

1. Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate NCHRP 350 crashworthiness requirements based on roadway speed and barrier application.
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

GENERAL NOTES

1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.

Posted Speed x	Formula	Minimum Desirable Taper Lengths x x 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'
35		205'	225'	245'	35'	70'
40		265'	295'	320'	40'	80'
45	L=WS	450'	495'	540'	45'	90'
50		500'	550'	600'	50'	100'
55		550'	605'	660'	55'	110'
60		600'	660'	720'	60'	120'
65		650'	715'	780'	65'	130'
70		700'	770'	840'	70'	140'
75		750'	825'	900'	75'	150'
80		800'	880'	960'	80'	160'

x x Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

SHEET 9 OF 12

Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(9)-14

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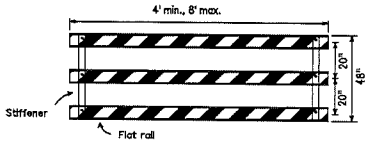
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.



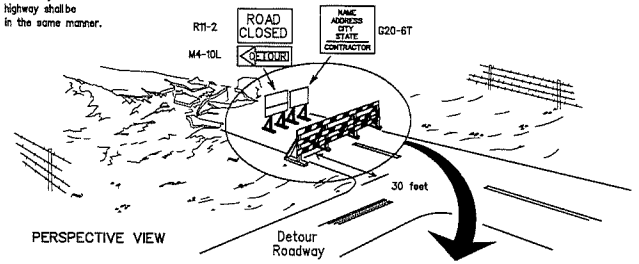
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

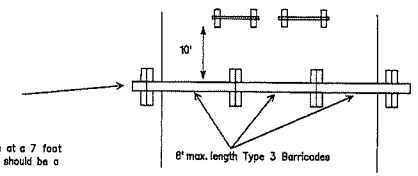
TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES

Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

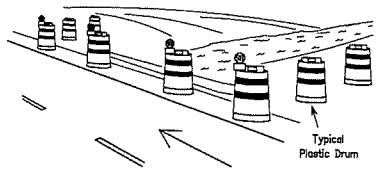
The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.
Barricade striping should slant downward in the direction of detour.



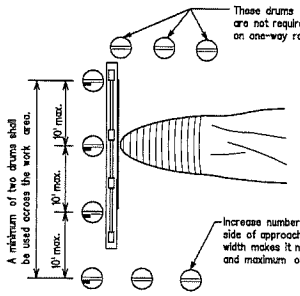
PLAN VIEW

1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

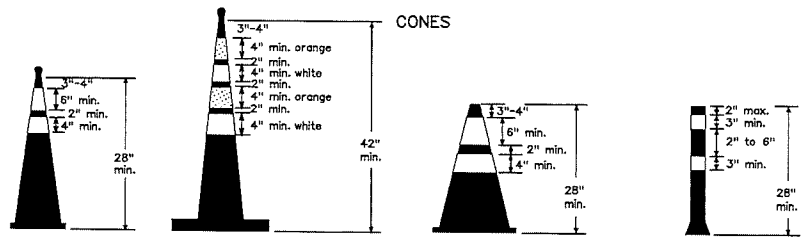


PLAN VIEW

1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.

LEGEND	
	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
SB	Steady burn warning light or yellow warning reflector

CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS

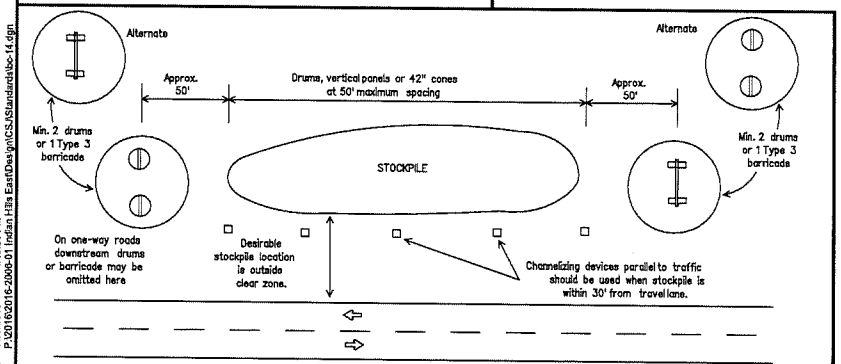


Two-Piece cones | One-Piece cones | Tubular Marker

28" Cones shall have a minimum weight of 9 1/2 lbs.

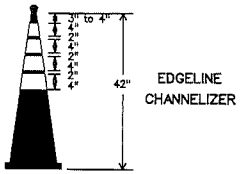
42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers used at night shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

THIS DEVICE SHALL NOT BE USED ON PROJECTS LET AFTER MARCH 2014.



1. This device is intended only for use in place of a vertical panel to channelize traffic by indicating the edge of the travel lane. It is not intended to be used in transitions or tapers.
2. This device shall not be used to separate lanes of traffic (opposing or otherwise) or warn of objects.
3. This device is based on a 42 inch, two-piece cone with an alternate striping pattern: four 4 inch retroreflective bands, with an approximate 2 inch gap between bands. The color of the band should correspond to the color of the edgeline (yellow for left edgeline, white for right edgeline) for which the device is substituted or for which it supplements. The reflectorized bands shall be retroreflective Type A conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
4. The base must weigh a minimum of 30 lbs.

Texas Department of Transportation | Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(10)-14

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WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

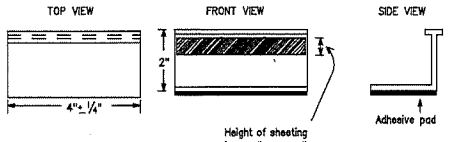
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

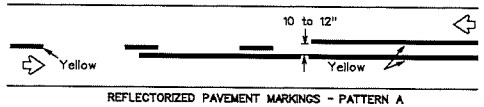
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11-02 8-14				
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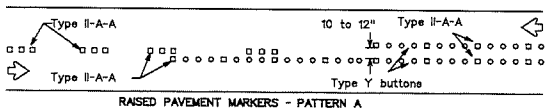
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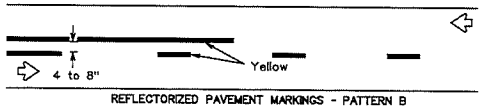
PAVEMENT MARKING PATTERNS



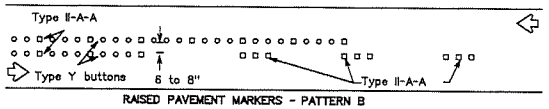
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



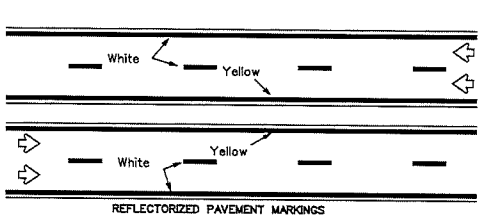
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



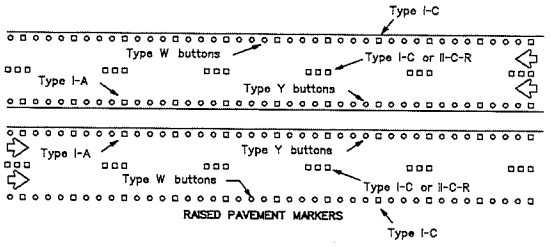
RAISED PAVEMENT MARKERS - PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer. Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



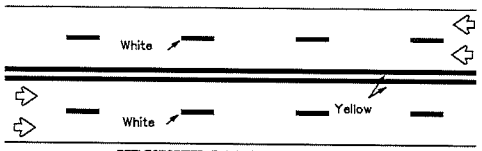
REFLECTORIZED PAVEMENT MARKINGS



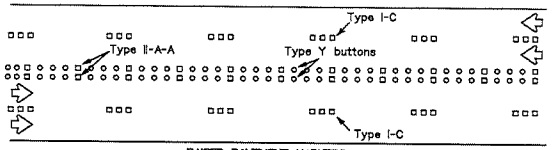
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



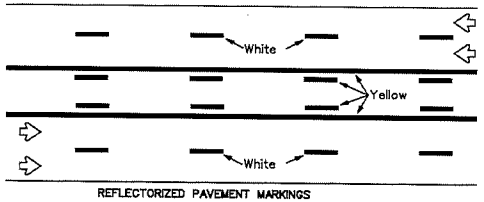
REFLECTORIZED PAVEMENT MARKINGS



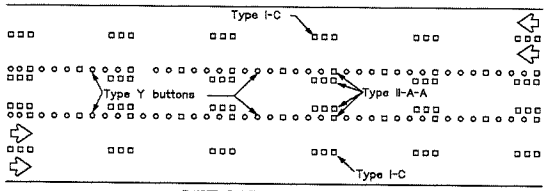
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS

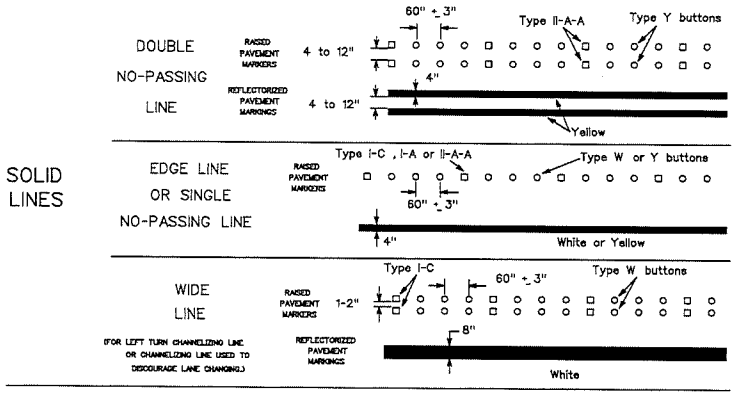


RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

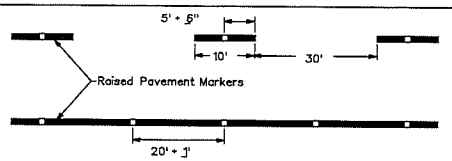
TWO-WAY LEFT TURN LANE

STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only - not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

SHEET 12 OF 12

Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

BC(12)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS				INDIAN HILLS
1-97 9-07	DIST	COUNTY		SHEET NO.
2-98 7-13				17
11-02 8-14				
105				

Hidalgo County Purchasing Department
2812 S. Business Highway 281
Edinburg, Texas 78539
(956) 318-2626/ Fax: (956) 318-2629

December 13, 2016

IOC Company, LLC
Oscar Cuellar, Managing Member
9312 E. Curve Road
Edinburg, Texas 78542

RE: BID NO.: 2016-399-12-07-FAZ
Contract: C-16-399-12-13
Notice of Bid Award for: Hidalgo County Precinct No. 1–FEMA Road Drainage Improvements – Indian Hills Subdivision

Dear Mr. Cuellar

Congratulations! This is to notify you that pursuant to action taken at the Commissioners' Court meeting held on **December 13, 2016**, the Base Bid, for the above-mentioned project, was awarded to your company in the total amount of **$1,280,979.70**. The award was made subject to your company's compliance with HB-1295 described in the attached letter.

Our next step will be to complete a contract to present to Commissioners' Court for approval. For this purpose, five original copies of the contract will have to be distributed; therefore, we are requesting you to provide Payment and Performance Bondsin five original sealed duplicates dated for **December 13, 2016** and your Acord certificates of insurance with required coverages.

We need to proceed with this project as soon as possible; therefore, we are requesting for you to contact, Mark D. Corbitt at 956 424-7898 at Tedsi Infrastructure Group located at 1201 E. Expressway 83 Mission, Texas 78572 at your earliest convenience for additional forms and information required.

We sincerely appreciate your time and interest in submitting bids and we extend an invitation to you on future bids. If you have any questions feel free to contact me @ 318-2626 x-4852 or via e-mail address darlene.betancourt@co.hidalgo.tx.us Thank you.

Sincerely,

Darlene H. Betancourt

Darlene H. Betancourt, CPPB
Hidalgo County Purchasing Department

Enclosures
cc:
Eloy Tello etello@ioccompany.com
Raul Lozano, raul.lozano@co.hidalgo.tx.us
Yolanda Estrada, yolanda.estrada@co.hidalgo.tx.us

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AI-59025 **Purchasing Department** **23. C. 1.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

A. Requesting approval of Supplemental Agreement No. 1 to Contract No. C-15-300-09-01 for L&G Consulting Engineers, Inc. d/b/a L&G Engineering, resulting in an amendment to the project limits from (Business 83 to Nolana) to (Nolana to Business 83) and (Business 83 to Ridge Road) for the Pct 2 Cesar Chavez Road Project.
B. Requesting approval of Supplemental Agreement No. 1 for services under Work Authorization No. 1, Contract No. C-15-300-09-01 for L&G Consulting Engineers, Inc. d/b/a L&G Engineering, resulting in an estimated cost increase of $249,994.32 for the Pct 2 Cesar Chavez Road Project.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1350-431-00-122-117-0-721

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funding available in year 2016 as of 3/17/17.

FISCAL YEAR: 2017 **ACCT. #:** 7-1350-431-00-122-117-0-841

FUNDS AVAILABLE Y/N?: Y/Pending **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funding pending approval of AI#59050 CC3/21/17.

Attachments

Supplemental Agreement No. 1 to Contract
Supplemental Agreement No. 1 to Work Auth 1
1295 signed

Form Review

Inbox	Reviewed By	Date
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/17/2017 11:57 AM
Final Approval Date: 03/17/2017		

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO. 1

TO AGREEMENT FOR PROFESSIONAL SERVICES
C-15-300-09-01

This **SUPPLEMENTAL AGREEMENT** is made pursuant to the terms and conditions of Article 8 of the Agreement made by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and **L&G Consulting Engineers Inc.** d/b/a **L&G Engineering**, Professional Engineers of Mercedes, Texas, hereinafter called "**Engineer**".

WITNESSETH:

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the 1st day of September, 2015 concerning engineering for **Cesar Chavez Rd (from Business 83 to E. Nolana Loop)** project for Hidalgo County Precinct No. 2 (hereinafter referred to as the "**Project**"); and,

WHEREAS, Article 8 of the **Agreement**, (Supplemental Agreements), establishes "The terms of this Agreement may be amended by supplemental agreement if the **Owner** determines that (1) there is a need to extend the Termination Date identified in Article 3.1 hereof, (2) there has been a significant change in the scope, complexity or character of the services to be performed by the Engineer, and/or (3) for any other reason agreeable to the **Owner** and the **Engineer**"; and,

WHEREAS, it has become necessary to amend the contract and revise the project limits to include (Business 83 to Ridge Road).

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said **Agreement** is amended as follows:

I. The Agreement is revised to

Show the additional project limits and should read, "Cesar Chavez Rd (from Business 83 to E. Nolana Loop) and (from Business 83 to Ridge Road).

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 2017.

THE ENGINEER:
L&G CONSULTING ENGINEERS INC.
d/b/a **L&G ENGINEERING**

BY: _____
Jacinto Garza, P.E., President

THE OWNER:
HIDALGO COUNTY

BY: _____
Ramon Garcia, County Judge

LIST OF ATTACHMENTS
Page 1 of Agreement

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO. 1

TO WORK AUTHORIZATION NO. 1
TO AGREEMENT FOR PROFESSIONAL SERVICES
C-15-300-09-01

This **SUPPLEMENTAL AGREEMENT** is made pursuant to the terms and conditions of Article 8 of the Agreement made by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and **L&G Consulting Engineers Inc.** d/b/a **L&G Engineering**, Professional Engineers of Mercedes, Texas, hereinafter called "**Engineer**".

WITNESSETH:

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the 1st day of September, 2015 concerning engineering for **Cesar Chavez Rd (from Business 83 to E. Nolana Loop)** project for Hidalgo County Precinct No. 2 (hereinafter referred to as the "**Project**"); and,

WHEREAS, Article 8 of the **Agreement**, (Supplemental Agreements), establishes "The terms of this Agreement may be amended by supplemental agreement if the **Owner** determines that (1) there is a need to extend the Termination Date identified in Article 3.1 hereof, (2) there has been a significant change in the scope, complexity or character of the services to be performed by the Engineer, and/or (3) for any other reason agreeable to the **Owner** and the **Engineer**"; and,

WHEREAS, it has become necessary to extend the project limits to include Business 83 south to Ridge Road; and,

WHEREAS, it has become necessary to replace the existing "Exhibit D – Fee Proposal" of Work Authorization No. 1 with the attached "Exhibit D1 –WA#1 Supplemental #1- Fee Proposal" to increase the original Work Authorization amount of **$1,151,217.08** to **$1,401,211.40**; therefore, the amount of **Supplemental No. 1 is $249,994.32.**

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said **Agreement** is amended as follows:

I. Project limits are extended to include Business 83 south to Ridge Road and "Exhibit D – Fee Proposal", of Work Authorization No. 1 to be replaced with "Exhibit D1-WA#1 Supplemental#1 – Fee Proposal" attached.

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 2017.

THE ENGINEER:
L&G CONSULTING ENGINEERS INC.
d/b/a **L&G ENGINEERING**

BY: _____
Jacinto Garza, P.E., President

THE OWNER:
HIDALGO COUNTY

BY: _____
Ramon Garcia, County Judge

LIST OF ATTACHMENTS

Exhibit D1

EXHIBIT D1
WA#1 Supplemental #1 ~ FEE PROPOSAL

Cesar Chavez Road Project
HIDALGO COUNTY PRECINCT #2

		MANHOURS								
		Senior Project Manager	Senior Engineer	Project Engineer	Senior Engineering Technician	Senior Environmental Scientist/Specialist	Admin / Clerical	L&G TOTAL HOURS	Sub-Contract Amounts	Total Line Item Cost
	TASK									
	WA #1 - Cesar Chavez Enviornmental Assessement, Public Involvement, Schematic Design & Survey									
1	Environmental Document for TxDOT/FHWA	8				1002	412	1422		$ 174,851.96
2	Public Involvement for the Project with Stakeholders and 1 Public Meeting	26	95	138			26	285		$ 41,627.68
3	Archeological and Historical Research					374	160	534		$ 65,008.52
4	Engineering Technical Support at Public Meetings with Layouts, Etc.	40	100	130	128		20	418		$ 56,431.72
5	Schematic for Roadway (TxDOT/FHWA)	80	500	604	437			1621		$ 225,159.12
6	Hydrological Map for Outfall Drain Ditch (HCDD#1)	40	200	223	192			655		$ 91,001.66
7	Schematic Design for Outfall (New Location)	45	84	121	99			349		$ 49,506.86
8	HCMPO/TxDOT Coordination for TxDOT Project Review Under New Programming Authority	85	300	50			50	485		$ 80,030.00
9	Office Surveys for Schematic (Prel. Ownership Identificationa and Property Rights)	50	100	120	87		82	439		$ 57,029.68
10	Preliminary Compensable Utilities Identification on Schematic	40	100	134	110			384		$ 54,003.64
11	Update Schematic Based on Comments as Provided by TxDOT/FHWA	48	110	145	101			404		$ 58,005.14
12	Engineering Tehnical Support at Public Hearing with Layouts, Etc.	10	40	64	30		36	180		$ 22,505.04
13	Public Involvement for 1 Public Hearing	23	51	192			48	314		$ 41,627.68
14	Coordination with Surveyor to Ensure Adequate Information for Deliverable	6	6	7				19		$ 3,228.38
14a	SUB: Field Surveys for Design and Construction	See Detailed Proposal from QHA on Sheet 2 of 3							$ 131,200.00	$ 131,200.00
	Subtotal Hours	**501**	**1686**	**1928**	**1184**	**1376**	**834**	**7509**		
	Hourly Base Rate	$ 70.00	$ 58.00	$ 43.00	$ 30.00	$ 49.00	$ 20.00			
	FY 15 Contract Hourly Rate w/ OH Mult. (178.12%) & Fixed Fee (12.00%)	$ 211.40	$ 175.16	$ 129.86	$ 96.64	$ 147.98	$ 60.40			
	Total Labor Costs	**$ 105,911.40**	**$ 295,319.76**	**$ 250,370.08**	**$ 114,421.76**	**$ 203,620.48**	**$ 50,373.60**	**$ 1,020,017.08**	**$131,200.00**	**$1,151,217.08**

Project Team Cost Proposals - Sub Consultants **Cost Proposal**
Quintanilla, Headley & Associates, Inc. $131,200.00 (See detailed break-down of fee on page 2 of 3)

Total Project Fee (Work Authorization #1): $1,151,217.08

	Supplemental #1 to WA #1 - Cesar Chavez Enviornmental Assessement, Public Involvement, Schematic Design & Survey									
1	Environmental Document for TxDOT/FHWA	2				64	16	82		$ 10,859.92
2	Public Involvement for the Project with Stakeholders and 1 Public Meeting	4	12	24			4	44		$ 6,305.76
3	Archeological and Historical Research					90	36	126		$ 15,492.60
4	Engineering Technical Support at Public Meetings with Layouts, Etc.	6	14	18	18			56		$ 7,797.64
5	Schematic for Roadway (TxDOT/FHWA)	30	196	236	170			632		$ 87,749.12
6	Hydrological Map for Outfall Drain Ditch (HCDD#1)	6	36	42	36			120		$ 16,507.32
7	Office Surveys for Schematic (Prel. Ownership Identificationa and Property Rights)	10	18	22	16		14	80		$ 10,515.64
8	Preliminary Compensable Utilities Identification on Schematic	10	26	32	30			98		$ 13,722.88
9	Update Schematic Based on Comments as Provided by TxDOT/FHWA	10	22	30	22			84		$ 11,989.40
10	Engineering Tehnical Support at Public Hearing with Layouts, Etc.	2	10	16	8		8	44		$ 5,508.48
11	Public Involvement for 1 Public Hearing	6	12	50			12	80		$ 10,588.12
12	SUE Effort for Utilities in Conflict (Estimated 25 holes)	14	40	40			40	134		$ 17,576.40
13	Coordination with Surveyor to Ensure Adequate Information for Deliverable	12	20	18				50		$ 8,377.48
13a	SUB: Field Surveys for Design and Construction	See Detailed Proposal from QHA on Sheet 3 of 3							$ 27,003.56	$ 27,003.56
	Subtotal Hours	**112**	**406**	**528**	**300**	**154**	**130**	**1630**		
	Hourly Base Rate	$ 70.00	$ 58.00	$ 43.00	$ 30.00	$ 49.00	$ 20.00			
	FY 15 Contract Hourly Rate w/ OH Mult. (178.12%) & Fixed Fee (12.00%)	$ 211.40	$ 175.16	$ 129.86	$ 96.64	$ 147.98	$ 60.40			
	Total Labor Costs	**$ 23,676.80**	**$ 71,114.96**	**$ 68,566.08**	**$ 28,992.00**	**$ 22,788.92**	**$ 7,852.00**	**$ 222,990.76**	**$27,003.56**	**$249,994.32**

Project Team Cost Proposals - Sub Consultants **Cost Proposal**
Quintanilla, Headley & Associates, Inc. $27,003.56 (See detailed break-down of fee on page 3 of 3)

Total Project Fee (Supplemental #1) $249,994.32

Total Project Fee (Work Authorization #1 & Supplemental #1): $1,401,211.40

EXHIBIT 'D' BUDGET Limited Toographic Survey and Control
Length: 3.04 Miles

	TASK DESCRIPTION CONTROL & TOPOGRAPHIC SURVEY	3-Person Field Party	RPLS Manager	Survey Tech.	CADD Tech	Clerical	Total Labor Hrs. & Costs	CADD Workstation
	Horizontal-Vertical Control (FNC 150)							
1	Recover and Verify Existing Control	30	6	12				
2	Set and GPS intermediate control on 1000' intervals	55	6	36				
3	Process and analyse data holding Texas State Plane Coordinates, South Zone NAD 83/93 datum and NAVD88.		6	36				
4	Provide 11"X 17" Horizontal-Vertical Control Sheets		6	36				
	Topographic Survey (FNC 150)							
1	Locate and Identify visable utilities & drainage structures	197	6	24	36			
2	Provide Cross-sections on 500' intervals within the existing ROW	300	6	18	54			
3	Deliverables			3	6	8		
	TOTAL LABOR HOURS	582	36	135	96	8		
	LABOR RATE PER HOUR	$ 181.67	$ 174.40	$79.74	$ 79.74	$ 72.67		$
	TOTAL LABOR COSTS (FNC 150)	**$** 105,731.94	**$** 6,278.40	**$** 10,791.10	**$** 7,655.04	**$** 581.36	**$**	**$**
	DIRECT EXPENSES:							
	Mileage						**$**	
	CADD Workstation						**$**	
	Reproduction & Delivery					$10.49	**$**	
	SUBTOTAL DIRECT EXPENSES:					$10.49	**$**	
	TOTAL COSTS (FNC 130 & FNC 150)	$105,731.94	$6,278.40	$10,791.10	$7,655.04	$591.85	$131,200.00	

EXHIBIT 'D' BUDGET Limited Toographic Survey and Control
Length: 0.89 Miles

	TASK DESCRIPTION CONTROL & TOPOGRAPHIC SURVEY	3-Person Field Party	RPLS Manager	Survey Tech.	CADD Tech	Clerical	Total Labor Hrs. & Costs	CADD Workstation
	Horizontal-Vertical Control (FNC 150)							
1	Recover and Verify Existing Control	6	2	3				
2	Set and GPS intermediate control on 1000' intervals	11	2	7				
3	Process and analyse data holding Texas State Plane Coordinates, South Zone NAD 83/93 datum and NAVD88.		2	7				
4	Provide 11"X 17" Horizontal-Vertical Control Sheets		2	7				
	Topographic Survey (FNC 150)							
1	Locate and Identify visable utilities & drainage structures	38	2	5	7			
2	Provide Cross-sections on 500' intervals within the existing ROW	58	2	4	10			
3	Deliverables			1	2	2		
	TOTAL LABOR HOURS	113	12	34	19	2		
	LABOR RATE PER HOUR	$181.67	$174.40	$79.74	$79.74	$72.67		
	TOTAL LABOR COSTS (FNC 150)	20,528.71	$2,092.80	$2,711.16	$1,515.06	$145.34		
	DIRECT EXPENSES:							
	Mileage							
	CADD Workstation							
	Reproduction & Delivery					$28.88		
	SUBTOTAL DIRECT EXPENSES:					$10.49		
	TOTAL COSTS (FNC 130 & FNC 150)	$20,528.71	$2,092.80	$2,711.16	$1,515.06	$155.83	$27,003.56	

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-179825

Date Filed:
03/17/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
L&G Consulting Engineers, Inc.
Mercedes , TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
C-15-300-09-01
Supplemental Agreement No. 1 to Contract for Cesar Chavez Road Project

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Sandoval, Armando J.	Mercedes , TX United States		X
Garza , Jacinto	Mercedes , TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

MARIE C. BUSTAMANTE
Notary Public, State of Texas
Comm. Expires 04-14-2017
Notary ID 12686848-8

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Jacinto Garza, this the 20th day of March, 20 17, to certify which, witness my hand and seal of office.

Marie C. Bustamante — Marie C. Bustamante — Exec Admin

Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

AI-59021 **Purchasing Department** **23. C. 2.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

Approval of Work Authorization No. 3 (with an estimated cost of $3,969.00) as submitted by Terracon Consultants, Inc., Contract No. C-16-208-07-19 to provide construction material testing services for the Pct 2 CRC Youth Facility Project.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-451-22-122-118-0-730

FUNDS AVAILABLE Y/N?: Y/Pending **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funding pending approval of AI#58987 CC 3/21/17.

Attachments

Work Auth #3

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/17/2017 03:55 PM
Budget & Management	Veronica Ortiz	03/17/2017 04:07 PM
Ivan Cantu	Ivan Cantu	03/17/2017 04:30 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/17/2017 11:16 AM
Final Approval Date: 03/17/2017		

HIDALGO COUNTY
Professional Engineering Services
Contract # C-16-208-07-19
Work Authorization Form

WORK AUTHORIZATION NO. 3

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, Terracon Consultants, Inc., professional engineers of Pharr, Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide construction material testing services for the Pct. 2 CRC Youth Facility Project located on Earling Road between Raul Longoria Road and Cesar Chavez Road in San Juan, TX.

The scope of services to be provided by the **Owner** is identified in ***EXHIBIT "A" – Scope of Services to be Provided by the Owner*** attached hereto.

The scope of services to be provided by the **Engineer** is identified in ***EXHIBIT "B" – Scope of Services to be Provided by the Engineer*** attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **$ 3,969.00**. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D".**

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with **Article**/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No. 3 shall be funded through funding source:
Account No**.** _____
Requisition Number _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon project completion as indicated in the "Exhibit C-Preliminary Work Schedule".

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by **Hidalgo County Precinct #2,** as to content and detail of this **Work Authorization No. 3**.

HIDALGO COUNTY PRECINCT #2 _____

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____ as indicated below and effective as of ___ day of _____, 2017.

THE ENGINEER:	**THE OWNER:**
Terracon Consultants, Inc.	**HIDALGO COUNTY**
_____	_____
By: Jorge A. Flores, P.G.	**By: Ramon Garcia, County Judge**

ATTEST:

_____

By: Arturo Guajardo, Jr., County Clerk

LIST OF ATTACHMENTS

EXHIBIT "A" - Service to be Provided by the Owner
EXHIBIT "B" - Services to be Provided by the Engineer
EXHIBIT "C" - Work Schedule
EXHIBIT "D" - Cost Proposal

EXHIBIT "A"

Services to be Provided by County

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General:

The Owner will provide to the Laboratory the following:

1) Provide the authorization to proceed with services through coordination with the project consulting and design Laboratory.
2) Payment for work performed by the Laboratory and accepted by the Owner in accordance with Article 3 of this Agreement.
3) Assistance to the Laboratory, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Laboratory cannot easily obtain.
4) Provide any available relevant data the Owner may have on file concerning the projects.
5) Provide timely review and decisions in response to the Laboratory's request for information and/or required submittals and deliverables, in order for the Laboratory to maintain the agreed upon work schedule prepared in accordance with Exhibit "A" attached to this Agreement.
6) Attend and participate in progress meetings as required and as coordinated and conducted by Laboratory.
7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Laboratory.

EXHIBIT B

Scope of Services to be provided by the Engineer

Terracon will perform materials testing in general accordance with the project specifications. The time required for quality control testing during the construction phase on the project is directly related to the contractor's scheduling and performance. Therefore, our fee for materials testing and observation services will be based upon applicable unit prices and hourly rates. Our anticipated scope of services is as follows:

- Field density/moisture testing and laboratory evaluation of soils; and
- Field testing and laboratory evaluation of concrete, observation of reinforced concrete.

Experienced field/laboratory personnel will be provided for testing services. All field/laboratory materials testing/inspection will be performed under the direction of a Texas Registered Professional Engineer. A detailed scope of services envisioned to complete the testing is as follows:

SOILS

Observations/testing will be performed by, or under the direction of a Texas Registered Professional Engineer. The field services will be supported by appropriate laboratory evaluation of soils used as fill or backfill on the site. The laboratory testing will include laboratory moisture-density relationship (Proctor), with sieve analysis and Atterberg limit determinations for classification and/or determination of import fill suitability. Laboratory material evaluations will be conducted as specified for each type of soil encountered during fill placement. The testing will be performed to check compliance with project specifications. The project contractor and construction manager personnel on the site will be informed of our field observations and test results. Written reports of test results will be prepared on a regular basis throughout the project duration and distributed per your directive.

CONCRETE

An American Concrete Institute (ACI) or equivalent Certified Engineering Technician will be provided on an as-requested basis to sample the plastic concrete used during construction. The concrete will be tested for slump, air content and temperature at the time of placement. Sets of concrete cylinders will be molded at each sampling.

All samples will be field cured at the site and returned to our laboratory for additional curing prior to compressive strength testing. Compressive strength testing will be conducted at 7-days (1 specimen), 28-days (2 or 3 specimens) intervals to determine compliance with project specifications. All test results will be conveyed after testing is completed.

PROJECT MANAGEMENT

The project manager will be the point of contact for the project and his duties include as related materials testing and observation services the following:

a) Attend construction meetings, on as scheduled basis;
b) Review concrete mixes submitted, on as scheduled basis;
c) Coordinate field and laboratory testing;
d) Communicate with Terracon field technicians, Contractor, and Owner's site representative;
e) Review laboratory and field test reports;
f) Control our budget and invoice;
g) Performing site visits to the project site; and
h) Provide technical assistance.

EXHIBIT C – Work Schedule

Terracon's work schedule is directly related to the contractor's scheduling and performance. It is the responsibility of the contractor or your designated representative to notify Terracon, in advance (minimum of 24 hour notice), for testing services required on this project. Our services will be performed on an as requested basis.

EXHIBIT D – PROPOSAL

Our fee estimate is in accordance with the time and tests performed as shown below.

SOILS

Estimate 24 hours in-place nuclear moisture-density testing @ $45/hour	$ 1,080.00
Estimate 2 standard proctor (soil (4" and 6" mold, each)) @ $225/test	$ 450.00
Estimate 2 Atterberg Limits (Liquid and Plastic Limits – Single Point Test) @ $75/test	$ 150.00
Estimate 2 percent finer than 200 sieve (washed, soil only, each)@ $55/test	$ 110.00
Estimate 8 nuclear gauge days @ $35/day	$ 280.00
Estimate 8 vehicle trip charge @ $30/trip	$ 240.00
Sub-Total (Soils)	*$ 2,310.00*

CONCRETE

Estimate 18 hours of sampling materials, per hour @ $45/hour	$ 810.00
Estimate 12 compression testing of concrete cylinders made during field @ $14.50/test	$ 174.00
Estimate 6 vehicle trip charge @ $30/trip	$ 180.00
Sub-Total (Concrete)	*$ 1,164.00*

CME Project Manager 4 hours @ $90/hour	*$ 360.00*
Senior Engineer 1 hour @ $135/hour	*$ 135.00*

Total Cost	***$ 3,969.00***

AI-58956 **Purchasing Department** **23. C. 3.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

Approval of Work Authorization No. 2 (with an estimated cost of $3,994.00) as submitted by Terracon Consultants, Inc., Contract No. C-16-208-07-19 to provide construction material testing services for the Co Wide Mechanic Shop Project.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1350-431-00-122-122-0-730

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Funding available as of 3/15/17.

Attachments

Work Auth #2

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/16/2017 10:25 AM
Budget & Management	Veronica Ortiz	03/16/2017 10:40 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/15/2017 11:08 AM
Final Approval Date: 03/17/2017		

HIDALGO COUNTY

Professional Engineering Services
Contract # C-16-208-07-19
Work Authorization Form

WORK AUTHORIZATION NO. **2**

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY, action herein by and through the Commissioner's Court, hereinafter called the "Owner," and, Terracon Consultants, Inc., professional engineers of Pharr, Texas, hereinafter called "Engineer".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the Engineer to provide geotechnical engineering services for the Hidalgo County Pct. 2 County Wide Service Shop Project.

The scope of services to be provided by the Owner is identified in *EXHIBIT "A" – Scope of Services to be Provided by the Owner* attached hereto.

The scope of services to be provided by the Engineer is identified in *EXHIBIT "B" – Scope of Services to be Provided by the Engineer* attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **$** 3,994.00. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as EXHIBIT "D".

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section _____ of the Agreement.

PART 4. FUNDING

This Work Authorization No. 2 shall be funded through funding source:
Account No**.** _____
Requisition Number _____ (MUST BE INCLUDED AFTER CC APPROVAL)

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon project completion as indicated in the "Exhibit C-Preliminary Work Schedule".

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by **Hidalgo County Precinct #2,** as to content and detail of this **Work Authorization No. 2**.

HIDALGO COUNTY PRECINCT #2 _____

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____ as indicated below and effective as of ___ day of _____, 2017.

THE ENGINEER:	**THE OWNER:**
Terracon Consultants, Inc.	**HIDALGO COUNTY**
FOR: _____	_____
By: Alfonso A. Soto, P.E.	**By: Ramon Garcia, County Judge**

ATTEST:

_____

By: Arturo Guajardo, Jr., County Clerk

LIST OF ATTACHMENTS

EXHIBIT "A" - Service to be Provided by the Owner
EXHIBIT "B" - Services to be Provided by the Engineer
EXHIBIT "C" - Work Schedule
EXHIBIT "D" - Cost Proposal

EXHIBIT "A"

Services to be Provided by County

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General:

The Owner will provide to the Laboratory the following:

1) Provide the authorization to proceed with services through coordination with the project consulting and design Laboratory.
2) Payment for work performed by the Laboratory and accepted by the Owner in accordance with Article 3 of this Agreement.
3) Assistance to the Laboratory, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Laboratory cannot easily obtain.
4) Provide any available relevant data the Owner may have on file concerning the projects.
5) Provide timely review and decisions in response to the Laboratory's request for information and/or required submittals and deliverables, in order for the Laboratory to maintain the agreed upon work schedule prepared in accordance with Exhibit "A" attached to this Agreement.
6) Attend and participate in progress meetings as required and as coordinated and conducted by Laboratory.
7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Laboratory.

EXHIBIT B

Scope of Services to be provided by the Engineer

The purposes of this study is to develop geotechnical engineering recommendations and guidelines for use in preparing appropriate design and related construction documents for this project. Our geotechnical engineering study will involve three phases of work: 1) Field, 2) Laboratory, and 3) Report Preparation. Unless stated otherwise in this proposal, we will provide the necessary personnel, equipment, and materials to complete the requirements of this geotechnical engineering study. Our plan for performing each major work category is outlined in the following sections.

Field Program – Based on the existing site conditions, the site plan provided by the client, we are providing the following exploration at this site as noted below:

Boring Locations	No. of Borings	Approximate Depth Below Existing Grade, ft.
County Wide Shop	**2**	**20**
Pavements	**1**	**5**

Sampling will be in general accordance with industry standard procedures wherein Shelby tube samples or split-barrel samples are obtained. Five samples will be obtained in the upper ten feet of each boring and at intervals of five feet thereafter. In addition we will observe and record groundwater levels during and after drilling. Once the samples have been collected and classified in the field, they will be placed in appropriate sample containers for transport to our laboratory.

Conditions/Items to be provided by Client: We have been provided with a scaled drawing that depicts the tentative layout of the proposed development. The locations of the borings will be established using this tentative project layout by our field personnel upon arrival at the site. The boring layout will be approximate. Our field personnel will locate the borings by measuring distances and estimating right angles from available reference points on or adjacent to the site. Additional items to be provided by the client include the right of entry to conduct the exploration and an awareness and/or location of any private subsurface utilities existing in the area. We will contact Texas One Call service for location of utilities in public easements. Location of private lines on the property is not part of the Texas One Call or Terracon scope. All private lines should be marked by others prior to commencement of drilling.

Terracon will take reasonable efforts to reduce damage to the property, such as rutting of the ground surface. However, it should also be understood that in the normal course of our work some such disturbance could occur. We have not budgeted to restore the site beyond backfilling our boreholes. If there are any restrictions or special requirements regarding this site or exploration, these should be known prior to commencing field work.

Our fee is based on the site being accessible to our truck-mounted drilling equipment and Terracon providing layout of the borings; additional costs may result if this is not the case. It does not include services associated with site clearing or location of underground utilities beyond contacting a "one-call" locate service. If such conditions are known to exist on the site, Terracon should be notified so that we may adjust our scope of services and fee, if necessary. We understand that the client will obtain permits required to access boring locations, if needed.

For safety purposes, all borings will be backfilled immediately after their completion. Excess auger cuttings would be disposed of on the site. Because backfill material often settles below the surface after a period of time, we recommend the boreholes be checked periodically and backfilled if necessary. We could provide this service at your request or grout the holes, but this would involve additional cost.

Laboratory Testing – The samples will be tested in our laboratory to determine physical engineering characteristics. Testing will be performed under the direction of a geotechnical engineer and will include visual classification, moisture content, dry density, Atterberg limit, and strength tests (unconfined compression/calibrated penetrometer), as appropriate.

Engineering Analysis and Report – The results of our field and laboratory programs will be evaluated by a professional geotechnical engineer licensed in the State of Texas. Based on the results of our evaluation, an engineering report will be prepared that details the results of the testing performed, provides logs of the borings, and a diagram of the site/boring layout. The report will include the following:

- Computer generated boring logs with soil stratification based on USCS.
- Summarized laboratory data.
- Groundwater levels observed during and after completion drilling
- Boring location plan.
- Subsurface exploration procedures.
- Encountered soils conditions.
- Parameters for foundation design.
- Estimated settlement of foundations;
- Subgrade preparation/ earthwork recommendations; and,
- Pavement design recommendations.

EXHIBIT C – Work Schedule

Schedule - We can generally begin the field exploration program within three days after receipt of notice to proceed, if site and weather conditions permit. We estimate the final geotechnical report can be completed within about two to three weeks after the soil borings are completed. In situations where information is needed prior to submittal of our report, we can provide verbal information or recommendations for specific project requirements after we have completed our field and laboratory programs.

EXHIBIT D – PROPOSAL

Our fee estimate is in accordance with the time and tests performed as shown below.

Mobilization, Drill Crew	$ 300.00
Estimate 45 soil borings, 0 to 50 ft., per lineal foot @ $10.50/each	$ 472.50
Estimate 17 water content determination @ $9.50/test	$ 161.50
Estimate 4 percent finer than 200 sieve (washed, soil only, each) @ $55/test	$ 220.00
Estimate 8 liquid and plastic limit tests (Single Point Test) @ $75/test	$ 600.00
Estimate 1 unconfined compression tests (soil) @ $50/test	$ 50.00
Estimate 8 hours Laboratory/Field Supervisor @ $75/hour	$ 600.00
Estimate 2 hours In-House Consultant, Principal Engineer @ $175/hour	$ 350.00
Estimate 2 hours Project Manager @ $135/hour	$ 270.00
Estimate 8 hours Project Engineer @ $110/hour	$ 880.00
Estimate 2 hours Project Secretary @ $45/hour	$ 90.00
Total Cost	***$ 3,994.00***

AI-59022 **Purchasing Department** **23. C. 4.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Eddie Cantu, COMM. PCT. #2 **Submitted By:** Erika Zamora, COMM. PCT. #2

Department: COMM. PCT. #2

Information

CAPTION

Requesting approval of Supplemental Agreement No. 1 for L&G Consulting Engineers, Inc. d/b/a L&G Engineering, Contract No. C-16-258-06-14 thus amending the contract removing/deleting construction contract administration and inspection services from the professional engineering services contract for the Pct 2 Yuma Avenue Extension Project.

BACKGROUND

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

No fiscal impact.

Attachments

Supplemental Agreement No. 1

1295 signed

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/17/2017 12:14 PM
Budget & Management	Veronica Ortiz	03/17/2017 01:20 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Erika Zamora		Started On: 03/17/2017 11:40 AM
Final Approval Date: 03/17/2017		

EXHIBIT "F"

Supplemental Agreement Form

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO. 1

TO AGREEMENT FOR PROFESSIONAL SERVICES
C-16-258-06-14

THIS **SUPPLEMENTAL AGREEMENT** is made pursuant to the terms and conditions of Article 8 of the Agreement made by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and L&G Consulting Engineers, Inc. d/b/a L&G Engineering, Professional Engineers of, Mercedes, Texas, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the 6th day of June 2016 concerning engineering for **Yuma Avenue Extension Project** (hereinafter referred to as the "**Project**"); and,

WHEREAS, Article 8 of the **Agreement**, (Supplemental Agreements), establishes that the terms of the agreement may be amended by supplemental agreement if the **Owner** determines that (3) for any other reason agreeable to the **Owner** and the **Engineer**; and,

WHEREAS, it has become necessary to amend the contract to **Remove the Construction Contract Administration and Inspection services from Exhibit "B" Section 12 Construction Phase Services of the contract due to the City of Mcallen assuming the responsibility of these services.**

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer**

agree that said **Agreement** is amended as follows:

I. The **Agreement** is revised to

Remove the Construction Contract Administration and Inspection Services from Exhibit "B" Section 12 Construction Phase Services of the contract due to the City of McAllen assuming the responsibility of these services.

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 2017.

THE ENGINEER:
ENGINEER

BY:_____

THE OWNER:
HIDALGO COUNTY

BY:_____
Ramon Garcia, County Judge

LIST OF ATTACHMENTS

(as required)

CERTIFICATE OF INTERESTED PARTIES

FORM **1295**

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-180196

Date Filed:
03/20/2017

Date Acknowledged:

1 **Name of business entity filing form, and the city, state and country of the business entity's place of business.**
L&G Consulting Engineers, Inc.
Mercedes , TX United States

2 **Name of governmental entity or state agency that is a party to the contract for which the form is being filed.**
Hidalgo County

3 **Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.**
C-16-258-06-14
Supplemental Agreeement No. 1 to Contract for Yuma Avenue Extension Project

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Sandoval, Armando J.	Mercedes , TX United States		X
Garza , Jacinto	Mercedes , TX United States	X	

5 **Check only if there is NO Interested Party.** ☐

6 **AFFIDAVIT**

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

MARIE C. BUSTAMANTE
Notary Public, State of Texas
Comm. Expires 04-14-2017
Notary ID 12686848-8

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Jacinto Garza, this the 20th day of March, 20 17, to certify which, witness my hand and seal of office.

Marie C. Bustamante | Marie C Bustamante | Exec Admin

Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

AI-58889 **Purchasing Department** **23. C. 5.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Marty Salazar, PURCHASING DEPT.

Submitted By: Rocio Villarreal, PURCHASING DEPT.

Department: PURCHASING DEPT.

Information

CAPTION

Requesting approval of a professional appraisal services agreement with LEONEL GARZA, JR. & ASSOCIATES, LLC for the purposes of appraisal services for: The Fair Market Value Appraisals in connection with the Acquisition of Land-Sale and/or Exchange, Rights of Way, Easements, Condemnations and Disposition of County owned Property located within Hidalgo County Precinct No. 2 (on an as needed basis) and as selected for negotiations by CC from the "POOL" of Appraisers by CC on 2/6/17.

BACKGROUND

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funding will be provided as needed per project.

Attachments

Agreement

Legal Approval

Form 1295

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/09/2017 11:37 AM
Budget & Management	Veronica Ortiz	03/09/2017 12:16 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Rocio Villarreal Started On: 03/09/2017 09:43 AM

Final Approval Date: 03/17/2017

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

PROFESSIONAL SERVICES CONTRACT
C-17-085-03-21

THIS AGREEMENT is made effective the 21st day of March, 2017, by and between the **County of Hidalgo, Texas** ("County") and **Leonel Garza, Jr. & Associates, LLC** ("Appraiser").

W I T N E S S E T H:

WHEREAS, the County requires appraisal services for: **The Fair Market Value Appraisals in connection with the Acquisition of Land, Rights of Way, Easements, Condemnations and Disposition of County owned Property located** within **Hidalgo County Precinct No. 2**; and

WHEREAS, the County of Hidalgo solicited Request for Qualifications (RFQ) for the development and establishment of a yearly pool for "Professional Appraisal Services", and

WHEREAS, from which "Professional Appraiser" has been selected from the "Pool" of pre-qualified Appraisers from response to the Request for Qualifications (RFQ), and

WHEREAS, County has determined that the services of "Professional Appraiser" are sometimes necessary to carry out the required appraisal activities.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, County and Appraiser do mutually agree as follows:

1. Scope of Services. Appraiser agrees to provide to County **the Fair Market Value Appraisals in connection with the Acquisition of Land, Rights of Way, Easements, Condemnations and Disposition of County owned Property located** within **Hidalgo County Precinct No. 2** as shown in Exhibit "A" attached hereto and entitled "Services to be Provided by the Appraiser". ***In the event the Appraiser does not provide the fair market value appraisal prior to the date specified on the purchase order, the Purchase Order will become NULL and VOID. If such Purchase Order becomes NULL and VOID and a fair market value appraisal is secured from another firm, Appraiser will be responsible for any additional charges or***

expenses incurred by Hidalgo County. Further, in the event that it is demonstrated by Appraiser that Hidalgo County has caused or delayed thus preventing the Appraiser from meeting the specified agreed upon deadline to provide the fair market value appraisal ordered, Appraiser must advise in written notice to the Purchasing Department to authorize and to secure additional time to comply.

2. Non-Exclusive Services of Appraiser. Hidalgo County reserves the right to request these services from other sources other than the Appraiser and shall not be in violation of any terms or conditions of this Agreement. The County assumes no liability or obligation for payment to the Appraiser for work performed or costs incurred by the Appraiser prior to the date authorized by the County for the Appraiser to begin work, during periods when work is suspended, or subsequent to the Termination Date.

3. Term. This Contract is for a period of **one (1) year**, effective **March 21, 2017**, and will expire **March 20, 2018** or unless sooner terminated as provided herein. The Appraiser will not begin work or incur costs until authorized in writing by the County for each "Purchase Order".

4. Compensation. As consideration for rendering the Services provided for in this Contract, the County agrees to pay the Appraiser the amounts specified in Exhibit "B" attached hereto payable against written invoice submitted by Appraiser. The Appraiser is authorized to submit periodic requests for payment within thirty days after completion of each purchase order. The request for payment shall be made using forms acceptable to the County and shall show the total amount earned to the date of submission and the amount due and payable as of the date of the current billing. Upon receipt of said request for payment, County shall submit a requisition for payment of said services in the customary manner provided for payments utilized by Hidalgo County, Texas. Appraiser agrees to separately account for the receipt and/or expenditure of funds received pursuant to this Contract and to keep adequate books and records of all such receipts and/or expenditures. All payments to Appraiser shall be mailed to the address shown in numbered paragraph 21, hereof.

5. Progress. Upon acceptance of a purchase order, the Appraiser shall undertake and complete the authorized work. The County or the Appraiser can request conferences to be provided at the Appraiser's office, the office of the County, or at other agreed upon locations.

6. Inspection of Work. The County has the right at all reasonable times to inspect or otherwise evaluate the work performed or being performed hereunder and the premises in which it is being performed. If any inspection or evaluation is made on the premises of the Appraiser, or a subcontractor, the Appraiser shall provide and require its subcontractor to provide all reasonable facilities and assistance for the safety and convenience of the inspectors in the performance of their duties. All inspections and evaluations shall be performed in such a manner as will not unduly delay the work.

7. Amendments. If it becomes necessary at any time during the contract period to change the scope of work, the contract period, the maximum amount payable, the complexity, or the character of this contract, an amendment must be prepared and executed within the contract period. The County retains the right to reject any such amendment proposed by the Appraiser unless the County finds the proposed amendment necessary to complete the work authorized herein. Any such amendments be made in writing agreed to by all parties hereto and duly executed before the end of the contract period as specified.

If the County finds it necessary to require changes in completed work because of errors made by the Appraiser, the County shall require the Appraiser to correct the work at no cost to the County and without amendment to the contract. If the changes are made at the request of the County and are not due to errors of the Appraiser, the County will reimburse the Appraiser for the additional work at the same rate of pay established in Exhibit "B", "Basis for Payment". If payment for the additional work will cause the maximum amount payable to be exceeded, an amendment shall be executed in accordance with the terms of this provision.

8. Reporting. The Appraiser shall promptly advise the County in writing of events which have a significant impact upon the contract, including:

a. Problems, delays, or adverse conditions which will materially affect the ability to meet time schedules and goals, or preclude the attainment of project work units by established time periods. This disclosure shall be accompanied by a statement of the action taken, or contemplated, and any County or, if Federal funds are involved, Federal assistance needed to resolve the situation.

b. Favorable developments or events which enable meeting time schedules and goals sooner than anticipated or producing more work units than originally projected.

9. Ownership of Documents. Upon completion or termination of this contract, all documents prepared by the Appraiser or furnished to the Appraiser by the County shall be delivered to and become the property of the County. All sketches, photographs, calculations, and other data prepared under this contract shall be made available, upon request, to the County without restriction or limitation on their further use. The Appraiser may, at its own expense, have copies made of the documents or any other data furnished the County under this contract.

10. Independent Contractor. Appraiser must comply with all applicable Hidalgo County policies and with any applicable federal, state or local laws, regulations, orders or ordinances applicable to the services provided by Appraiser under this Contract. Notwithstanding the foregoing sentence, Appraiser represents and maintains that it is an independent contractor and is not an employee of Hidalgo County, Texas, or any agency thereof, and represents and warrants that it does not desire or request any fringe benefits provided to employees of Hidalgo County, Texas, and/or any agency thereof, including, but not limited to benefits associated with Hidalgo County's civil service program. Appraiser agrees to be responsible for any federal income tax, withholding or social security tax liability that might arise from payments received hereunder.

11. Voluntary Termination. County may terminate this Contract at any time for any reason or no reason at all upon the giving of thirty (30) days prior written notice to the other party.

12. Insurance. Appraiser agrees to provide liability insurance covering its activities in providing the services for County in an amount not less than the minimum amounts prescribed by the Texas Tort Claims Act, ' 100.001, et seq., Texas Civil Practices and Remedies Code, and shall furnish department a certificate of insurance, Exhibit “C”, issued by the insurer that such insurance

is in full force and effect.

13. No Assignment. Except as otherwise herein provided, Appraiser, may not assign the obligations or rights under this contract to any person without the prior written consent of County.

14. Conflict. Nothing in this Contract shall be construed so as to require the commission of any act contrary to law, and whenever there is any conflict between any provision of this Contract and any present or future law, ordinance or administrative, executive or judicial regulation, order or decree, or amendment thereof, contrary to which the parties have no legal right to contract, the latter shall prevail, but in such event the affected provision or provisions of this Contract shall be modified only to the extent necessary to bring them within the legal requirements and only during the time such conflict exists

15. Termination by County. If Appraiser fails to deliver quality service, fails to achieve the defined goals, outcomes, strategies and outputs set by County, or if Appraiser fails to comply with any conditions in this Contract, then County shall have the right to terminate this Contract upon the giving of ten (10) days prior written notice to Appraiser.

16. No Waiver. No waiver by County of any breach of any provision of this Contract shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision hereof.

17. Entire Agreement. This Contract contains the entire agreement between the parties hereto, and each party acknowledges that neither has made (either directly or through any agent or representative) any representations or agreements in connection with this Contract not specifically set forth herein. This Contract may be modified or amended only by agreement in writing executed by County and Appraiser, and not otherwise.

18. Venue. This Contract shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created hereunder are performable in Hidalgo County, Texas. The parties hereby consent to personal jurisdiction in Hidalgo County, Texas.

19. Hold Harmless. In the event Appraiser should cause, either directly or indirectly, damage, loss, destruction, liability, or claims against the other party as a result of intentional conduct, negligence or otherwise, Appraiser shall hold harmless and indemnify County from any and all obligations, liabilities, causes of action, lawsuits, damages, and assessments, including legal fees, etc., that result from the Appraiser=s intentional actions or negligence. This indemnification clause shall survive this Contract and be enforceable as a separate agreement in the event its survival and enforcement becomes necessary.

20. Attorney's Fees. In the unlikely event that a dispute occurs which is litigated or arbitrated, or a cause of action in law or equity is filed concerning the operation, construction, interpretation, or enforcement of this Contract, the losing party shall bear the cost of the attorney's fees incurred by the prevailing party and any and all costs applicable thereto, including, but not limited to, court costs, deposition fees, expert witness fees, out-of-pocket expenses and travel expenses which are incurred by the prevailing party.

21. Notices. Except as may be otherwise specifically provided in this Contract, all notices, demands, requests or communications required or permitted hereunder shall be in writing and shall either be (i) personally delivered against a written receipt, or (ii) sent by registered or certified mail, return receipt requested, postage prepaid and addressed to the parties at the addresses set forth below, or at such other addresses as may have been theretofore specified by written notice delivered in accordance herewith:

If to County:	Hidalgo County Attention: County Judge 100 East Cano, 2nd Floor Edinburg, Texas 78539
If to Appraiser:	**Leonel Garza, Jr. & Associates, LLC** Attn: Leonel Garza, III, Co-Owner/Primary R.E.A. 1419 Dove, Suite 1 McAllen, Texas 78504

Each notice, demand, request or communication which shall be delivered or mailed in the manner described above shall be deemed sufficiently given for all purposes at such time as it is personally delivered to the addressee or, if mailed, at such time as it is deposited in the Unites

States mail.

22. Execution of Documents. The parties hereto covenant and agree that they will execute such other and further instruments and documents as are or may become necessary or convenient to effectuate and carry out the terms of this Contract.

. **23. Binding Contract.** This Contract shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, executors, administrators, legal representatives, successors, and assigns where permitted by this contract.

24. Gender. All pronouns used in this Contract shall include the other gender, whether used in the masculine, feminine or neuter gender, and the singular shall include the plural whenever and as often as may be appropriate

25. Authority. The execution and performance of this Contract by County and Appraiser have been duly authorized by all necessary laws, resolutions or corporate action, and this Contract constitutes the valid and enforceable obligations of County and Appraiser in accordance with its terms.

26. Commitment of Current Revenues Only. In the event that, during any term hereof, the Commissioners Court does not appropriate sufficient funds to meet the obligations of County under this Agreement, County may terminate this Agreement upon ninety (90) days written notice to Company. County agrees, however, to use reasonable efforts to secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of County pursuant to the provisions of Tex. Loc. Govt. Code Ann. ' 271.903 (Vernon Supp. 1996).

27. Immunities. Nothing in this Agreement is intended to and County does not hereby waive, release or relinquish any right to assert any of the defenses County enjoys by virtue of the state or federal constitution, laws, rules or regulations, and any sovereign, official or qualified immunity available to County as to any claim or action of any person, entity, or individual against County.

EXECUTED as of the day and year first written above.

Approved by Commissioners' Court on _____, 2017.

APPROVED AS TO FORM:
Atlas, Hall & Rodriguez, LLP

By:_____
Stephen L. Crain, Attorney

COUNTY OF HIDALGO, TEXAS

By:_____
Ramon Garcia, County Judge

APPRAISER:
Leonel Garza, Jr. & Associates, LLC

By:_____

Printed Name: Leonel Garza, III

Title: Owner/Primary R.E.A.

ATTEST:

_____
Arturo Guajardo, Jr., County Clerk

EXHIBIT “A-1”

REQUEST FOR QUALIFICATIONS (RFQ) PROCUREMENT PACKET

Hidalgo County Purchasing Department
2812 S. Business Highway 281
Edinburg, Texas 78539
(956) 318-2626/ Fax: (956) 292-7612

February 1, 2016

Participant's name

Address

City

State, Zip Code

Re: **HIDALGO COUNTY**
Request for Qualifications - **"Professional Appraisal Services and/or Appraisal Review Services Annual Pool-Hidalgo County"**
(Including all funding sources, programs, and entities)
RFQ No: 2016-005-02-17-SMA

Dear Respondents:

Enclosed please find a Request for Qualifications (RFQ) packet for your consideration. Hidalgo County Purchasing Department welcomes and appreciates your participation in the RFQ process.

We have updated our RFQ packet. Carefully read and review all instructions, requirements, specifications and/or scope of work included in this packet.

If any further assistance is required, please do not hesitate to call the Purchasing Department at (956) 318-2626.

Sincerely,

Martha L. Salazar, CPPB
Hidalgo County Purchasing Agent

MLS/sma
Enclosures

Hidalgo County Purchasing Department
New Administration Building
2812 S. Business Highway 281
Edinburg, Texas 78539
(956) 318-2626/ Fax: (956) 318-2629

REQUEST FOR QUALIFICATIONS (RFQ)

TABLE OF CONTENTS

HIDALGO COUNTY

(All funding sources, programs and entities)

"Professional Appraisal Services and/or Appraisal Review Services Annual Pool"

RFQ No: 2016-005-02-17-SMA

Item	Description	No. of Pages
1.	Request for Qualifications Letter	1
2.	Request for Qualifications, Legal Notice	9
3.	Exhibit A, Requirements	8
4.	Exhibit B, Evaluation Criteria and Evaluation Form	1
5.	Attachment B –Procurement Form –Areas of Specialization	1
6.	Exhibit C, Insurance Requirements	4
7.	Exhibit D-1, CIQ Conflict of Interest Questionnaire	3
8.	Exhibit D-2, CIS Local Government Officer Conflicts Disclosure Statement	3
9.	Exhibit E, Proposer's Affidavit	1
10.	Vendor/Bidder Application and W-9 form	6
11.	Certification Regarding Debarment	1
12.	RFQ Submittal Check List	1

The above mentioned items shall be found in the Request for Qualifications (RFQ) packet that is attached herewith. Should you find that any of the items are not attached in its entirety please contact Purchasing by calling (956) 318-2626, advise of missing documentation, and Purchasing will forward information either through facsimile or by U.S. Mail.

Thank you.

Martha L. Salazar, CPPB, Purchasing Agent

February 1, 2016
Date

REQUEST FOR QUALIFICATIONS (RFQ)

HIDALGO COUNTY

(Including all funding sources, programs, and entities)

"Professional Appraisal Services **and/or** Appraisal Review Services Annual Pool"

RFQ NO: 2016-005-02-17-SMA

Acceptance Due Date: **February 17, 2016**

Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department

Project Buyer Contact Information:

Sandra Montalvo, Buyer II
(956) 318-2626 Ext. 4865
sandra.montalvo@co.hidalgo.tx.us

1. Sealed qualifications will be received for **"Hidalgo County (Including all funding sources, programs, and entities) Professional Appraisal Services and/or Appraisal Review Services Annual Pool"**, *in* accordance with the requirements attached hereto as Exhibit "A." Qualifications should address all requirements set forth. Respondents may suggest substitutions of features which they feel would be in the best interest of Hidalgo County ("County"). Strong rationale must be presented for any deviation from the requirements. Hidalgo County reserves the right to reject the deviation and its effect on the overall qualifications.

2. **One (1) original, three (3) copies** of all qualifications and **eight (8) CDs in PDF Format** are required with the respondent's name and address clearly typed/printed on upper left hand corner and the proper notation clearly typed/printed on the lower left hand corner of the envelope and/or package, **RFQ 2016-005-02-17-SMA Hidalgo County (Including all funding sources, programs, and entities) Professional Appraisal Services and/or Appraisal Review Services Annual Pool"**, and in County's Purchasing Department, Physical Location: 2802 S. Business Hwy. 281 Postal/ Mailing: 2812 S. Business Hwy. 281 New Administration Building, Edinburg, Texas, **ON OR BEFORE 9:30 A.M., WEDNESDAY, FEBRUARY 17, 2016.**

   NO FACSIMILES OR LATE ARRIVALS WILL BE ACCEPTED. ANY QUALIFICATION RECEIVED AFTER THAT TIME WILL NOT BE OPENED AND WILL BE RETURNED. OVERNIGHT MAIL MUST ALSO BE PROPERLY LABELED ON THE OUTSIDE OF EXPRESS ENVELOPE OR PACKAGE IN REFERENCE TO QUALIFICATION.

   Hidalgo County reserves the right to refuse and reject any/all qualifications and to waive any/all formalities or technicalities, or to accept the proposal considered the best and most advantageous to Hidalgo County.

3. Hidalgo County reserves the right to separate and accept, or eliminate any item(s) listed under this qualification that it deems necessary to accommodate budgetary and/or operational requirements. Hidalgo County also reserves the right to reject any or all qualifications submitted and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best qualification for approval. Receipt of any qualification shall under no circumstances obligate County to accept the lowest dollar qualification. The award of this contract shall be made to the responsible offeror whose qualification is determined to be the best evaluated offer resulting from negotiation, taking into consideration the relative importance of price and other evaluation factors as herein set forth.

4. Failure of the delivered item to perform as specified or failure to meet the stated delivery schedule shall release Hidalgo County from all obligations to the contracting party with regard to the item(s) in question. In such event, County may elect to award the contract to the next-lowest responsible respondent, or to reject all qualifications and re-advertise.

5. For work to be performed at a County owned or operated location, each respondent shall, in its sole discretion, visit the job site before preparing the qualification and thoroughly familiarize himself/herself with existing conditions. Respondent should take field dimensions and note all circumstances which affect the dollar amount of the qualification.

6. Descriptive specifications are referenced in this document to indicate the general kind and quality of equipment desired by Hidalgo County. Due to various styles and models of equipment, respondents are required to include illustrations, specifications, explanation of warranties, and service data with their qualification including catalogue numbers and any necessary references.

7. Proposed prices are to remain firm for a minimum of ninety (90) days after priced qualification opening.

8. County reserves the right to accept or reject any or all qualifications.

9. Any interpretations, amendments, corrections or changes to this qualification document must be in a written addendum and signed by the County Judge or his designee. Addenda will be mailed to all who are known to have received a copy of the Request for Qualifications. Respondents shall acknowledge receipt of all addenda as a part of their qualification.

10. Costs are to be net F.O.B., County Prepaid.

11. County is exempt from Federal Excise Tax, State Tax and Local Tax. DO NOT include tax in cost figure. If it is determined that tax was included in the cost figure it will not be included in the tabulation of any awards. Tax exemption certificates will be furnished upon request.

12. Funds for this procurement have been provided through the County budget for this fiscal year only. County, on an annual basis, has the right to reconsider a contract during the budget process for ensuing years if financial resources of County are insufficient to meet the liabilities of said contract. The award of a qualification or contract hereunder will not be construed to create a debt of the County which is payable out of funds beyond the current fiscal year.

13. **DELIVERY INSTRUCTIONS:**

- No deliveries accepted after 3:00 P.M., Monday-Friday.
- At least seventy two (72) hours prior notice of delivery must be given to Martha L. Salazar, CPPB, Purchasing Agent before delivery will be accepted.
- If you need additional information call the office listed below:

Hidalgo County Purchasing Department
Martha L. Salazar, CPPB, Purchasing Agent
(956) 318-2626

14. **BILLING AND PAYMENT INSTRUCTIONS:**

- Invoices must include:
  a) Name and address of successful respondent
  b) Name and address of receiving department or official
  c) Purchase Order Number and Contract number (if any)
  d) Notation- **"Hidalgo County (Including all funding sources, programs, and entities) RFQ: 2016-005-02-17-SMA-HIDALGO COUNTY (Including all funding sources, programs, and entities) "Professional Appraisal Services and/or Appraisal Review Services Annual Pool",**
  e) Descriptive information as to the items or services delivered, including product code, item number, quantity, etc.
- Discount payments will be considered when offered.
- Contact person for Billing and Payment questions:

HIDALGO COUNTY AUDITOR'S OFFICE
Postal/Mailing 2808 S. Business Hwy. 281
Edinburg, Texas 78539
(956) 318-2511

15. SCHEDULE OF EVENTS

Qualification Opening, 9:30 A.M.	**February 17, 2016**
Award of Contract:	2016
Commence Work or Deliver Products:	2016

16. HIDALGO COUNTY HOLIDAYS:

2016 YEAR	
New Year's Day	01/01/16
Martin Luther King Day	01/18/16
President's Day	02/15/16
Good Friday	03/25/16
Memorial Day	05/30/16
Independence Day	07/04/16
Labor Day	09/05/16
Columbus Day	10/10/16
Veteran's Day	11/11/16
Thanksgiving Day	11/24/16-11/25/16
Christmas Day	12/23/16-12/26/16
New Year's Eve	12/30/16

17. ~~BID OR PERFORMANCE BOND~~ AND DEBARMENT CERTIFICATION; ~~PAYMENT UNDER CONTRACT:~~

- ~~If the contract proposed is for the construction of public works or is for a contract for goods and services exceeding $100,000, all bidders shall furnish a good and sufficient bid bond in the amount of five percent of the total contract price. A bid bond must be executed with a surety company authorized to do business in Texas~~. All respondents are also required to furnish a certification or acknowledgment stating that the contractor or vendor is free from suspension or debarment pursuant to federal regulation 45CFR76.

- ~~Together with the signing of a contract or issuance of a purchase order following the acceptance of a qualification, and prior to commencement of the actual work, the respondent shall furnish a performance bond to the County for the full amount of the contract, if that contract exceeds $50,000.~~

- ~~If the contract is for $50,000 or less, no money will be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County, and, if applicable, the receipt by County of satisfactory evidence that all subcontractors and materialmen have been paid.~~

- ~~If a contract is for the construction, alteration or repair of public buildings or public works, the contractor *shall* provide a payment bond for a contract in excess of Twenty Five Thousand Dollars ($25,000.00), as required by Tex. Govt. Code Ch. 2253.~~

- ~~For requirements contracts, bond requirements are determined by applying the proposed unit price to the estimated quantities included in the specifications.~~

18. ETHICAL STANDARDS:

- It shall be a breach of ethics to offer, give or agree to give any elected official, department head or employee, or former elected official, department head or employee, of the County, or for any elected official, department head or employee or former elected official, department head or employee of the County, to solicit, demand, accept or agree to accept from another person, entity or organization, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter pertaining to any program requirement or a contract or subcontract, or to any solicitation or qualification therefore pending before any department or agency of the County.

- It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for the County, or any person associated therewith, as an inducement for the award of a subcontract or order.

- No public official shall have an interest in a contract awarded hereunder except in accordance with Tex. Loc. Govt. Code Chapter 171.

- **NOTICE:**

  ALL COMMUNICATIONS BY A VENDOR TO THE COUNTY, ITS OFFICIALS, AND DEPARTMENT HEADS REGARDING THIS PROCUREMENT SHALL BE DONE THROUGH THE HIDALGO COUNTY PURCHASING DEPARTMENT.

  No vendor, its representative, agent, or employee shall engage in private communication with a member of the Hidalgo County Commissioners Court or county department heads regarding any procurement of goods or services by the County from the date that the bid, RFP, or RFQ is released. No private communication regarding the purchase shall be permitted until the procurement process is complete and a purchase order is granted or a contract is entered into. Members of the commissioners court are required to make a reasonable effort to inform themselves regarding potential procurements and have a duty to inquire of vendors, their representatives or employees, the nature of any private communication being sought prior to engaging in any communication. "Private Communication" means communication with any vendor outside of a posted meeting of the governing body, a regular meeting of a standing or appointed committee, or a negotiation with a vendor which has been specifically authorized by the governing body.

19. DISCLOSURE OF CONFLICT OF INTEREST

Effective January 1, 2016, Chapter 176 of the Texas Local Government Code requires that any vendor, person, consultant or contractor considering doing business with Hidalgo County ("the County") to disclose in the Conflict of Interest Questionnaire (the "CIQ") attached as Exhibit D-1, the vendor, person, consultant or contractor's affiliation or business relationship that might cause a conflict of interest with the County. By law, the CIQ must be filed with the Hidalgo County Clerk's Office no later than the seventh business day after the date the person becomes aware of facts that require that statement to be filed. The disclosure requirement applies to a person or business that contracts or seeks to contract with Hidalgo County for the sale or purchase of property, goods or service. Any purchase order or contract resulting from this process shall be considered null and void if the successful respondent fails to comply with Texas Local Government Code Chapter 176. Vendors, consultants, contractors and others who desire to conduct business with Hidalgo County are encouraged to refer to Texas Local Government Code Chapter 176 for details of this law. An offense under Texas Local Government Code Chapter 176 is a Class C Misdemeanor.

Completed Form CIQ must be submitted to the Hidalgo County Clerk's Office located at 100 N. Closner, Edinburg, Texas 78539 - Hidalgo County Courthouse.

COMPLETION AND SUBMISSION OF FORM CIQ IS THE SOLE RESPONSIBILITY OF THE PROSPECTIVE RESPONDENT. QUESTIONS REGARDING COMPLIANCE SHOULD BE DIRECTED TO YOUR LEGAL COUNSEL.

20. CERTIFICATE OF INTERESTED PARTIES (FORM HB1295)

As of January 1, 2016, to comply with Texas Government Code Section §2252.908, and the rules issued by the Texas Ethics Commission found in Title 1, Section 46.1, 46.3 and 46.5 of the Texas Administrative Code, we have updated and revised our RFQ packet. In accordance with these requirements, business must submit a completed Certificate of Interested Parties Form 1295 to the County before the County may enter into a contract with the business entity. In box 3 of Form 1295, you will provide the RFQ No. as shown on the packet. Once completed and filed with the Texas Ethics Commission, Form 1295 must be printed and signed in the presence of a notary and submitted to our office either by facsimile transmission to (956) 292-7612 or via email to sandra.montalvo@co.hidalgo.tx.us. Hidalgo County cannot enter into a contract until Form 1295 is submitted. Therefore, failure to timely submit Form 1295 signed and notarized may result in delay of award. Full instructions for completion and submittal of Form 1295 may be found on the Texas Ethics Commission website:

https://www.ethics.state.tx.us/tec/1295-Info.htm

THE AWARDED VENDOR WILL HAVE THIRTY (30) DAYS TO SUBMIT THE SIGNED NOTARIZED FORM 1295. ***HIDALGO COUNTY CANNOT ENTER INTO A CONTRACT UNTIL FORM 1295 IS SUBMITTED.***

FORM CIS (LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT) will be included in packet as Exhibit "D-2".

COMPLETION AND SUBMISSION OF FORM CIS IS THE SOLE RESPONSIBILITY OF THE PROSPECTIVE RESPONDENT. QUESTIONS REGARDING COMPLIANCE SHOULD BE DIRECTED TO YOUR LEGAL COUNSEL.

21. If, during the life of any contract or qualification awarded, the successful respondents' net prices generally available to other customers for items awarded herein are reduced below the contracted price, it is understood and agreed that the benefits of such reduction shall be extended to County.

22. Qualifications, and all goods and services provided thereunder, shall comply with all federal, state and local laws concerning this type(s) of goods and/or services.

23. Minimum Standards for Responsible Prospective Respondents: A prospective respondent must affirmatively demonstrate respondent's responsibility. A prospective respondent, by submitting a qualification, represents to County that it meets the following requirements:

- Possess or is able to obtain adequate financial resources as required to perform under the qualification;
- Be able to comply with the required or proposed delivery schedule;
- Have a satisfactory record of performance;
- Have a satisfactory record of integrity and ethics;
- Be otherwise qualified and eligible to receive an award.

24. Successful respondent will pay or cause to be paid, without cost or expenses to County, all FICA, FUTA/SUTA and Federal Income Withholding Taxes of all employees, and all wages and benefits as required by Federal or State law. Successful respondents' officers, agents and/or employees will not be entitled to any benefits of an employee or elected official of County, including, but not limited to, benefits associated with Countys' civil service system.

25. Any contract award to a successful respondent will be in effect until (a) the contract expires, (b) delivery and acceptance of products, and/or performance of services ordered, or (c) terminated by County with thirty (30) day's written notice prior to cancellation.

26. County reserves the right to enforce performance of any contract awarded hereunder in any manner prescribed by law or deemed to be in the best interest of the County. County reserves the right to terminate contract immediately in the event of breach or default by successful respondent, or in the event a successful respondent fails to:

A. Meet schedules;
B. Pay any required fees or taxes; or
C. Otherwise perform in accordance with the requirements.

27. Successful respondent shall defend, indemnify and save harmless County and all its elected officials, officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful respondent, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from qualification award. Successful respondent indemnifies and will indemnify and save harmless County from liability, claim or demand on their part, agents, servants, customers, and/or employees whether such liability, claim or demand arise from event or casualty happening on or within the occupied premises themselves or happening upon or in any of the halls, elevators, entrances, stairways or approaches to the facilities within which the occupied premises are located. Successful respondent shall pay any judgment with costs which may be obtained against county

growing out of such injury or damages, and shall, upon request, provide a defense to County by counsel reasonably acceptable to County. Successful respondents' indemnity hereunder shall include, but is not limited to, claims relating to patent, copyright or trademark infringement, and the like, arising out of the goods or services provided by successful respondent.

28. Successful respondent shall warrant that all items/services shall conform to the specifications and/or all warranties provided under the Uniform Commercial Code and be free from all defects in material, workmanship and the like. Items supplied under a contract pursuant to this Request for Qualifications shall be subject to Countys' approval. Items found to be defective or not meeting specifications shall be replaced by successful respondent within two business days at no expense to County. Items not picked up within one (1) week after notification shall be deemed a donation to County and may be used or disposed of at County's discretion and without waiver of any other rights of County as to the items' nonconformity.

29. This document and any disputes arising hereunder shall be governed and construed according to the laws of the State of Texas, and will be performable exclusively in Hidalgo County, Texas.

30. The successful respondent shall not assign, sell, transfer or convey its rights under any awarded contract, in whole or in part, without the prior written consent of County.

31. Respondents shall provide with the qualification response, a list of at least three (3) references where like services have been supplied by their firm. Include the name of the business or government, address, telephone number and name of representative or contact person.

32. Respondents must provide **all** documentation requested with this Qualification in their response. Failure to provide this information may result in rejection of the qualification as nonconforming.

Request for Qualifications
For
HIDALGO COUNTY
(Including all funding sources, programs, and entities)
"Professional Appraisal Services and/or Appraisal Review Services Annual Pool"
RFQ NO: 2016-005-02-17-SMA

To: Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department
Physical Location: 2802 S. Business Hwy. 281
Postal/ Mailing: 2812 S. Business Hwy. 281
New Administration Building
Edinburg, Texas 78539

In accordance with the Requirements, and subject to all laws and regulations of the United States and state and local laws, the undersigned respondent proposes and commits to furnish all labor, equipment, material, software and services as set forth in the documents hereinbefore mentioned. The undersigned further agrees, upon acceptance of its qualification, to execute a contract and/or Purchase Order issued by Hidalgo County for performing and completing the work described in the Requirements within the time stated and for the prices proposed in the documents attached hereto and made a part hereof.

Respondent acknowledges receipt of all of the pages of the documents referenced in the Request for Qualification Checklist presented in connection with this procurement. Respondent understands that Hidalgo County reserves the right to reject any or all qualifications and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best qualification.

Respondent agrees that this qualification shall be good and may not be withdrawn for a period of ninety (90) calendar days after the scheduled closing time for receiving qualifications, as contained in the Requirements.

Respectfully submitted,

Firm: _____

Address: _____

By: _____

Printed Name: _____

Title: _____

EXHIBIT A
REQUIREMENTS

HIDALGO COUNTY
(INCLUDING ALL FUNDING SOURCES, PROGRAMS, AND ENTITIES)
REQUEST FOR QUALIFICATIONS

"PROFESSIONAL APPRAISAL SERVICES *AND/OR* APPRAISAL REVIEW SERVICES ANNUAL POOL"

RFQ № 2016-005-02-17-SMA

The County of Hidalgo will be accepting Statements of Qualifications from Real Estate Appraisers (firms) in order to establish a pre-qualified pool on an "As Needed Basis" per project by all County Departments and/or applicable Programs requiring said services as set forth in the requirements. Upon approval and acceptance by Hidalgo County Commissioners' Court, the term of the pre-qualified pool of Real Estate Appraisers will be for **March 16, 2016 and ending March 15, 2017.** The Hidalgo County Purchasing Department will receive **sealed** envelopes containing Statement of Qualifications for the provision of **"PROFESSIONAL APPRAISAL SERVICES AND/OR APPRAISAL REVIEW SERVICES ANNUAL POOL-HIDALGO COUNTY"** (including all funding sources, Programs, and Entities)-**Request For Qualifications** as specified herein. Statements of Qualifications will be accepted until **9:30 A.M., Wednesday, February 17, 2016.** **ANY RFQ RECEIVED AFTER THAT TIME WILL NOT BE OPENED AND WILL BE RETURNED.**

The following outlines the Request for Qualifications:

SECTION I

GENERAL TERMS AND CONDITIONS

RFQ DOCUMENT SUBMITTALS/DELIVERY

A total of one (1) original, three (3) copies and eight (8) CD's in PDF format of the RFQ shall be submitted as part of your response.

Respondents must complete and include in their response, all documentation requested in this RFQ. Refer to enclosed RFQ Check List form for documents to be included with your response.

Hidalgo County is requesting that statements of Qualifications responses be sealed, clearly marked and labeled with the Company's name, RFQ N0: 2016-005-02-17-SMA, Project title: "Professional Appraisal Services and/or Appraisal Review Services Annual Pool" and Opening Date and be delivered to Martha L. Salazar, CPPB, Purchasing Agent, at:

US Postal Mail Address:
Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department
Administration Building
2812 S. Business Hwy 281
Edinburg, Texas 78539

Physical Address:
Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department
Administration Building
2802 S. Business Hwy. 281
Edinburg, Texas 78539

Hidalgo County requires respondents, when hand delivering statements of Qualifications, to have a Purchasing Department representative time/date stamp and initial the sealed envelope when dropping RFQ off.

All costs and expenses associated with the preparation and submission of (RFQs, bids, proposals and/or quotes) shall be the responsibility of the respondent and no reimbursements for such charges or expenses shall be passed onto Hidalgo County.

DISCLOSURE OF CONFLICT OF INTEREST:
Effective January 1, 2016, Chapter 176 of the Texas Local Government Code requires that any vendor, person, consultant of contractor considering doing business with Hidalgo County ("the County") to disclose in the Conflict of Interest Questionnaire ("the CIQ") attached as **Exhibit D-1**, the vendor, person consultant or contractor's affiliation of business relationship that might cause a conflict of interest with the County. By law, the CIQ must be filed with the Hidalgo County Clerk's Office no later than the seventh business day after the date the person becomes aware of facts that require that statement to be filed. The disclosure requirement applies to a person or business who contract or seek to contract with Hidalgo County for the sale or purchase of property, goods or service. Any purchase order or contract resulting from this process shall be considered null and void if the successful respondent fails to comply with Texas Local Government Code Chapter 176. Vendors, consultants, contractors and others who desire to conduct business with Hidalgo County are encouraged to refer to Texas Local Government Code Chapter 176 for the details of this law. An offense under Texas Local Government Code Chapter 176 is a Class C Misdemeanor.

COMPLETED FORM CIQ MUST BE SUBMITTED TO THE HIDALGO COUNTY CLERK'S OFFICE LOCATED AT 100 N. CLOSNER, EDINBURG, TEXAS 78539 – HIDALGO COUNTY COURTHOUSE.

COMPLETION AND SUBMISSION OF FORM CIQ IS THE SOLE RESPONSIBILITY OF THE PROSPECTIVE RESPONDENT. QUESTIONS REGARDING COMPLIANCE SHOULD BE DIRECTED TO YOUR LEGAL COUNSEL.

FORM CIS (Local Government Officer Conflicts Disclosure Statement) WILL BE INCLUDED IN PACKET AS EXHIBIT "D-2".

COMPLETION AND SUBMISSION OF FORM CIS IS THE SOLE RESPONSIBILITY OF THE PROSPECTIVE RESPONDENT. QUESTIONS REGARDING COMPLIANCE SHOULD BE DIRECTED TO YOUR LEGAL COUNSEL.

PROPOSER'S AFFIDAVIT:
Respondents to this RFQ must submit a signed Proposer's Affidavit (attached herein in Exhibit E) certainly that the submission is (1) not the result of Collusion as described in the Proposer's Affidavit, (2) that the Respondent does not have a Conflict of Interest as described in the Proposer's Affidavit, or (3) that the Respondent has not and will not attempt to lobby directly or indirectly as described in the Proposer's Affidavit.

NON-DISCRIMINATION:
Respondents, during the performance of this contract, will not discriminate against any employee or applicant for employment because of race, religion, sex, national origin or disability except where religion, sex, national origin or disability is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor.

PROCESSING TIME FOR PAYMENT:
Respondents are advised that a minimum of thirty (30) days is required to process invoices for payment.

ELECTRONIC TRANSMISSION OF QUALIFICATIONS:
Hidalgo County's Purchasing Department will not accept telegraphic or electronically transmitted submissions.

PROOF OF FINANCIAL AND BUSINESS CAPABILITY:
Respondent must, upon request, furnish satisfactory evidence of their ability to furnish products or services in accordance with the terms and conditions of these requirements. Hidalgo County will make the final determination as to the vendor's ability.

RESPONDENT DEFAULT:
Hidalgo County reserves the right, in case of respondent default, to procure the articles or services from other sources and hold the defaulting respondent responsible for any excess costs occasioned thereby.

RESTRICTIVE OR AMBIGUOUS REQUIREMENTS:
It is the responsibility of the respondent to review the Request for Qualifications (RFQ) packet and to notify in writing the Purchasing Department if the requirements are formulated in a manner that would unnecessarily restrict competition. These criteria also apply to requirements that are ambiguous.

RFQ QUESTIONS AND ANSWERS:
Any protest(s) or question(s) regarding the requirements or request for qualifications procedures must be received in the Purchasing Department **via e-mail or via facsimile to (956) 292-7612: sandra.montalvo@co.hidalgo.tx.us BY NO LATER THAN Wednesday, February 10, 2016 at 5:00 p.m. Responses will be sent to all applicants by Friday, February 12, 2016 at 5:00 p.m. TELEPHONE INQUIRIES WILL NOT BE ACCEPTED.**

SIGNING OF QUALIFICATIONS:
In order to be considered, all submittals **must** be signed. **Please sign the original in *blue ink.***

WAIVING OF INFORMALITIES:
Hidalgo County reserves the right to waive minor informalities or technicalities when it is in the best interest of Hidalgo County.

SUBCONTRACTING:
The successful respondent may not subcontract the award without the written consent of the Commissioners' Court of Hidalgo County.

TERM OF POOL:
The pool term is for a period of one (1) year, or upon completion of project(s) unless project specifies for more than one (1) year.

DAVIS BACON ACT: (IF APPLICABLE)
All selected and awarded firms are required; if applicable adhere to the Davis-Bacon Act.

SECTION II
RFQ REQUIREMENTS

REQUEST FOR QUALIFICATIONS:
The required contents and limitations for the preparation of the RFQ are described in this section. Failure to provide the requested information or adhere to any County limitations may result in disqualification of the submitted RFQ.

UNDERSTANDING OF THE PROJECT:
This section should demonstrate the respondents understanding of the project needs, the work required, and any local issues or concerns. This description should be concise, candid, and limited to 3 pages in length.

FIRM QUALIFICATIONS:
County of Hidalgo is seeking to contract with an Appraisal firm(s) that has had experience in, but not limited to the following areas:

A. Scope of Appraisal Services:

1) Property appraisals will be based on "Fair Market Value" unless otherwise specified or requested. Two copies of the appraisal report shall be bound, clearly labeled and signed by the primary certified general appraiser and any other certified general appraiser and/or licensed trainee which aided in the process. Four additional copies will be furnished.

2) All photographs used within the report must be originals. No digital photos shall be used for subject property. Digital photos shall only be used for comparable sales. All adjustments to any comparable sales must be clearly explained in a narrative format. All comparable sales must be within a two year time frame. If any sales which have occurred prior to the two year limit, they must be clearly explained and added to the conventional three comparable sales typically used in the appraisal process.

3) Current location maps of the subject property including, area, regional, plat, and flood maps must be included and clearly labeled for the subject property.

4) All reports shall be a "Self Contained Narrative Report" unless otherwise requested and shall follow the 2009 or most current Uniform Standard of Professional Appraisal Practice (USPAP) rules and regulations. Each appraisal report must be physically inspected, photographed, and personally signed by the primary-general certified appraiser of the firm. Appraiser trainees may aid in the collection of the information, however, all analysis and conclusion must be performed by the primary general certified appraiser.

5) Appraisal reports are due within four weeks of request (20 business days) and receipt of a fully executed purchase order.

B. Scope of Appraisal Review Services:

1) Review all appraisal reports for each Property to determine consistency of values, supporting documentation related to the conclusion reached, compliance with the Uniform Standards of Professional Appraisal Practices.

2) As a review of an initial and update appraisal are two separate and distinct appraisal assignments, the fees must consider the complexity of each separate assignment as shown in the Provider's Fee Schedule.

3) Beyond delivery of the review appraisal of the initial and updated appraisal documents, the review appraiser can be called to provide preparation and testimony for any Special Meeting/Commissioners Court. For this appraisal assignment, the fee for the preparation time and testimony must be based on the hourly rate shown in the Provider's Fee Schedule.

4) Appraisal Review reports are due within four weeks of request (20 business days) and receipt of a fully executed purchase order.

5) It is the County's sole option to require TXDoT's form ROW-A-10 "Tabulation of Values" in the deliverable for appraisal review assignments.

Additionally, the above section(s) (A and/or B) should include, but are not restricted to the following information:

A. Firm name, address, phone number and person to contact regarding the Request for Qualification.

B. Qualifications and recent experience of the firm and key personnel relative to the performance of similar services for public entities.

C. List of references including the name, address and phone number of the person most closely associated with the firm's prior project performance (See Attachment B).

D. List of Recent Projects-within Two (2) Years (See Attachment B).

E. Ability to commence services immediately after successfully negotiating a contract for services.

F. Familiarity with the geographical area.

G. Statement regarding an Affirmative Action Program.

H. Minimum of $1,000,000.00 Professional liability, errors and omissions, insurance.

PERSONNEL AND STAFFING:
The firm should provide an organizational chart for the project and a summary paragraph of the project work to be performed by each proposed staff member. Biographic summaries that highlight the experience relevant to the specific project responsibilities should be provided for all proposed personnel. There is a one (1) page limitation for each biographic summary provided.

REQUIRED CERTIFICATIONS AND SUBMITTAL:
This section will contain any current licenses and/or certifications as required by the STATE OF TEXAS.

PARTICIPATING FIRMS ARE NOT TO PROVIDE A FEE SCHEDULE WITH THIS SUBMITTAL:
The fee will be negotiated in accordance with the Professional Services Procurement Act, Tex. Govt. Code Ann.2254.001, et seq.

PART III
SELECTION/EVALUATION

SELECTION/EVALUATION PROCESS:

The evaluation system consists of a 100-point system. The firms will be ranked after evaluation on a per project basis upon approval of roster by Hidalgo County Commissioners' Court. Categories under the 100-point system include response to RFQ. RFQ submittal evaluation will be based on the criteria outlined below, and will be scored on the scales shown on the enclosed "RFQ Evaluation Form. "The respondent's Statement of Qualifications will be evaluated based on the criteria presented below.

1) ***Responsiveness:*** **30 points**
   a) Requested Information
   b) Thoroughness
   c) Understanding of Project
   d) List of references provided
   e) Clarity - Brevity
   f) Degree of Interest

2) ***Firm Capabilities:*** **45 points**
   a) Background
   b) Relevant experience
   c) Experience with similar projects
   d) Knowledge of area
   e) Timeliness of schedule
   f) Quality services previously provided to Hidalgo County
   g) Current workload
   h) Ability to commence various requested projects simultaneously
   i) Completion of projects within budgets

3) ***Staffing:*** **25 points**
   a) Qualifications of personnel-The professional team members responsible assigned to assist County projects shall be identified in the organizational chart.
   b) Key personnel
   c) Required discipline skills

REQUEST FOR QUALIFICATIONS GRADING AND RANKING PROTOCOL:

Once a Project has been identified and it is determined that Real Estate Appraiser Services are required, approval to seek engagement for professional services is sought from Hidalgo County Commissioners Court. The following protocol and procedures are utilized;

1) Hidalgo County Commissioners' Court, Elected Official and/or the User Department in need of Real Estate Appraiser Services **will nominate** (at the minimum) three (3) firms from Hidalgo County's approved pool of firms, thereafter, will review, score, and evaluate the responses received in Request for Qualifications.

2) A grid of the scores will be presented to Commissioners' Court for the purpose of **ranking and approval** for the Purchasing Department to enter into negotiations with the number one (1) ranked firm;

NEGOTIATION PROCESS:

Negotiations will commence with Commissioners' Court approved number one ranked firm;

1) Firms will be asked to submit (as part of those negotiations) a "scope of service" including fees;

2) The negotiated contract including best and final offer with the successful firm will be presented to Commissioners' Court (including compliance with all requirements as well as insurances) for consideration and final approval.

3) If negotiations with the number one (1) ranked firm fail, the Purchasing Department will recommend to Commissioners' Court that negotiations cease with the number one (1) ranked firm and commence to negotiate with the next highest ranked firm;

EXHIBIT "B"

EVALUATION CRITERIA

"PROFESSIONAL APPRAISAL SERVICES AND/OR APPRAISAL REVIEW SERVICES ANNUAL POOL"

RFQ No.2016-005-02-17-SMA

Internal Use Only: Commodity Code: 946-15

Selection Criteria	Points	Score
1. RESPONSIVENESS -----(30 pts)		
➢ Requested information	5	
➢ Thoroughness	5	
➢ Understanding of Project	5	
➢ List of references provided	5	
➢ Clarity-Brevity	5	
➢ Degree if Interest	5	
Comments/Rationale For Points:		TOTAL _____
2. FIRM CAPABILITIES----(45 pts)		
➢ Background	5	
➢ Relevant experience	5	
➢ Experience with similar projects	5	
➢ Knowledge of area	5	
➢ Timeliness of schedule	5	
➢ Quality services previously provided to Hidalgo County	5	
➢ Current workload	5	
➢ Ability to commence various re-quested projects simultaneously	5	
➢ Completion of projects within budgets	5	
Comments/Rationale For Points:		TOTAL _____
3. STAFFING--------(25 pts)		
➢ Qualification of personnel	10	
➢ Key personnel	10	
➢ Required discipline skills	5	
Comments/Rationale For Points:		TOTAL
Total Score		

Project Name: _____

Department:_____

Firm/Participant:_____

Evaluator: _____ Date:_____

Type of Service: (circle one): Appraisal Appraisal Review

PROCUREMENT FORM
ATTACHMENT "B"
HIDALGO COUNTY-PROFESSIONAL APPRAISAL SERVICES AND/OR APPRAISAL REVIEW SERVICES POOL
2016-005-02-17-SMA

Name and Address of Firm:	_____ _____ _____
Principals of Firm and Titles:	_____ _____ _____

Area of Specialization: Check Applicable Service(s)

	Appraisal Services		Appraisal Review Services

Local References (Rio Grande Valley) List Four (4) Only:

Reference #1: _____

Reference #2: _____

Reference #3: _____

Reference #4: _____

Recent Projects (Within Two [2] Years) List Four (4) Only:

Project #1: _____

Project #2: _____

Project #3: _____

Project #4: _____

Submitted By: _____

Signature: _____

Typed Name: _____

EXHIBIT "C"

Insurance Requirements
Professional Services
(i.e...Engineers, Architects, Appraisers & Surveyors)

The proposer awarded the contract shall furnish proof of insurance, which will also include any subcontractor that is subcontracted by the proposer in at least the following limits, to be in place prior to providing any services under this Contract and to continue at all times in force in effect during the term of this Contract:

1. Professional liability insurance policy with limits of at least One Million Dollars ($1,000,000) per occurrence, or limited to claims made, include at least a five (5) year extended reporting period.

2. A Five Hundred Thousand Dollars ($500,000.00) Comprehensive General Liability insurance policy providing additional coverage to all underlying liabilities of County.

3. Automobile liability insurance policy with limits of at least Three Hundred Thousand Dollars ($300,000.00) per person and Five Hundred Thousand Dollars ($500,000.00) per occurrence. Coverage should include injury to or death of persons and property damage claims with limits up to Five Hundred Thousand Dollars ($500,000.00) arising out of the services provided to County hereunder.

4. Uninsured/Underinsured motorist coverage in an amount equal to the bodily injury limits set forth immediately above;

5. Workers compensation insurance in amounts established by Texas law, unless the Bidder is specifically exempted from the Texas Workers Compensation Act, Texas Labor Code Chapter 401, et. seq.

<u>Hidalgo County will only accept certificates of insurance on an Acord form (as attached hereto).</u> Certificates of insurance naming County as an additional insured shall be submitted to County for approval prior to any services being performed by Contractor. Each policy of insurance required hereunder shall extend for a period equivalent to, or longer than the term of the Contract, and any insurer hereunder shall be required to give at least thirty (30) days written notice to the County prior to the cancellation of any such coverage on the termination date, or otherwise. This Contract shall be automatically suspended upon the cancellation, or other termination, of any required policy of insurance hereunder, and such suspension shall continue until evidence adequate replacement coverage is provided to County. If replacement coverage is not provided within thirty (30) days following suspension of the Contract, this Contract shall automatically terminate.

ACORD	CERTIFICATE OF INSURANCE	DATE (MM/DD/YY)

PRODUCER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
	INSURERS AFFORDING COVERAGE
INSURED	INSURER A:
	INSURER B:
	INSURER C:
	INSURER D:
	INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THER TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	**GENERAL LIABILITY** ☐ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS MADE ☐ OCCUR ☐ OWNER'S & CONT. PROT ☐ OWNER'S PROTECTIVE LIABILITY GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PROJECT ☐ LOC				EACH OCCURRENCE	$
					FIRE DAMAGE (Any one fire)	$
					MED (Any one person)	$
					PERS & ADV INJURY	$
					AL AGGREGATE	$
					ODUCTS – COMP/OP AGG	$
B	**AUTOMOBILE LIABILITY** ☐ ANY AUTO ☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ☐ NON-OWNED AUTOS				COMBINED SINGLE LIMIT (Ea accident)	$
					BODILY INJURY (Per person)	$
					BODILY INJURY (Per accident)	$
					PROPERTY DAMAGE (Per accident)	$
	GARAGE LIABILITY ☐ ANY AUTO				AUTO ONLY-EA ACCIDENT	$
					OTHER THAN AUTO ONLY EA ACC	$
					AGG	$
C	**EXCESS LIABILITY** ☐ OCCUR ☐ CLAIMS MADE ☐ DEDUCTIBLE ☐ RETENTION $				EACH OCCURENCE	$
					AGGREGATE	$
						$
						$
						$
D	**WORKERS COMPENSATION AND EMPLOYER'S LIABILITY**				WC STATU- TORY LIMITS ☐ OTHER	
					E.L. EACH ACCIDENT	$
					E.L. DISEASE-EA EMPLOYEE	$
					E.L. DISEASE-POLICY LIMIT	$
	OTHER					

DESCRIPTION OF OPERATIONS / LOCATION / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

County of Hidalgo shall be named as additional insured on all Commercial General Liability policies.

CERTIFICATE HOLDER	ADDITIONAL INSURED; INSURER LETTER: _____ CANCELLATION
Hidalgo County **Attn: Purchasing Department** **2812 S Highway Bus. 281** **Edinburg, Texas 78539**	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BY CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL ***30*** DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE

SAMPLE

Insurance Requirement Acknowledgment

I, _____, authorized representative for _____,
Company/Vendor

hereby acknowledge receipt of the County's required insurance limits. Said requirements:

- will be acquired within 10 working days after notification from Purchasing Department of award of project by the Hidalgo County Commissioners' Court;

- will acquire additional amounts required to meet the County's requirements within 10 working days after notification from Purchasing Department of award of project by the Hidalgo County Commissioners' Court; currently carry the following

  Professional Liability (Errors & Omissions): $_____

  Automobile Liability: $_____ General Liability: $_____

- have already been met, see attached copy of insurance certificate.

_____ _____
Authorized Representative Date

Notice to Proposer:

A certificate of insurance for the required insurance limits shall be provided to the Purchasing Department's Contract Managers in order to qualify for award and to execute a contract between your Company and the County

Failure to provide Certificates of Insurance to the Purchasing Department's Contract Managers will cause the award to be rescinded and re-awarded to next qualified vendor. Certificates of Insurance will be monitored and verified on a **quarterly basis** to ensure coverage policy is in place. It is the Company's obligation to maintain the appropriate insurance coverage throughout the term of the contract.

THIS FORM MUST ACCOMPANY YOUR PACKET

PROJECT REQUIREMENTS ACKNOWLEDGMENT

This is to certify that I, _____, possess all of the APPLICABLE:

1. Licenses: _____
2. Bonds: _____
3. Certificates: _____
4. Permits: _____
5. Other: _____

necessary to carry out the required project. Furthermore, I am providing copies of the required documentation so that, if my company is awarded this project, I may be eligible to enter into a contract with Hidalgo County and proceed to complete the project in a timely manner.

* Any licenses, bonds, certificates, permits, etc. which are required must be presented as part of the packet in order to expedite the evaluation process. Failure to provide said documentation will result in the disqualification of your proposal/qualification.

_____ _____

Authorized Signature Date

_____

Company

_____

Address

_____

City, State, Zip

Exhibit "D-1"

Form CIQ

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY
Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

_____
Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

_____
Signature of vendor doing business with the governmental entity

_____
Date

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

Exhibit "D-2"

Form CIS

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

FORM CIS

(Instructions for completing and filing this form are provided on the next page.)

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This is the notice to the appropriate local governmental entity that the following local government officer has become aware of facts that require the officer to file this statement in accordance with Chapter 176, Local Government Code.

OFFICE USE ONLY

Date Received

1 Name of Local Government Officer

2 Office Held

3 Name of vendor described by Sections 176.001(7) and 176.003(a), Local Government Code

4 Description of the nature and extent of each employment or other business relationship and each family relationship with vendor named in Item 3.

5 List gifts accepted by the local government officer and any family member, if aggregate value of the gifts accepted from vendor named in Item 3 exceeds $100 during the 12-month period described by Section 176.003(a)(2)(B).

Date Gift Accepted _____ Description of Gift _____

Date Gift Accepted _____ Description of Gift _____

Date Gift Accepted _____ Description of Gift _____

(attach additional forms as necessary)

6 AFFIDAVIT

I swear under penalty of perjury that the above statement is true and correct. I acknowledge that the disclosure applies to each family member (as defined by Section 176.001(2), Local Government Code) of this local government officer. I also acknowledge that this statement covers the 12-month period described by Section 176.003(a)(2)(B), Local Government Code.

_____

Signature of Local Government Officer

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20 _____, to certify which, witness my hand and seal of office.

_____

Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

Section 176.003 of the Local Government Code requires certain local government officers to file this form. A "local government officer" is defined as a member of the governing body of a local governmental entity; a director, superintendent, administrator, president, or other person designated as the executive officer of a local governmental entity; or an agent of a local governmental entity who exercises discretion in the planning, recommending, selecting, or contracting of a vendor. This form is required to be filed with the records administrator of the local governmental entity not later than 5 p.m. on the seventh business day after the date on which the officer becomes aware of the facts that require the filing of this statement.

A local government officer commits an offense if the officer knowingly violates Section 176.003, Local Government Code. An offense under this section is a misdemeanor.

Refer to chapter 176 of the Local Government Code for detailed information regarding the requirement to file this form.

INSTRUCTIONS FOR COMPLETING THIS FORM

The following numbers correspond to the numbered boxes on the other side.

1. **Name of Local Government Officer.** Enter the name of the local government officer filing this statement.

2. **Office Held.** Enter the name of the office held by the local government officer filing this statement.

3. **Name of vendor described by Sections 176.001(7) and 176.003(a), Local Government Code.** Enter the name of the vendor described by Section 176.001(7), Local Government Code, if the vendor: a) has an employment or other business relationship with the local government officer or a family member of the officer as described by Section 176.003(a)(2)(A), Local Government Code; b) has given to the local government officer or a family member of the officer one or more gifts as described by Section 176.003(a)(2)(B), Local Government Code; or c) has a family relationship with the local government officer as defined by Section 176.001(2-a), Local Government Code.

4. **Description of the nature and extent of each employment or other business relationship and each family relationship with vendor named in item 3.** Describe the nature and extent of the employment or other business relationship the vendor has with the local government officer or a family member of the officer as described by Section 176.003(a)(2)(A), Local Government Code, and each family relationship the vendor has with the local government officer as defined by Section 176.001(2-a), Local Government Code.

5. **List gifts accepted, if the aggregate value of the gifts accepted from vendor named in item 3 exceeds $100.** List gifts accepted during the 12-month period (described by Section 176.003(a)(2)(B), Local Government Code) by the local government officer or family member of the officer from the vendor named in item 3 that in the aggregate exceed $100 in value.

6. **Affidavit.** Signature of local government officer.

Local Government Code § 176.001(2-a): "Family relationship" means a relationship between a person and another person within the third degree by consanguinity or the second degree by affinity, as those terms are defined by Subchapter B, Chapter 573, Government Code.

Local Government Code § 176.003(a)(2)(A):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

EXHIBIT "E"
PROPOSER'S AFFIDAVIT

PROPOSER'S AFFIDAVIT OF NON-COLLUSION
NON-CONFILICT OF INTERST, AND ANTI-LOBBYING
FOR "REAL ESTATE APPRAISERS POOL"

STATE OF TEXAS
COUNTY OF HIDALGO

Affiant, _____, being first duly sworn, deposes that:

(1) Affiant does hereby state neither the Proposer nor any of the Proposer's officers, partners, owners, agents, representatives, employees, or parties in interest, has in any way colluded, conspired, agreed, directly or indirectly with any person, firm, corporation, or other proposer, or potential proposer, to provide any money or other valuable consideration for assistance in procuring or attempting to procure a contract or fix the prices in the attached proposed or the proposal of any other proposer, and further states that no such money or other reward will be hereinafter paid.

(2) Affiant further states they have neither recommended or suggested to Hidalgo County or nay of its officials or employees, any of the terms or provisions set forth in their Request for Proposal and subsequent agreement, except at a meeting open to all interested proposers, of which proper notice was given.

(3) Affiant, further states their officers, employees, or agents have not, and will not attempt to lobby, directly or indirectly, the Hidalgo County Commissioner's Court between proposal submission date and award by the Hidalgo County Commissioner's Court.

(4) Affiant further states no officer, or stockholder of the Proposer is a member of the staff, or related to any employee of the Hidalgo County except as noted herein below:

Signature/Title: _____

Subscribed and sworn to before me this _____day of _____, 20__.

_____

Notary Public

My commission expires:_____, 20__

HIDALGO COUNTY
PURCHASING DEPARTMENT
Bidder/Vendor Application

Complete in print or type. Please return this application to the Hidalgo County Purchasing Department
thru Facsimile: (956) 318-2629 or (956) 292-7612
in person or regular mail to:
Mailing/Postal Address: 2812 S. Business Hwy. 281
Physical Address: 2802 S. Business Hwy. 281
Edinburg, Texas 78539
or e-mail: purchasing@co.hidalgo.tx.us

Company Name: Telephone No. ( )
dba Name:
Legal Name:
Mailing Address: Fax No. ( )
Physical Address:
City, State, Zip Tax I.D. No.
Remit to Address : City, State, Zip
E-Mail Address:
Representative(s) Name(s) & Title(s)
Type of Organization (check one): _____ Individual _____ Partnership _____ Corporation _____ Non-Profit _____ LLC _____ Sole Proprietor _____ Other, Specify State Identification No._____ (Please attached completed W-9 form with this application) Federal Identification No. or (if individual) SS No.
State of Incorporation: _____ Date:_____ Other:
Type of Business (check one): _____ Manufacturer _____ Wholesaler _____ Retailer _____ Broker _____ Distributor _____ Service Organization _____ Other, Specify
Name & Title of Person(s) Authorized to Sign Bids, Proposals, and/or Contracts:
Small and/or Disadvantaged Business Information (check application criteria) Small Business: Disadvantaged Business (At Least 51% Ownership) ☐ Less than 125,000 annual gross receipt ☐ Black American ☐ Native American ☐ Less than 250,000 annual gross receipt ☐ Hispanic American ☐ Women ☐ Less than 499,000 annual gross receipt ☐ Asian Pacific American ☐ Other ☐ More than 500,000 annual gross receipt Have you been certified as a HUB or an MBE/WBE source?: ☐ Yes ☐ No Indicate Certification No.(s):_____ or are Certificate(s) attached?: ☐ Yes ☐ No
What type of product(s) is/are solicited by your company?: Would you like to be provided with specifications for procurements of such products?: ☐ Yes ☐ No
To Be Completed by the County: Rec'd by (Purchasing):_____ Date Rec'd by (Purchasing): Date Forwarded Information to Auditor's Office:_____Entry Date: _____ Vendor No.:

HISTORICALLY UNDERUTILIZED BUSINESS (HUB) DECLARATION

The primary objective of the Hidalgo County HUB Program is to ensure Historically Underutilized Businesses receive a fair and equal opportunity for participation in the County's procurement process. This fact holds true for Services (Professional & Non-Professional), Commodities, and Construction contracts and any subcontracts thereto. The program strongly encourages Prime Contractors to provide subcontracting opportunities to Certified Hub Contractors/Vendors. Our goal for HUB contractor/vendor participation, as well as HUB subcontractor participation is 30%. To be considered as a "Certified HUB Contractor/Vendor" the contractor/vendor must have been certified by, and hold a current and valid certification with any of the three agencies listed below.

Have you been Certified as a HUB or an MBE/WBE source?: ☐Yes ☐ No

If yes, by whom?: ☐ Texas Building & Procurement Commission ☐ Other_____

Indicate Certification No(s).:_____ or Are Certificate(s) Attached?: ☐ Yes ☐ No

LIST OF CERTIFIED HUB SUBCONTRACTORS

(Attach additional pages if necessary)

What percentage of the Bid, RFP, or RFQ is to be subcontracted with Certified HUB sources?: _____%
(List HUB Subcontractor information below).

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): ☐Texas Building & Procurement Commission ☐ other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): ☐Texas Building & Procurement Commission ☐ other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): ☐Texas Building & Procurement Commission ☐ other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

Form **W-9**
(Rev. August 2013)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification:
☐ Individual/sole proprietor ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____

☐ Other (see instructions) ▶

Exemptions (see instructions):
Exempt payee code (if any) _____
Exemption from FATCA reporting code (if any) _____

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
☐☐☐ – ☐☐ – ☐☐☐☐

Employer identification number
☐☐ – ☐☐☐☐☐☐☐

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below), and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here | **Signature of U.S. person** ▶ | **Date** ▶

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. The IRS has created a page on IRS.gov for information about Form W-9, at *www.irs.gov/w9*. Information about any future developments affecting Form W-9 (such as legislation enacted after we release it) will be posted on that page.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, payments made to you in settlement of payment card and third party network transactions, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct.

Note. If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity,
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust, and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* on page 1.

What is FATCA reporting? The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of $50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a $500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA) name" on the "Business name/disregarded entity name" line.

Disregarded entity. For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulation section 301.7701-2(c)(2)(iii). Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Note. Check the appropriate box for the U.S. federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the U.S. federal tax classification in the space provided. If you are an LLC that is treated as a partnership for U.S. federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation, as appropriate. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for U.S. federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

Other entities. Enter your business name as shown on required U.S. federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the *Exemptions* box, any code(s) that may apply to you. See *Exempt payee code* and *Exemption from FATCA reporting code* on page 3.

Exempt payee code. Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends. Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following codes identify payees that are exempt from backup withholding:

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2—The United States or any of its agencies or instrumentalities

3—A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities

4—A foreign government or any of its political subdivisions, agencies, or instrumentalities

5—A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States

7—A futures commission merchant registered with the Commodity Futures Trading Commission

8—A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10—A common trust fund operated by a bank under section 584(a)

11—A financial institution

12—A middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over $600 required to be reported and direct sales over $5,000[1]	Generally, exempt payees 1 through 5[2]
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

[1] See Form 1099-MISC, Miscellaneous Income, and its instructions.

[2] However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Reg. section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Reg. section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at *www.ssa.gov*. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: *A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.*

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt payee code* earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account [1]
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor [2]
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee [1]
b. So-called trust account that is not a legal or valid trust under state law	The actual owner [1]
5. Sole proprietorship or disregarded entity owned by an individual	The owner [3]
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	**Give name and EIN of:**
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity [4]
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

[1] List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

[2] Circle the minor's name and furnish the minor's SSN.

[3] You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

[4] List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

***Note.** Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: *spam@uce.gov* or contact them at *www.ftc.gov/idtheft* or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

Certification
Regarding Debarment, Suspension and Ineligibility

As is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 76, Government-wide Debarment and Suspension, the applicant certifies, to the best of his or her knowledge and belief, that both it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency;

b. Have not within a three-year period preceding this bid proposal and/or application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction, violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a government entity with commission of any of the offenses enumerated herein; and

d. Have not within a three-year period preceding this bid proposal and/or application had one or more public transactions terminated for cause or default.

Signature:_____
Print Name:_____
Title:_____
Telephone Number:_____
Date:_____

If the bidder is unable to certify to all of the statements in this Certification, such bidder should attach an explanation to this proposal.

HIDALGO COUNTY
(Including all funding sources, programs, and entities)
REQUEST FOR QUALIFICATIONS
PROFESSIONAL APPRAISALS SERVICES AND/OR APPRAISAL REVIEW SERVICES ANNUAL POOL

RFQ No.: 2016-005-02-17-SMA

RFQ SUBMITTAL CHECK LIST

All forms listed below must be included in the RFQ response.

Indicate with a check mark (✓) the Forms completed and included in this response:

_____ Page 9 of Legal Notice

_____ Exhibit "C" -Acknowledgement forms (pages 3 and 4)

_____ Exhibit "D-1" - CIQ Form

_____ Exhibit "D-2" – CIS Form

_____ Exhibit "E" –Proposers Affidavit

_____ Vendor Bidder Application and IRS form W-9

_____ Certification Regarding Debarment

_____ 1 Original, 3 Copies, and 8 CD's containing a complete copy of Response.

_____ _____
SIGNATURE DATE

EXHIBIT “A”

SERVICES TO BE PROVIDED BY APPRAISER

GARZA & ASSOCIATES
1419 Dove Avenue, McAllen, Texas 78504
956-687-7295 Office / leonel3@garza-associates.com

March 7, 2017

APPRAISAL SERVICES BID

To: Hidalgo County Purchasing Department
Rocio Villarreal / Contract Manager
2812 South Business Highway 281
Edinburg, Texas 78539
Office (956) 318-2626

Project:	On an "As Needed Basis"
Projected Time Frame:	To be established by HCPCT #2
Type of Acquisition:	Fee Simple Estate
Price:	$ 2,250.00 / Each
Update/Revised Reports:	$ 500.00 / Each
Additional Original Reports:	$ 50.00 Per Original
Deliverables	Four (4) original reports.
Eminent Domain Prep. / Testimony / Support:	$150.00 Per Hour
Expert Witness / Trial:	$250.00 Per Hour

Client & Intended User
The client and intended user of this report is identified as the Hidalgo County Precinct No. 2

Intended Use
The intended use of the reports is to provide a market valuation of the proposed acquisition area which shall be purchased in the name of the Hidalgo County Precinct No. 2

Scope of the Assignment
The scope of the assignment is to determine the market value of the part to be acquired and any contributory value of improvements located within the part to be acquired. A review of the remainder, if any, shall be performed to determine if there is a diminution of market value that is compensable. Reports shall conform to standards set forth by the Texas Department of Transportation, Senate Bill-18 and the County of Hidalgo.

Thank you for the opportunity:

Leonel Garza III
Certified Real Estate Appraiser
TX-1328375-G

1419 Dove Avenue, McAllen, Texas 78504
956-687-7295 Office / leonel3@garza-associates.com

Leonel Garza III

President of Leonel Garza Jr. & Associates LLC

Company Bio

Leonel Garza Jr. & Associates, LLC provides a variety of real estate consulting services with primary focus on real estate appraisals and appraisal litigation support. The company specializes in General Commercial Real Estate, Estate Valuations, and Right-of- Way Easement Acquisition and Defense. In addition to the appraisal services, the company provides Real Property Tax Consulting Services. The purpose of this division is to support property tax owners in the verification of property tax assessment as promulgated by the Texas Property Tax Code.

Property Tax Division

The property tax division of the firm conducts reviews of property tax assessments by various county appraisal districts to consult clients on their current tax liabilities. Reviews include attending informal and formal hearings on behalf of clients at local appraisal districts. With accounts throughout South Texas including the County of Cameron, Brooks, Hidalgo, Starr, Willacy, Webb and Nueces County. Clients include dealerships, movie theaters, concrete batch plants, convenience stores, national franchises, retail box centers, retail strip centers, warehouses, subdivisions, and many other commercial type properties and specialty type properties.

Right-of-Way Division

The Right-of-Way Division of the firm conducts Real Estate Appraisals for various local and government agencies throughout South Texas. Leonel Garza III has undergone extensive training in this field of work. He specializes in acquisitions concerning diminution of market value and/or property bi-sections. ROW experience extends to various types of acquisitions including, but not limited to, expansion of existing roadways, development of new roadways, utility easements, transmission line easements, drainage or irrigation easements, damage assessment, cost to cure, relocation assistant research, budget analysis, condemnation hearing and trial support. Clients include the Texas Department of Transportation (TxDOT), Texas Attorney General Office Real Estate Division, Hidalgo County Drainage District No. 2, Hidalgo County Regional Mobility Authority (HCRMA), American Electric & Power (AEP), Hidalgo County Precinct No. 2, Hidalgo County Precinct No. 3, Hidalgo County Precinct No. 4 and United Irrigation District.

Texas A&M University, College Station, Texas
Bachelor of Science Degree, 1995
Biomedical Science Major

Texas Appraiser Licensing and Certification Board
Certified General Real Estate Appraiser
TX 1328375 G

Texas Department of Licensing and Regulation
State Certified Property Tax Consultant
TX 00003181



Texas Appraiser Licensing and Certification Board
P.O. Box 12188 Austin, Texas 78711-2188
Certified General Real Estate Appraiser

Number: TX 1328375 G
Issued: 12/30/2016 Expires: 12/31/2018
Appraiser: LEONEL GARZA III

Having provided satisfactory evidence of the qualifications required by the Texas Appraiser Licensing and Certification Act, Texas Occupations Code, Chapter 1103, is authorized to use this title, Certified General Real Estate Appraiser.

Douglas E. Oldmixon
Commissioner

Appraisal Institute
Associate Member

The Appraisal Institute is a global professional association of real estate appraisers, with nearly 20,000 professionals in almost 60 countries throughout the world. Its mission is to advance professionalism and ethics, global standards, methodologies, and practices through the professional development of property economics worldwide. (www.appraisalinstitute.org).

National Association of Master Appraisers

Designated as a Master Senior Appraiser by the National Association of Master Appraisers. This designation is obtained through educational requirements and experience. (www.naappraisers.org)

International Right of Way Association (IRWA)
Associate Member 7899430

The International Right of Way Association is a professional member organization comprised of global infrastructure real estate practitioners. IRWA has served professionals who acquire, manage and transfer the land rights needed for building and maintaining energy and transportation infrastructure. Recognized for their high ethical standards, commitment to integrity and professional excellence, IRWA's nearly 10,000 members hail from over 15 countries around the world. They are united by their profession and their commitment to pursuing training and professional development through courses, chapter meetings, seminars and the annual education conference. (www.IRWA.com)

Hidalgo County Subdivision Advisory Board
Chairman of the Board

This county board on subdivision reviews primary goal is to ensure that proper standards, set by Texas Water Development Board and the Texas Subdivision Model Rules and/or opinions from the Texas State Attorney General's Office, are conducted in the development of proposed subdivision within the County of Hidalgo and/or Extraterritorial Jurisdiction of municipalities throughout the County of Hidalgo. The board's secondary function is to review applications for variances against the Flood Plain Administrators decisions of the base flood elevations throughout the County of Hidalgo. Appointed to the board since May 1999.

Hidalgo County Building Line of Adjustments
Chairman of the Board

This county board reviews applications of variances to general set-back regulations set forth by the County of Hidalgo. This review includes the review of existing and/or proposed encroachments into set-backs, easements, road right-of-way set-back, subdivision plat requirements and/or requirements set forth by adjoining municipalities of which the subject is within the extraterritorial jurisdiction. Appointed to the board since January 2005.

McAllen Planning and Zoning Board
Former Member & Chairman

This board is charged with submitting reports, plans, and recommendations to the City Commission for the orderly growth, development, and welfare of the City. They review and make recommendations on zoning change requests, conditional use permits for longer than one year, and variances to Subdivision Ordinance requirements for development. Member of board from February 8, 2010 to January 28, 2016.

McAllen Traffic Commission Board
Former Member & Vice Chairman

Makes recommendations to the City Commission to reduce and eliminate traffic congestion and flow throughout the City. Member of board from April 14, 2008 to June 24, 2014.

McAllen Zoning Board of Adjustments and Appeals
Former Member & Chairman

This city board has the duty to hear and decide appeals where it is alleged there is error in any requirement, or determination made administratively in the enforcement of the Zoning Ordinance. The Board hears appeals that grant variances to setback requirements and special exceptions to reconstruction of nonconforming buildings. Member of board from February 2002 to February 2008.

McAllen Ambulance Advisory Committee
Former Member & Vice Chairman

Evaluates and reports to the City Commission on the operation of the emergency ambulance service rendered by company or companies rendering such service.

McAllen Building Board of Adjustments and Appeals
Former Member

The BBOA reviews the decision of City Staff for the demolition of properties deemed unsafe through the City for a variety of reasons. The board review all facts and concerns and make the decision to secure or proceed with demolition based upon the safety of the neighboring property owners and occupants. The greatest concern for the commission is the safety of the surrounding neighborhood occupants. Board member from January 28, 2002 to December 31, 2003

EXHIBIT “B”

FEE SCHEDULE

GARZA & ASSOCIATES
1419 Dove Avenue, McAllen, Texas 78504
956-687-7295 Office / leonel3@garza-associates.com

FEE SCHEDULE

March 7, 2017

APPRAISAL SERVICES BID

To: Hidalgo County Purchasing Department
Rocio Villarreal / Contract Manager
2812 South Business Highway 281
Edinburg, Texas 78539
Office (956) 318-2626

Project:	On an "As Needed Basis"
Projected Time Frame:	To be established by HCPCT #2
Type of Acquisition:	Fee Simple Estate
Price:	$ 2,250.00 / Each
Update/Revised Reports:	$ 500.00 / Each
Additional Original Reports:	$ 50.00 Per Original
Deliverables	Four (4) original reports.
Eminent Domain	
Prep. / Testimony / Support:	$150.00 Per Hour
Expert Witness / Trial:	$250.00 Per Hour

Client & Intended User
The client and intended user of this report is identified as the Hidalgo County Precinct No. 2

Intended Use
The intended use of the reports is to provide a market valuation of the proposed acquisition area which shall be purchased in the name of the Hidalgo County Precinct No. 2

Scope of the Assignment
The scope of the assignment is to determine the market value of the part to be acquired and any contributory value of improvements located within the part to be acquired. A review of the remainder, if any, shall be performed to determine if there is a diminution of market value that is compensable. Reports shall conform to standards set forth by the Texas Department of Transportation, Senate Bill-18 and the County of Hidalgo.

Thank you for the opportunity:

Leonel Garza III
Certified Real Estate Appraiser
TX-1328375-G

EXHIBIT “C”

INSURANCE REQUIREMENTS

LEONGAR-02 HEREN1

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 5/23/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Shepard Insurance Agency 5801 N 10th St Ste 300 McAllen, TX 78504	PHONE (A/C, No, Ext): (956) 686-3888	FAX (A/C, No): (956) 682-5650
	E-MAIL ADDRESS: shepard@shepins.com	

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : American Hallmark Ins Co of TX	43494
INSURER B : Hartford Ins Co of the Midwest	37478
INSURER C : Breckenridge Insurance Services LLC	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

Leonel Garza Jr & Associates LLC
1419 Dove Ave
Suite 1
McAllen, TX 78504

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PRO-JECT [X] LOC [ ] OTHER:	X		44-CL-132457-00	05/18/2016	05/18/2017	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 1,000,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] ALL OWNED AUTOS [X] SCHEDULED AUTOS [X] HIRED AUTOS [X] NON-OWNED AUTOS			44-CL-132457-00	05/18/2016	05/18/2017	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
A	X UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED [X] RETENTION $ 10,000			44-CU-132526-00	05/18/2016	05/18/2017	EACH OCCURRENCE AGGREGATE Prd.Com Op Aggr	$ 1,000,000 $ 1,000,000 $ 1,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N [ ] (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	65WBCAR0136	05/18/2016	05/18/2017	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
C	Professional Liab	X		0100038816-0	05/18/2016	05/18/2017	See Description	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Form CG0205 12 04 - 30 Day Notcie of Cancellation
Professional Liab- Claims Made:Agrgregate limit $1,000,000; Limit of liability per claim 1,000,000; Re-troactive date: May 18,2010; Professional Liability E&O Deductible per Claim $10,000

Units:
2010 Toyota #5TFRM5F15AX011366;
2014 Toyota #5TFUM5F17EX052999;

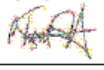
CERTIFICATE HOLDER

Hidalgo County
Attn: Purchasing Department
2812 S. Highway Business 281
Edinburg, TX 78539

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



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Zimbra **rocio.villarreal@co.hidalgo.tx.us**

RE: C-17-085-03-21-LEONEL GARZA

From : Steve Crain <scrain@atlashall.com> Wed, Mar 08, 2017 11:27 AM
Subject : RE: C-17-085-03-21-LEONEL GARZA
To : 'Rocio Villarreal' <rocio.villarreal@co.hidalgo.tx.us>

The contract is fine.

From: Rocio Villarreal [mailto:rocio.villarreal@co.hidalgo.tx.us]
Sent: Wednesday, March 08, 2017 10:28 AM
To: Steve Crain <scrain@atlashall.com>
Subject: C-17-085-03-21-LEONEL GARZA

Mr. Crain:

Can you please review and approve as to form.

Thank you.

ROCIO VILLARREAL
HIDALGO COUNTY PURCHASING DEPT.
CONTRACTS MANAGER
(956) 318-2626 Work
(956) 292-7000 Ext. 4868 Work
rocio.villarreal@co.hidalgo.tx.us
2812 S. Business Hwy 281
Edinburg, Texas 78539

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-174311

Date Filed:
03/03/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
LEONEL GARZA, JR. & ASSOCIATES, LLC
McAllen, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County Precinct No. 2

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
C-17-085-03-21
Real Estate Appraisal Services

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Garza, III, Leonel	MCALLEN, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

ALMA OYERVIDES
MY COMMISSION EXPIRES
September 10, 2019

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Leonel Garza, III, this the 3rd day of March, 20 17, to certify which, witness my hand and seal of office.

Alma Oyervides — Alma Oyervides

Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-174311

Date Filed:
03/03/2017

Date Acknowledged:
03/08/2017

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

LEONEL GARZA, JR. & ASSOCIATES, LLC
McAllen, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

Hidalgo County Precinct No. 2

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

C-17-085-03-21
Real Estate Appraisal Services

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Garza, III, Leonel	MCALLEN, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

AI-59044 **Purchasing Department** **23. D. 1.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Marty Salazar, PURCHASING DEPT.

Submitted By: Letty Saenz, PURCHASING DEPT.

Department: PURCHASING DEPT.

Information

CAPTION

A. Requesting exemption from competitive bidding requirements under the Texas Local Government Code, Section 262.024 (A) (4) for a professional service;

B. Presentation of the scoring grid (for the purposes of ranking by CC) the firms graded & evaluated through the County's approved "pool" of Engineering Firms for the provision of "professional engineering services" for *Project: Expansion of the Mile 22.5 Road located within Hidalgo County Precinct No. 4;*

ENGINEERING FIRMS:

Totals	Quintanilla, Headly & Associates, Inc.	DBR Engineering Consultants, Inc.	Alpha Infrastructure Engineering, PLLC
Scores	97	95	94
Ranking			

C. Authority for the Purchasing Department to negotiate a professional engineering services agreement for *Project: Expansion of the Mile 22.5 Road located within Hidalgo County Precinct No. 4*, commencing with the No.1 ranked firm _____ for Engineering Services.

D. Requesting exemption from competitive bidding requirements under the Texas Local Government Code, Section 262.024 (A) (4) for a professional service;

E. Presentation of the scoring grid (for the purposes of ranking by CC) the firms graded & evaluated through the County's approved "pool" of Engineering Firms for the provision of "professional engineering services" for *Project: Cesar Chavez Road (Owassa - Iowa) located within Hidalgo County Precinct 4;*

ENGINEERING FIRMS:

Totals	Strada Engineering and Consulting, LLC	Doucet & Associates, Inc.	Fulcrum Consulting Services
Scores	98	95	92
Ranking			

F. Authority for the Purchasing Department to negotiate a professional engineering services agreement for *Project: Cesar Chavez Road (Owassa - Iowa) located within Hidalgo County Precinct 4*, commencing with the No.1 ranked firm _____ for Engineering Services.

BACKGROUND

GRIDS

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1350-431-00-124-183-0-721

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

*budget impact for: CESAR CHAVEZ RD PROJECT

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

*Budget Impact to be determined by Pct 4/Budget for: Cesar Chavez Road Project

---

Attachments

GRID-EXP of MI 22.5-PCT 4
NCD-LULU
GRID-CESAR CHAVEZ RD-PCT 4
NCD-LULU

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/17/2017 04:39 PM
Budget & Management	Veronica Ortiz	03/17/2017 04:43 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Letty Saenz		Started On: 03/17/2017 02:53 PM
Final Approval Date: 03/17/2017		

PROFESSIONAL ENGINEERING SERVICES
for
"EXPANSION OF MILE 22.5 ROAD"
HIDALGO COUNTY PRECINCT No. 4

Scoring & Evaluation GRID

Engineering Firms

FIRMS	Quintanilla, Headly & Associates, Inc.	DBR Engineering Consultants, Inc.	Alpha Infrastructure Engineering, PLLC
Evaluator 1	97	95	94
RANKING			

***Scoring/Evaluation-completed by Precinct 4 Staff.**

NO CONFLICT DISCLOSURE FORM

Name of Government Officer/Employee: Maria D. Lucio

Title/Position: Executive Assistant

Contract for Goods/Services: Extension of Mile 22 1/2

Name of Vendors contracting with OR seeking to contract with Hidalgo County:

1. Quintanilla, Headly & Associates, Inc.
2. DBR
3. Alpha Infrastructure Engineering PLLC
4. _____

In my review, grading, selection or approval of the above identified vendors, I hereby affirm that I have no conflicts to disclose (employment/business, family or gifts exceeding $100) in connection with the above identified vendor(s) as required by section 176 of the Texas Local Government Code.

Signed: Maria D. Lucio

Date: 3-17-17

PROFESSIONAL ENGINEERING SERVICES
for
"CESAR CHAVEZ ROAD (OWASSA-IOWA)"
HIDALGO COUNTY PRECINCT No. 4

Scoring & Evaluation GRID

Engineering Firms

FIRMS	Strada Engineering and Consulting, LLC	Doucet & Associates, Inc.	Fulcrum Consulting Services
Evaluator 1	98	95	92
RANKING			

*Scoring/Evaluation-completed by Precinct 4 staff.

NO CONFLICT DISCLOSURE FORM

Name of Government Officer/Employee: Maria D. Luio

Title/Position: Executive Assistant

Contract for Goods/Services: Cesar Chavez Road

Name of Vendors contracting with OR seeking to contract with Hidalgo County:

1. Strada Engineering & Consulting
2. Fulcrum Consulting Services
3. Doucet & Associates, Inc.
4. _____

In my review, grading, selection or approval of the above identified vendors, I hereby affirm that I have no conflicts to disclose (employment/business, family or gifts exceeding $100) in connection with the above identified vendor(s) as required by section 176 of the Texas Local Government Code.

Signed: Maria D. Luio

Date: 3-17-17

AI-58651 **Purchasing Department** **23. D. 2.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Marty Salazar, PURCHASING DEPT.

Submitted By: Tanya Delira, PURCHASING DEPT.

Department: PURCHASING DEPT.

Information

CAPTION

A. Presentation and recommendation by project engineer, Halff & Associates [with concurrent by Pct.] to award Pct. #4's: Recovery and Motor Pool Improvements Project to Synergy Builders of Texas the responsible vendor submitting the lowest and best bid meeting all specifications and/or requirements to Synergy Builders of Texas in the amount of $395,000.00;
B. Pursuant to TXLGC 262.031 and in the interest of expediting a project's progress, requesting authority/approval for the Precinct Commissioner or designee: Maria D. Lucio to execute change orders for Pct. 4 that involve an increase or decrease in the cost of $50,000.00 or LESS and in no event to exceed the Change Order's Statutory limits. The original contract price may not be decreased by 18% or more without the consent of the contractor.

BACKGROUND

Recommended by project engineer Halff & Associates, Inc.

Base bid in the amount of $395,000.00.

Fiscal Impact

FISCAL YEAR: **ACCT. #:**

FUNDS AVAILABLE Y/N?: Pending **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Refer to AI-59040

Attachments

Plans
Specifications
1295
Plan Holders List
Tabulation Sheet
Engineer Notice Award

Pct. 4 Award Notice

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/17/2017 03:54 PM
Budget & Management	Veronica Ortiz	03/17/2017 04:06 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Tanya Delira		Started On: 02/21/2017 11:52 AM
Final Approval Date: 03/17/2017		

HIDALGO COUNTY PRECINCT 4 - RECOVERY AND MOTOR POOL IMPROVEMENTS

EDINBURG, TEXAS

COUNTY OFFICIALS

RAMON GARCIA	COUNTY JUDGE
A.C. CUELLAR, JR.	COMMISSIONER PRECINCT 1
EDUARDO "EDDIE" CANTU	COMMISSIONER PRECINCT 2
JOE M. FLORES	COMMISSIONER PRECINCT 3
JOSEPH PALACIOS	COMMISSIONER PRECINCT 4
VALDE GUERRA	COMMISSIONERS COURT EXECUTIVE OFFICER

Halff AVO#31806 (WA01)

SHEET LIST

Sheet Number	Sheet Title
G0.01	COVER SHEET
C1.0	DEMOLITION PLAN
C2.0	SITE DIMENSION AND STRIPING PLAN
C3.0	GRADING & PAVING PLAN
C3.1	GRADING & PAVING PLAN
C4.0	MISCELLANEOUS DETAILS
C5.0	MISCELLANEOUS DETAILS
S1.0	GENERAL NOTES
S1.1	GENERAL NOTES
S1.2	EXCAVATION PLAN
S1.3	ROOF UPLIFT PLAN
S2.0	TYPICAL DETAILS
S2.1	TYPICAL DETAILS
S3.0	FOUNDATION PLAN
S4.0	CMU WALL LAYOUT PLAN
S5.0	ROOF FRAMING PLAN
B-101	STORAGE BUILDING DOORS
MP1.01	SITE PLAN
MP2.01	ENLARGED MECHANICAL & PLUMBING PLAN – STORAGE BUILDING
MP3.01	MECHANICAL & PLUMBING SCHEDULES AND DETAILS
E0.01	ELECTRICAL GENERAL LEGEND
ES1.00	ELECTRICAL SITE PLAN
ES1.01	ENLARGED ELECTRICAL PLANS
E2.01	ELECTRICAL SCHEDULES
E3.01	ELECTRICAL RISER DIAGRAMS
E4.01	ELECTRICAL DETAILS
E4.02	ELECTRICAL DETAILS
E4.03	ELECTRICAL DETAILS

PROJECT TEAM

MEP

Halff Associates, Inc.
5000 West Military Highway, Ste. 100
McAllen, Texas 78503-7446
Tel:956.664.0286
Fax:956.664.0282

Menton J. Murray, P.E., LEED AP (Mechanical & Plumbing)
Email:tmurray@halff.com

Jose A. Delgado, P.E., LEED AP (Electrical)
Email:JoseDelgado@halff.com

CIVIL

Halff Associates, Inc.
5000 West Military Highway, Ste. 100
McAllen, Texas 78503-7446
Tel:956.664.0286
Fax:956.664.0282

Raul Garcia, Jr., P.E., CFM (Civil)
Email:RGarcia@halff.com

STRUCTURAL

Chanin Engineering, LLC
400 Nolana, Ste N2
McAllen, Texas 78504
Tel:956.687.9421
Fax:956.687.3211

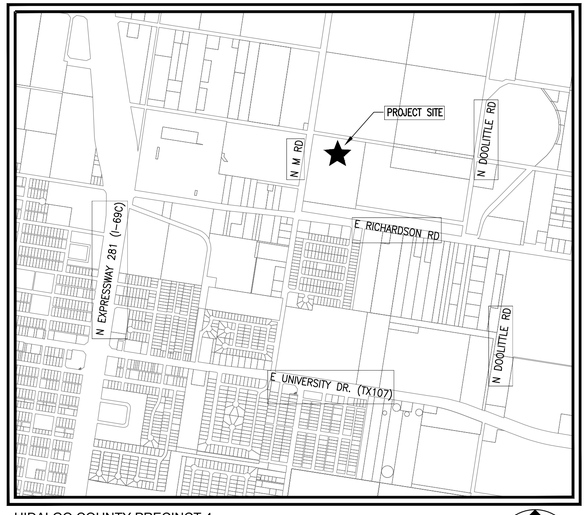
Miguel Chanin, P.E. (Structural)
Email: miguel@chaninengineering.com

OWNER

The County of Hidalgo Texas
Precinct 4
1051 N. Doolittle Rd.
Edinburg, Texas 78542
Tel:956.383.3112
Fax:956.381.5905

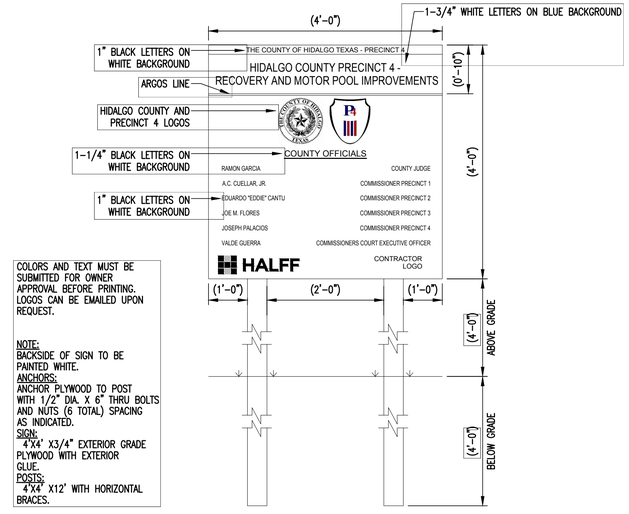
Honorable Joseph Palacios (Commissioner Precinct 4)
Email: joseph.palacios@co.hidalgo.tx.us

LOCATION



HIDALGO COUNTY PRECINCT 4
1051 N. Doolittle Rd.
Edinburg, Texas 78542

PROJECT SIGN



COLORS AND TEXT MUST BE SUBMITTED FOR OWNER APPROVAL BEFORE PRINTING. LOGOS CAN BE EMAILED UPON REQUEST.

NOTE:
BACKSIDE OF SIGN TO BE PAINTED WHITE.
ANCHORS:
ANCHOR PLYWOOD TO POST WITH 1/2" DIA. X 6" THRU BOLTS AND NUTS (6 TOTAL) SPACING AS INDICATED.
SIGN:
4'X4' X3/4" EXTERIOR GRADE PLYWOOD WITH EXTERIOR GLUE.
POSTS:
4"X4" X12' WITH HORIZONTAL BRACES.

SET # : _____

100% CONSTRUCTION DOCUMENTS

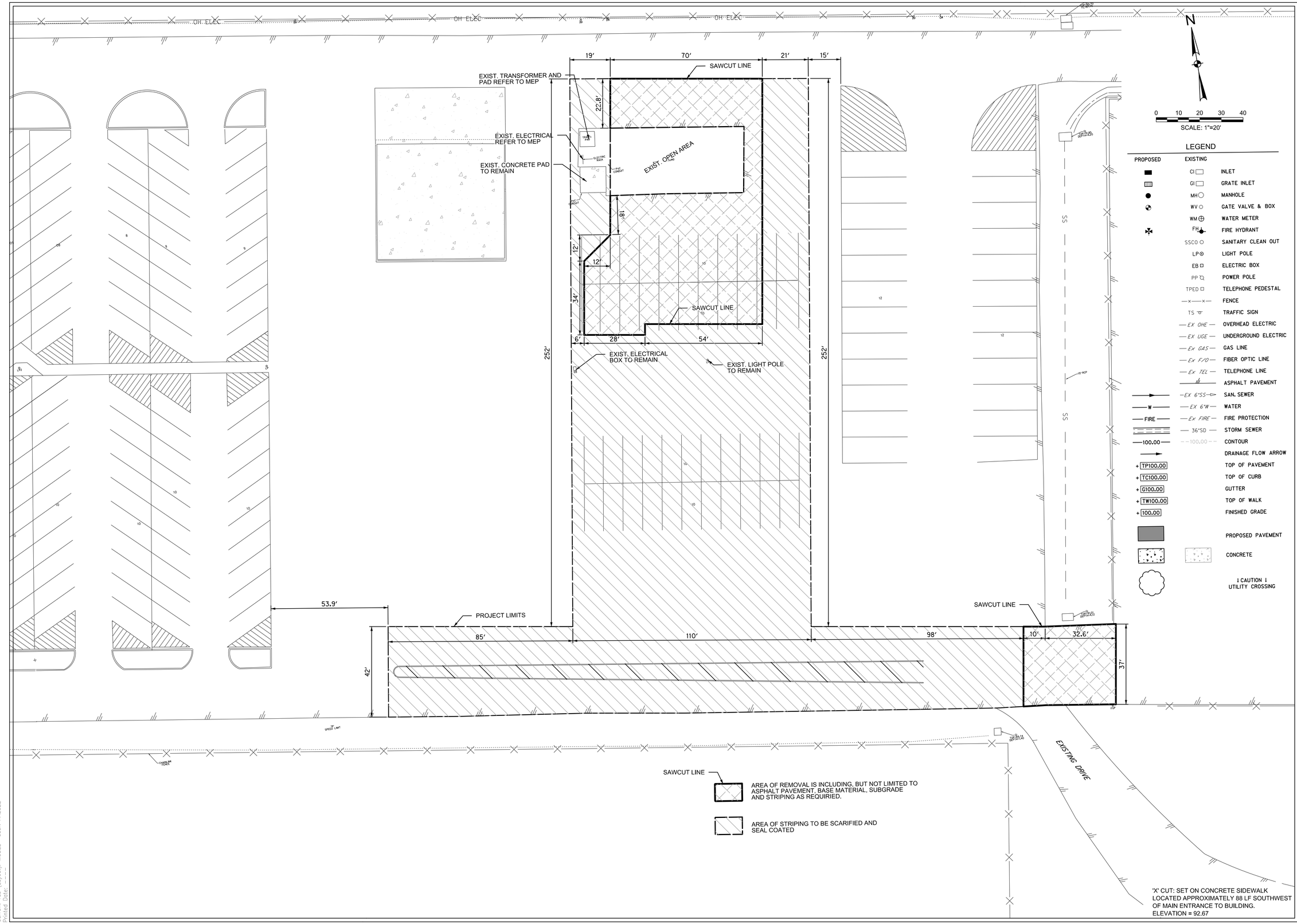
Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
1051 N. Doolittle Rd.
Edinburg, Texas 78542

HALFF
5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
FAX (956) 664-0282
TBPE FIRM #F-312

Revision No.	Date	Description

Project No.:	31806(WA01)
Issued:	10 / 10 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED
Sheet Title	COVER SHEET
Sheet Number	G0.01

File Name: i:\31000s\31806\WA01\MEP\CADD\DWG\G001-GS-31806(WA01)_PHil.dwg
Current Tab (Layout): G0.01 COVER SHEET User: AH2522
Printed Date: 10/11/2016 8:19:12 AM



LEGEND

PROPOSED	EXISTING	
■	CI	INLET
▥	GI	GRATE INLET
●	MH	MANHOLE
◕	WV	GATE VALVE & BOX
	WM	WATER METER
✠	FH	FIRE HYDRANT
	SSCO	SANITARY CLEAN OUT
	LP	LIGHT POLE
	EB	ELECTRIC BOX
	PP	POWER POLE
	TPED	TELEPHONE PEDESTAL
	—x—x—	FENCE
	TS	TRAFFIC SIGN
	— EX OHE —	OVERHEAD ELECTRIC
	— EX UGE —	UNDERGROUND ELECTRIC
	— Ex GAS —	GAS LINE
	— Ex F/O —	FIBER OPTIC LINE
	— Ex TEL —	TELEPHONE LINE
		ASPHALT PAVEMENT
—EX 6"SS—		SAN. SEWER
—W—	— EX 6"W —	WATER
—FIRE—	— Ex FIRE —	FIRE PROTECTION
	— 36"SD —	STORM SEWER
—100.00—	- -100.00- -	CONTOUR
		DRAINAGE FLOW ARROW
+ TP100.00		TOP OF PAVEMENT
+ TC100.00		TOP OF CURB
+ G100.00		GUTTER
+ TW100.00		TOP OF WALK
+ 100.00		FINISHED GRADE
		PROPOSED PAVEMENT
		CONCRETE
		! CAUTION ! UTILITY CROSSING

Hidalgo County Precinct 4 - Recovery and Motor Pool Improvements

1051 N. Doolittle Rd.
Edinburg, Texas 78542

HALFF
5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
FAX (956) 687-0502
TBPE FIRM #F-312

Revision No.	Date	Description

STATE OF TEXAS
RAUL GARCIA, JR.
94855
LICENSED PROFESSIONAL ENGINEER
10/10/16

The Seal appearing on this document was authorized by Raul Garcia, JR., P.E. Number 94855 on October 10, 2016. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act. The Record Copy of this drawing is on file at the offices of Halff Associates, Inc., 5000 W. Military Suite 100, McAllen, TX 78503. TBPE FIRM #F-312

Project No.:	31806(WA01)
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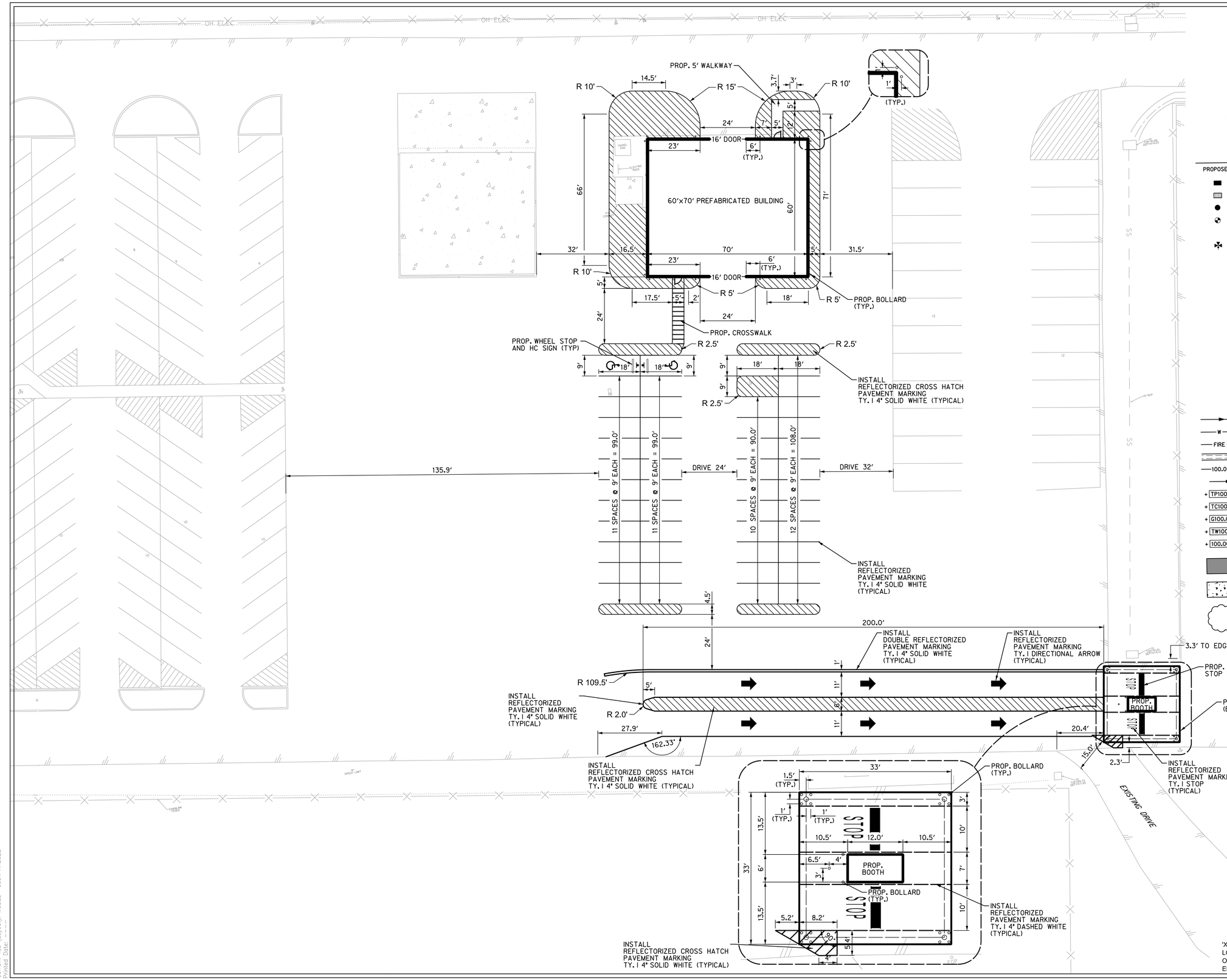
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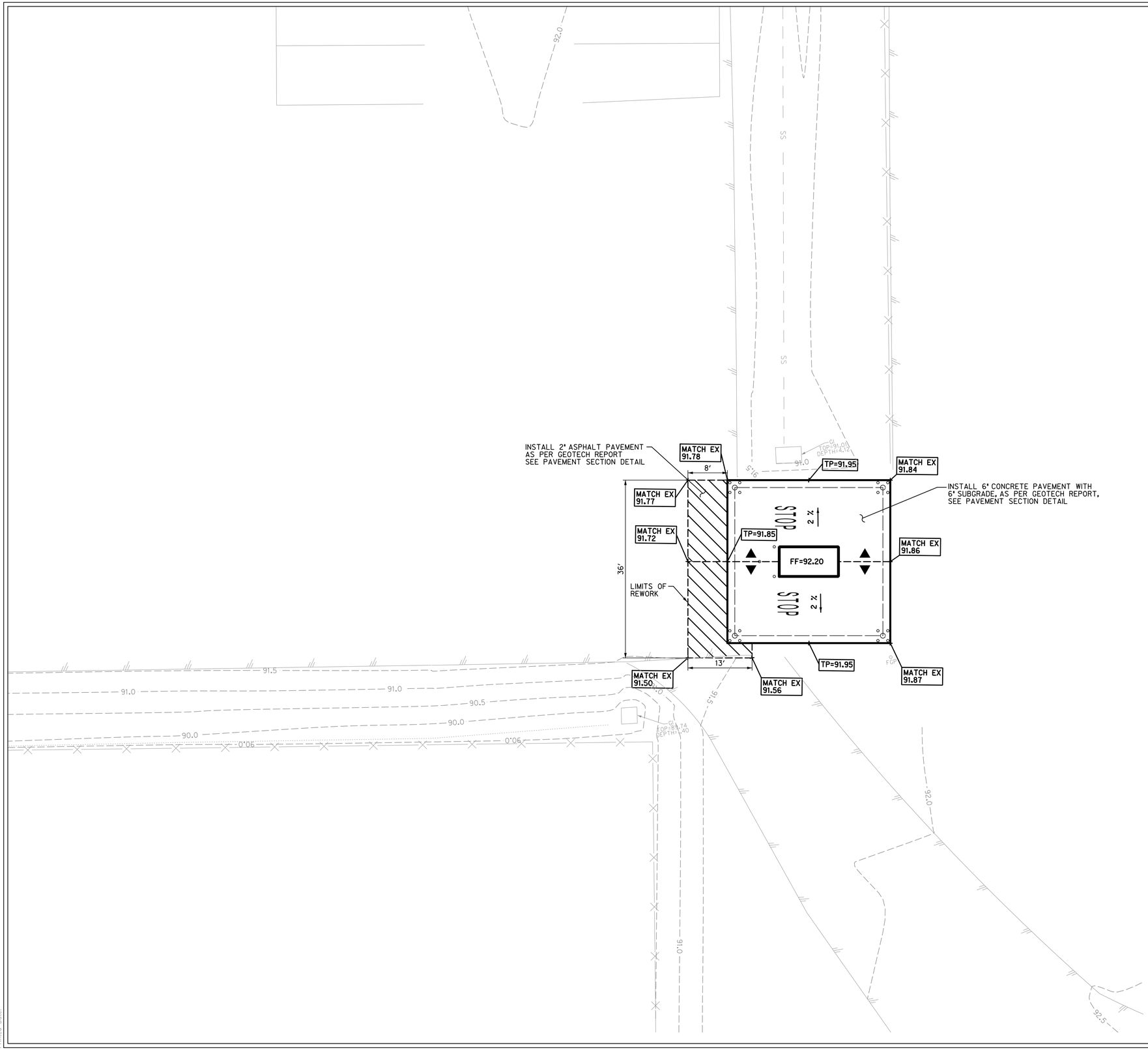
DEMOLITION PLAN

C1.0

Sheet Number

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Current Tab (Layout): MODEL User: AH2522
Printed Date: - - -


OH ELEC
OH ELEC
OH ELEC
PROP. 5' WALKWAY
R 10'
14.5'
R 15'
3.7'
3'
R 10'
1'
(TYP.)
5'
24'
7'
5'
2'
16' DOOR
23'
6'
(TYP.)
66'
60'x70' PREFABRICATED BUILDING
60'
71'
32'
16.5'
70'
5'
31.5'
23'
6'
(TYP.)
R 10'
16' DOOR
5'
R 5'
R 5'
PROP. BOLLARD
(TYP.)
17.5'
5'
2'
18'
24'
24'
PROP. CROSSWALK
PROP. WHEEL STOP
AND HC SIGN (TYP)
R 2.5'
R 2.5'
9'
18'
18'
9'
18'
18'
9'
9'
R 2.5'
INSTALL
REFLECTORIZED CROSS HATCH
PAVEMENT MARKING
TY. I 4" SOLID WHITE (TYPICAL
135.9'
11 SPACES @ 9' EACH = 99.0'
11 SPACES @ 9' EACH = 99.0'
DRIVE 24'
10 SPACES @ 9' EACH = 90.0'
12 SPACES @ 9' EACH = 108.0'
DRIVE 32'
INSTALL
REFLECTORIZED
PAVEMENT MARKING
TY. I 4" SOLID WHITE
(TYPICAL)
4.5'
200.0'
24'
INSTALL
DOUBLE REFLECTORIZED
PAVEMENT MARKING
TY. I SOLID WHITE
(TYPICAL)
INSTALL
REFLECTORIZED
PAVEMENT MARKING
TY. I DIRECTIONAL ARROW
(TYPICAL)
3.3' TO EDGE OF EXIST. FENCE
1'
R 109.5'
5'
11'
8'
11'
PROP. 24" SOLID WHITE
STOP BAR (TYP.)
INSTALL
REFLECTORIZED
PAVEMENT MARKING
TY. I 4" SOLID WHITE
(TYPICAL)
R 2.0'
PROP.
BOOTH
PROP. CANOPY
(BY OTHERS)
27.9'
162.33°
20.4'
15.0'
2.3'
INSTALL
REFLECTORIZED CROSS HATCH
PAVEMENT MARKING
TY. I 4" SOLID WHITE (TYPICAL)
INSTALL
REFLECTORIZED
PAVEMENT MARKING
TY. I STOP
(TYPICAL)
EXISTING DRIVE
33'
1.5'
(TYP.)
PROP. BOLLARD
(TYP.)
1'
(TYP.)
1'
(TYP.)
3'
13.5'
10'
10.5'
12.0'
10.5'
6.5'
4'
33'
6'
3'
PROP.
BOOTH
7'
PROP. BOLLARD
(TYP.)
13.5'
10'
INSTALL
REFLECTORIZED
PAVEMENT MARKING
TY. I 4" DASHED WHITE
(TYPICAL)
5.2'
8.2'
90°
5.4'
4'
INSTALL
REFLECTORIZED CROSS HATCH
PAVEMENT MARKING
TY. I 4" SOLID WHITE (TYPICAL)
'X' CUT: SET ON CONCRETE SIDEWALK
LOCATED APPROXIMATELY 88 LF SOUTHWEST
OF MAIN ENTRANCE TO BUILDING.
ELEVATION = 92.67
N
0 10 20 30 40
SCALE: 1"=20'
LEGEND
PROPOSED
EXISTING
CI INLET
GI GRATE INLET
MH MANHOLE
WV GATE VALVE & BOX
WM WATER METER
FH FIRE HYDRANT
SSCO SANITARY CLEAN OUT
LP LIGHT POLE
EB ELECTRIC BOX
PP POWER POLE
TPED TELEPHONE PEDESTAL
FENCE
TS TRAFFIC SIGN
EX OHE OVERHEAD ELECTRIC
EX UGE UNDERGROUND ELECTRIC
EX GAS GAS LINE
EX F/O FIBER OPTIC LINE
EX TEL TELEPHONE LINE
ASPHALT PAVEMENT
EX 6"SS SAN. SEWER
EX 6"W WATER
FIRE EX FIRE FIRE PROTECTION
36"SD STORM SEWER
100.00 100.00 CONTOUR
DRAINAGE FLOW ARROW
+ TP100.00 TOP OF PAVEMENT
+ TC100.00 TOP OF CURB
+ G100.00 GUTTER
+ TW100.00 TOP OF WALK
+ 100.00 FINISHED GRADE
PROPOSED PAVEMENT
CONCRETE
! CAUTION !
UTILITY CROSSING
Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
1051 N. Doolittle Rd.
Edinburg, Texas 78542
HALFF
5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
FAX (956) 664-0302
TBPE FIRM #F-312
Revision
No. Date Description
STATE OF TEXAS
RAUL GARCIA, JR.
94855
LICENSED
PROFESSIONAL ENGINEER
10/10/16
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Project No.: 31806(WA01)
Issued: 10/ 10 / 16
Drawn By: FC
Checked By: CM
Scale: AS NOTED
Sheet Title
SITE DIMENSION AND STRIPING PLAN
C2.0
Sheet Number
File Name: I:\31000s\31806\CADD\References\CE-TBLOCK-31806.dgn
Current Tab (Layout): MODEL User: AH2522
Printed Date: ----



'X' CUT: SET ON CONCRETE SIDEWALK LOCATED APPROXIMATELY 88 LF SOUTHWEST OF MAIN ENTRANCE TO BUILDING. ELEVATION = 92.67

N

0 5 10 15 20

SCALE: 1"=10'

LEGEND

PROPOSED	EXISTING	
■	CI □	INLET
▥	GI □	GRATE INLET
●	MH ○	MANHOLE
◕	WV ○	GATE VALVE & BOX
	WM ⊕	WATER METER
✠	FH	FIRE HYDRANT
	SSCO ○	SANITARY CLEAN OUT
	LP ⊙	LIGHT POLE
	EB ⊡	ELECTRIC BOX
	PP	POWER POLE
	TPED □	TELEPHONE PEDESTAL
	—x—x—	FENCE
	TS	TRAFFIC SIGN
	— EX OHE —	OVERHEAD ELECTRIC
	— EX UGE —	UNDERGROUND ELECTRIC
	— Ex GAS —	GAS LINE
	— Ex F/O —	FIBER OPTIC LINE
	— Ex TEL —	TELEPHONE LINE
	////	ASPHALT PAVEMENT
——	—EX 6"SS—	SAN. SEWER
—W—	— EX 6"W —	WATER
—FIRE—	— Ex FIRE —	FIRE PROTECTION
	— 36"SD —	STORM SEWER
—100.00—	- -100.00- -	CONTOUR
→		DRAINAGE FLOW ARROW
+ TP100.00		TOP OF PAVEMENT
+ TC100.00		TOP OF CURB
+ G100.00		GUTTER
+ TW100.00		TOP OF WALK
+ 100.00		FINISHED GRADE
■		PROPOSED PAVEMENT
▨	▨	CONCRETE
⌇		⌇ CAUTION ⌇ UTILITY CROSSING

Hidalgo County Precinct 4 - Recovery and Motor Pool Improvements

1051 N. Doolittle Rd.
Edinburg, Texas 78542

HALFF
5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
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TBPE FIRM #F-312

Revision No.	Date	Description

STATE OF TEXAS
RAUL GARCIA, JR.
94855
LICENSED PROFESSIONAL ENGINEER
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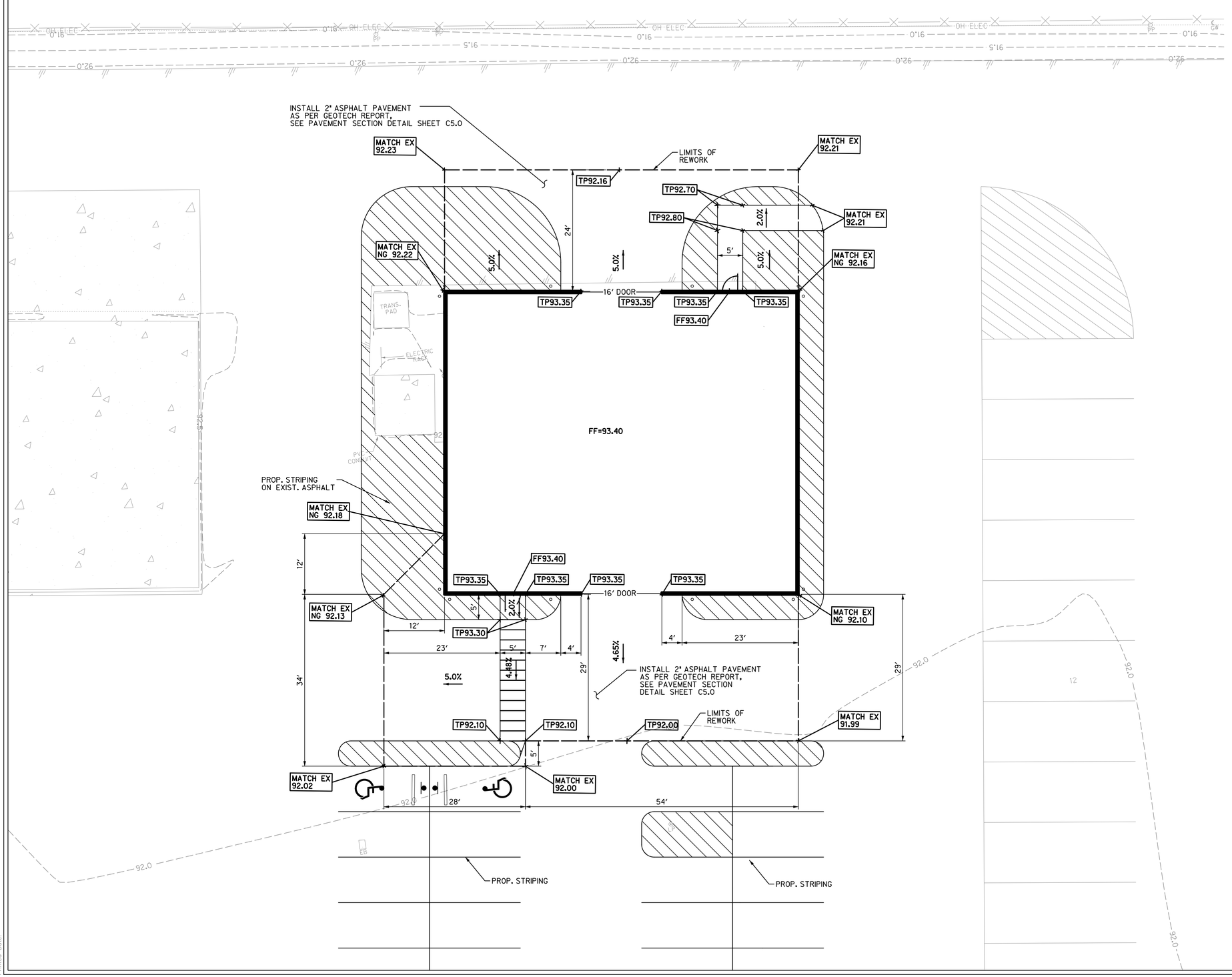
Sheet Title

GRADING & PAVING PLAN

C3.0

Sheet Number

File Name: I:\31000s\31806\CADD\References\CE-TBLOCK-31806.dgn
Current Tab (Layout): MODEL User: AH2522
Printed Date: - - -





'X' CUT: SET ON CONCRETE SIDEWALK LOCATED APPROXIMATELY 88 LF SOUTHWEST OF MAIN ENTRANCE TO BUILDING. ELEVATION = 92.67

N

0 5 10 15 20

SCALE: 1"=10'

LEGEND

PROPOSED	EXISTING	
■	CI □	INLET
▥	GI □	GRATE INLET
●	MH ○	MANHOLE
◕	WV ○	GATE VALVE & BOX
	WM ⊕	WATER METER
✠	FH	FIRE HYDRANT
	SSCO ○	SANITARY CLEAN OUT
	LP ⊙	LIGHT POLE
	EB ⊡	ELECTRIC BOX
	PP	POWER POLE
	TPED □	TELEPHONE PEDESTAL
	—x—x—	FENCE
	TS	TRAFFIC SIGN
	— EX OHE —	OVERHEAD ELECTRIC
	— EX UGE —	UNDERGROUND ELECTRIC
	— Ex GAS —	GAS LINE
	— Ex F/O —	FIBER OPTIC LINE
	— Ex TEL —	TELEPHONE LINE
	////	ASPHALT PAVEMENT
—→—	—EX 6"SS—⇦	SAN. SEWER
—W—	— EX 6"W —	WATER
—FIRE—	— Ex FIRE —	FIRE PROTECTION
	— 36"SD —	STORM SEWER
—100.00—	--100.00--	CONTOUR
→		DRAINAGE FLOW ARROW
+ TP100.00		TOP OF PAVEMENT
+ TC100.00		TOP OF CURB
+ G100.00		GUTTER
+ TW100.00		TOP OF WALK
+ 100.00		FINISHED GRADE
		PROPOSED PAVEMENT
		CONCRETE
		! CAUTION ! UTILITY CROSSING

Hidalgo County Precinct 4 - Recovery and Motor Pool Improvements

1051 N. Doolittle Rd.
Edinburg, Texas 78542

HALFF
5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
FAX (956) 682-3002
TBPE FIRM #F-312

Revision No.	Date	Description

RAUL GARCIA, JR.
94855
LICENSED PROFESSIONAL ENGINEER
10/10/16

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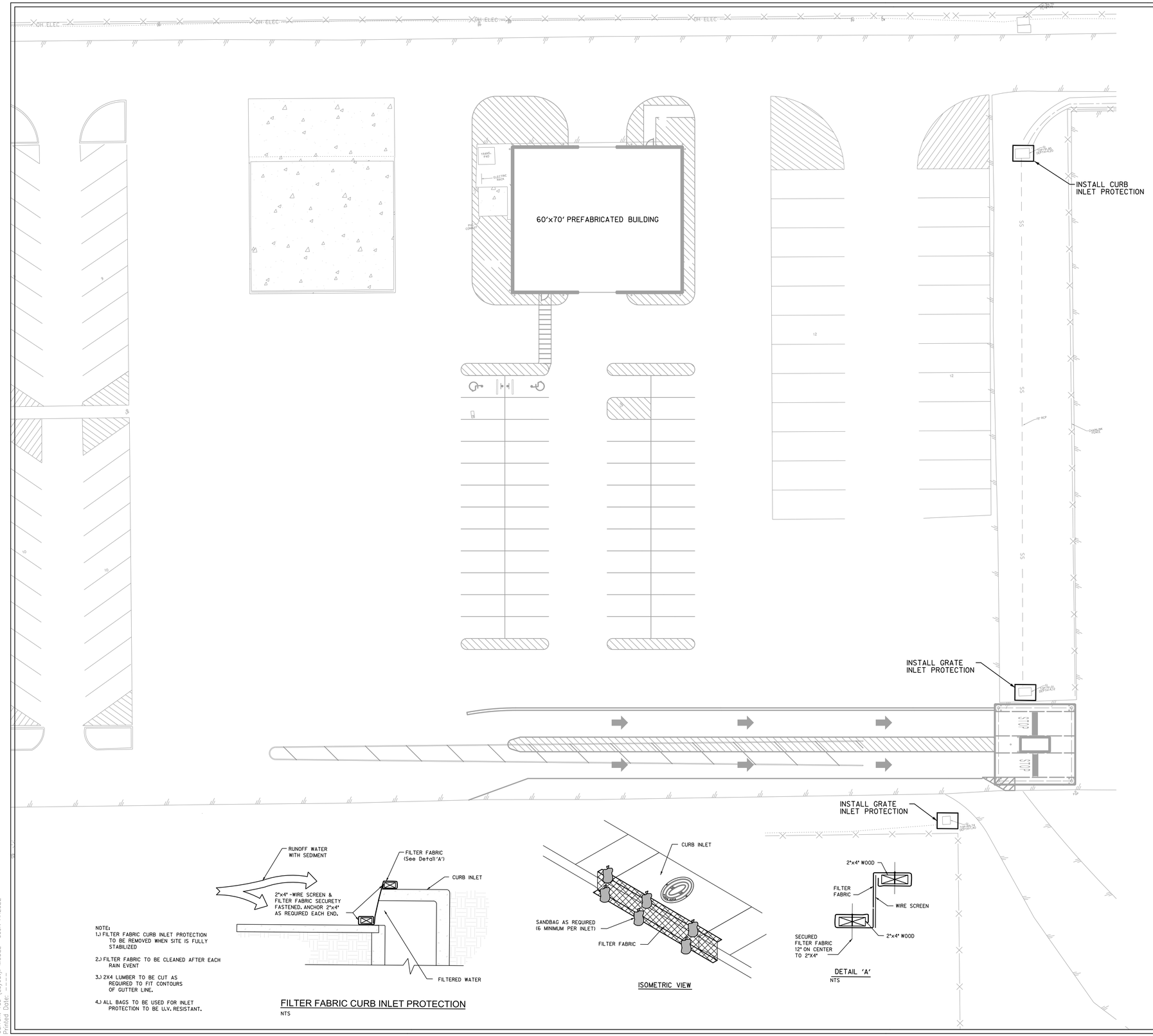
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GRADING & PAVING PLAN

C3.1

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NOTE;
1.) FILTER FABRIC CURB INLET PROTECTION TO BE REMOVED WHEN SITE IS FULLY STABILIZED

2.) FILTER FABRIC TO BE CLEANED AFTER EACH RAIN EVENT

3.) 2X4 LUMBER TO BE CUT AS REQUIRED TO FIT CONTOURS OF GUTTER LINE.

4.) ALL BAGS TO BE USED FOR INLET PROTECTION TO BE U.V. RESISTANT.

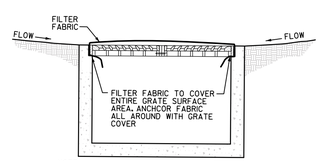
FILTER FABRIC CURB INLET PROTECTION

NTS

ISOMETRIC VIEW

DETAIL 'A'

NTS



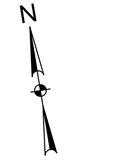
NOTE:

1. FILTER FABRIC CURB INLET PROTECTION TO BE REMOVED WHEN SITE IS FULLY STABILIZED.
2. FILTER FABRIC TO BE CLEARED AFTER EACH RAIN EVENT AT EACH INLET.

FILTER FABRIC GRATE INLET PROTECTION

NTS

'X' CUT: SET ON CONCRETE SIDEWALK LOCATED APPROXIMATELY 88 LF SOUTHWEST OF MAIN ENTRANCE TO BUILDING. ELEVATION = 92.67



LEGEND

INLET PROTECTION

SF SILT FENCE

THIS IS NOT A STORM WATER POLLUTION PREVENTION PLAN. CONTRACTOR MUST ADD HIS OPERATION SPECIFIC INFORMATION PER THE PERMIT REQUIREMENTS & INCLUDE ALL DOCUMENTATION & CERTIFICATES AS REQUIRED BY THE PERMIT.

NOTE:
STABILIZED CONSTRUCTION EXIT LOCATION TO BE DETERMINED BY CONTRACTOR.

EROSION GENERAL NOTES

1. IT IS THE INTENT OF THIS SUGGESTED EROSION CONTROL PLAN AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT TO ESTABLISH A MINIMUM BASIS OF COMPLIANCE WITH FEDERAL REGULATIONS. CONTRACTOR SHALL PREPARE AND SUBMIT A NOTICE OF INTENT PER THE REQUIREMENTS IN THE NPDES GENERAL PERMIT. THE CONTRACTOR SHALL PREPARE THE STORM WATER POLLUTION PREVENTION PLAN AND BE SOLELY RESPONSIBLE FOR ITS IMPLEMENTATION. THE STORM WATER POLLUTION PREVENTION PLAN SHALL MEET THE REQUIREMENTS SET FORTH IN THE TEXAS COMISSION ON ENVIRONMENTAL QUALITY (TCEQ) TPDES GENERAL PERMIT FOR REGION 6 FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITES.

2. THE STORM WATER POLLUTION PREVENTION PLAN SHOULD ADDRESS THREE GOALS:
   A) DIVERSION OF UPSLOPE WATER AROUND DISTURBED AREAS OF THE SITE;
   B) LIMITS THE EXPOSURE OF DISTURBED AREAS TO THE SHORTEST DURATION POSSIBLE; AND
   C) REMOVAL OF SEDIMENT FROM STORM WATER BEFORE IT LEAVES THE SITE.

3. THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO TCEQ.

4. THE CONTRACTOR MUST AMEND PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

5. STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY 14 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES. REPAIRS AND INADEQUACIES REVEALED BY THE INSPECTION MUST BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.

6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE RETAINED AND MADE PART OF THE PLAN.

7. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE NPDES GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE POLLUTION PREVENTION PLAN.

8. THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE:

   DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR;
   REGULAR COLLECTION OF WASTE;
   CONVENIENTLY LOCATED WASTE RECEPTACLES; AND
   DESIGNATING AND CONTROLLING EQUIPMENT WASHDOWN.

9. THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS AND SEQUENCE. MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF THE REQUIREMENTS OF LAW AND THIS PLAN. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.

10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.

11. BORROW AREAS, IF EXCAVATED, SHALL BE PROTECTED AND STABILIZED UTILIZING THE PLAN DETAILS. ALL WORK SHALL CONFORM TO GOVERNMENTAL REQUIREMENTS AND BECOME PART OF THE STORM WATER POLLUTION PREVENTION PLAN (SWP3). THE WORK SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

12. ALL NON-PAVED AREAS SHALL BE MULCHED AND SEEDED WITH EROSION PROTECTION IMMEDIATELY UPON COMPLETION OF FINAL GRADING. THIS INCLUDES ALL DITCHES AND EMBANKMENTS. THE CONTRACTOR SHALL MAINTAIN FINAL GRADING AND KEEP SEEDED AREAS WATERED UNTIL FULLY ESTABLISHED AND ACCEPTED BY THE OWNER.

13. THE CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL TRAFFIC EXIT POINTS PRIOR TO EXITING ONTO ANY PAVED ROADWAY.

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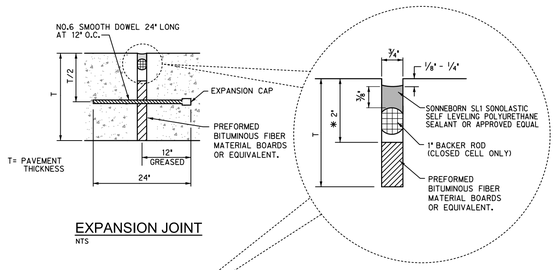
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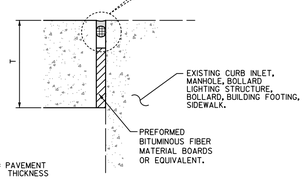
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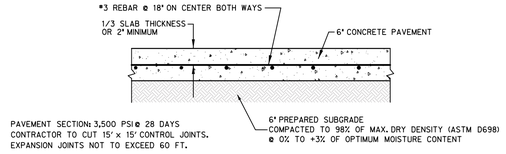
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EXPANSION JOINT
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ISOLATION JOINT
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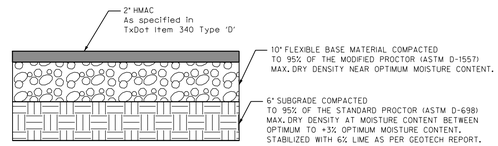


PAVEMENT SECTION: 3,500 PSI @ 28 DAYS
CONTRACTOR TO CUT 15' x 15' CONTROL JOINTS.
EXPANSION JOINTS NOT TO EXCEED 60 FT.

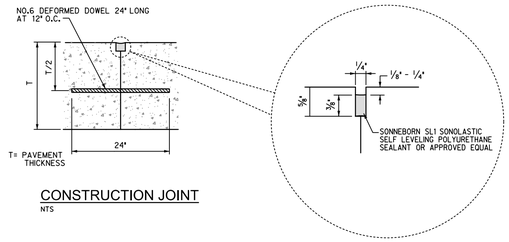
CONTRACTOR TO USE CONSTRUCTION JOINTS WHERE NEW PAVEMENTS ARE POURED ON TWO SEPARATE DAYS.

* GEOTECHNICAL STUDY:
PROVIDED BY: L&G CONSULTING ENGINEERS,INC.
PROJECT NO.: GL16012
DATE: JULY 31,2016

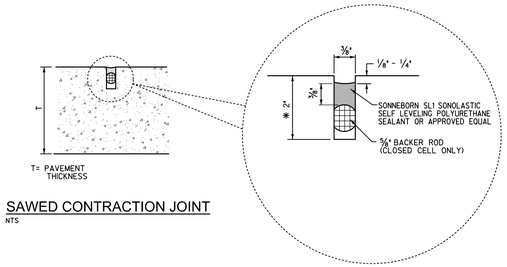
CONCRETE PAVEMENT SECTION
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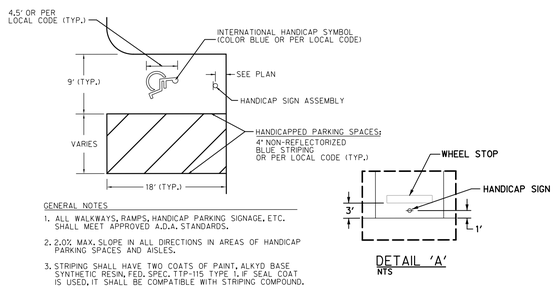
ASPHALT PAVEMENT SECTION
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CONSTRUCTION JOINT
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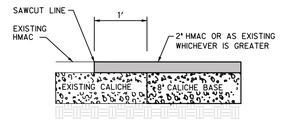


SAWED CONTRACTION JOINT
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HANDICAP STALL DETAIL
SCALE: NTS

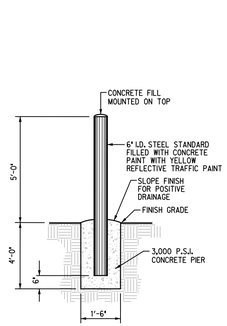
DETAIL 'A'
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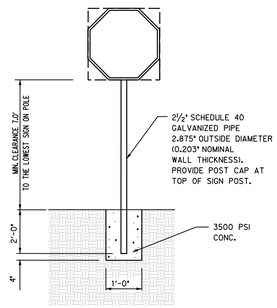
SAWCUT DETAIL
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NOTE: ALL CONCRETE SHALL BE CLASS A.

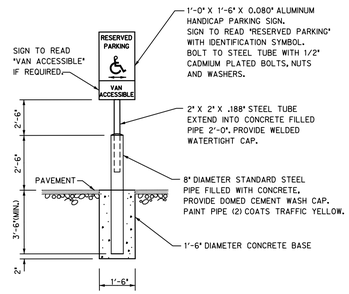
CONCRETE WHEEL STOP WITH DRAINAGE SLOTS DETAIL
NTS



BOLLARD DETAIL
NTS



REGULATORY SIGN
NTS



HANDICAP SIGN & SUPPORT
NTS

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GENERAL NOTES

GENERAL

1. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, SHORING FOR THE EARTH BANKS, FORMS, SCAFFOLDING, PLANNING, SAFETY NETS, SUPPORT AND BRACING FOR CRANES, GIN POLES, ETC. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
2. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
3. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. EXACT WEIGHTS AND LOCATIONS OF MECHANICAL EQUIPMENT SHALL BE COORDINATED BY CONTRACTOR. IF THE FINAL LOCATION VARIES FROM THAT SHOWN ON THE PLANS, CONTRACTOR TO NOTIFY ARCHITECT AND ENGINEER FOR APPROVAL BEFORE INSTALLATION.
4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.
5. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND SHALL BE RESPONSIBLE FOR CONDITIONS OF ALL WORK AND MATERIALS.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS AND ELEVATIONS. CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN WRITING TO THE ARCHITECT. ANY CONFLICT BETWEEN THE DRAWING AND SPECIFICATIONS OF THE VARIOUS TRADES INVOLVED SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER.
7. DETAILS SHOWN ON DRAWINGS APPLY AT SIMILAR CONDITIONS.
8. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL STANDARDS AND TO ALL APPLICABLE PROVISIONS OF THE GOVERNING BUILDING CODE.
9. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED IN WRITING WHEN WORK COMMENCES.
10. CONTRACTOR SUBSTITUTIONS: ANY MATERIALS OR PRODUCTS THAT ARE SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIALS OR PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS WILL ONLY BE CONSIDERED IF THE FOLLOWING CRITERIA ARE SATISFIED.
    A) A COST SAVING TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST
    B) THE MATERIAL OR PRODUCT HAS BEEN APPROVED BY THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO) AND THE ICBO REPORT IS SUBMITTED WITH THE REQUEST.

STRUCTURAL OBSERVATION

1. THE PROFESSIONAL ENGINEER OR HIS/HER AUTHORIZED REPRESENTATIVE SHALL CONDUCT ALL STRUCTURAL OBSERVATIONS. STRUCTURAL OBSERVATIONS SHALL BE FOR THE PURPOSE OF ASCERTAINING GENERAL COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. HOWEVER, SUCH OBSERVATION VISITS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATIONS AND RESPONSIBILITIES TO THE CONSTRUCTION DOCUMENTS.
2. ITEMS THAT REQUIRE A STRUCTURAL OBSERVATION ARE AS FOLLOWS:
    A. STEEL REINFORCEMENT IN SLAB OR FOUNDATION
    B. FRAMING OF ROOF BEFORE PANELS ARE INSTALLED
    C. EXTERIOR METAL PANELS
    D. CMU WALL REINFORCING BEFORE FILLING WITH GROUT
3. NOTIFY ENGINEER 24 HOURS IN ADVANCE WHEN A STRUCTURAL OBSERVATION IS REQUIRED.
4. WORK SHALL NOT CONTINUE AT THESE AREAS UNTIL OBSERVATION AND APPROVAL BY ENGINEER. FAILURE BY THE CONTRACTOR TO PROVIDE PROPER NOTICE FOR AN OBSERVATION VISIT AT THE REQUIRED TIME OR ADDITIONAL WORK PERFORMED WITHOUT AN OBSERVATION VISIT WILL BE DONE AT CONTRACTOR'S RISK AND MAY BE SUBJECT TO COMPLETE OR PARTIAL REMOVAL TO VERIFY COMPLIANCE OF PREVIOUS WORK.

STEEL REINFORCING

1. ALL REINFORCEMENT SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A-615 GRADE 60.
2. REINFORCING STEEL SHALL BE DESIGNED, DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE LATEST ACI DETAILING MANUAL (SP-66) AND CSRI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE, (ACI #315) LATEST EDITIONS.
3. BARS SCHEDULED OR DETAILED "CONT" SHALL BE SPLICED ONLY WHEN UNAVOIDABLE AT POINTS OF MINIMUM STRESS AND WITH A MINIMUM LAP AS FOLLOWS:
    A. HORIZONTAL BARS w/ MORE THAN 12" OF FRESH CONCRETE CAST BELOW LAPS.
        #6 BARS AND SMALLER - 57 BAR DIAMETERS
        #7 BARS AND BIGGER - 72 BAR DIAMETERS
    B. OTHER BARS
        #6 BARS AND SMALLER - 44 BAR DIAMETERS
        #7 BARS AND BIGGER - 55 BAR DIAMETERS
    C. ALL SPLICES TO BE STAGGERED A MINIMUM OF 4'-0". TOP BAR AND BOTTOM BAR SPLICES TO BE LOCATED AT MID-SPAN AND WITHIN 1/3 SPAN RESPECTIVELY.
4. CORNER REINFORCING BARS SHALL BE USED AT ALL CORNERS AND INTERSECTIONS.
5. EXTEND THE SLAB REINFORCING STEEL PERPENDICULAR TO EXTERIOR GRADE BEAM TO THE TOP OUT SIDE REINFORCING BAR OF BEAM.
6. SPACE REINFORCING BARS WITH MINIMUM CLEAR SPACING IN ACCORDANCE WITH ACI 318 OF ONE BAR DIAMETER, BUT NOT LESS THAN 1 INCH. FOR COMPRESSION MEMBERS, SPACE AT A MINIMUM OF 1.5 INCHES OR 1.5 BAR DIAMETERS, WHICHEVER IS GREATER.
7. WHERE REINFORCING BARS ARE PLACED IN MULTIPLE LAYERS, PLACE UPPER BARS DIRECTLY ABOVE LOWER BARS.
8. MAINTAIN CONCRETE COVER AROUND REINFORCEMENT IN ACCORDANCE WITH ACI 318 AND AS FOLLOWS:
    A. FOOTING AND CONCRETE CAST AGAINST EARTH - 3 INCHES
    B. EXPOSED TO EARTH OR WEATHER
        #6 BARS AND BIGGER - 2 INCHES
        #5 BARS AND SMALLER - 1.5 INCHES
    C. BEAMS AND COLUMNS - 1.5 INCHES
    D. SLABS AND WALLS - 1 INCH
9. REPAIR ANY DAMAGE TO VAPOR RETARDER PER MANUFACTURER SPECIFICATIONS.
10. ADDITIONAL REINFORCING TO BE PROVIDED ON SITE FOR USE AS DIRECTED BY STRUCTURAL ENGINEER.
        #4 BARS - 100 FT.
        #5 BARS - 100 FT.
        #6 BARS - 100 FT.

DESIGN CRITERIA

1. DESIGN LOADS, STRUCTURAL ANALYSIS AND PREPARATION OF STRUCTURAL MEMBERS ARE BASED ON THE FOLLOWING CRITERIA:
2. CODE: ..... IBC 2012
3. VERTICAL LOADS
    A. ROOF DEAD LOAD (PRE-ENGINEERED BUILDING): ..... STRUCTURE SELF WEIGHT
    B. COLLATERAL LOAD (PRE-ENGINEERED BUILDING): ..... 20 PSF
    C. ROOF LIVE LOAD(REDUCIBLE) : ..... 10 PSF
    D. UPLIFT LOAD ..... SEE ROOF UPLIFT PLAN

F. MECHANICAL LOAD:
THE GENERAL CONTRACTOR SHALL SUBMIT ACTUAL WEIGHTS AND LOCATIONS OF EQUIPMENT TO BE USED IN THE PROJECT TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOADS USED IN THE DESIGN AT LEAST TWO WEEKS PRIOR TO FABRICATION AND CONSTRUCTION OF THE SUPPORTING STRUCTURE.

4. LATERAL LOADS
    A. WIND SPEED (V-ULT): ..... 131 MPH
        WIND SPEED (V-ASD) ..... 102 MPH
    B. EXPOSURE CATEGORY: C
    C. IMPORTANCE FACTOR: 1.0
    D. BUILDING CATEGORY: II
    E. SEISMIC DESIGN CATEGORY: ..... A
    F. SITE CLASS: ..... D
5. GEOTECHNICAL ENGINEERING REPORT:
    PROVIDED BY: L&G ENGINEERING
    PROJECT NUMBER: GL16012
    DATED: 7/31/16
    FOUNDATION DESIGN BASED ON THE FOLLOWING PARAMETERS
    A. EFFECTIVE PI: ..... 32 IN
    B. CLIMATIC RATING (Cw): 15
    C. MINIMUM BEAM DEPTH: ..... 36 IN
    D. MINIMUM FOOTING DEPTH..... 36 IN
    E. ALLOWABLE BEARING CAPACITY (BEAMS) ..... 950 PSF
    F. ALLOWABLE BEARING CAPACITY (FOOTING) ..... 1100 PSF
    G. EXISTING PVR: ..... 2.3 IN
    H. PVR (SEE EXCAVATION NOTES) ..... 1.0 IN

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE TO AISC SPECIFICATIONS.
2. MATERIALS USED SHALL BE AS FOLLOWS=
    A. STRUCTURAL W-SHAPES - ASTM A992 GRADE 50
    B. STRUCTURAL M-SHAPES AND S-SHAPES - ASTM A36
    C. STRUCTURAL T-SHAPES - CUT FROM W-SHAPES
    D. CHANNELS AND ANGLES - ASTM A36
    E. ROUND HOLLOW STRUCTURAL SECTIONS - ASTM A500 GRADE B
    F. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS - ASTM A500 GRADE B
    G. STRUCTURAL PLATES - ASTM A36
    H. STRUCTURAL BARS - ASTM A36
    I. HIGH STRENGTH BOLTS - ASTM A325
    J. ELECTRODES - SERIES E70
3. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY SPECIFICATIONS.
4. CONNECTIONS NOT DETAILED AND/OR SCHEDULED ON STRUCTURAL DRAWINGS SHALL BE DETAILED BY FABRICATOR AND MARKED FOR ENGINEERS APPROVAL. CONNECTIONS TO BE DESIGNED TO AISC SPECIFICATIONS AND SHALL BE CAPABLE OF SUPPORTING 55% OF THE MAXIMUM UNIFORM LOAD CAPACITY FOR THE SPAN SPECIFIED, SHOWN IN THE TABLES OF UNIFORM CONSTANTS OF THE AISC MANUAL OF STEEL CONSTRUCTION.
5. REFER TO ARCHITECTURAL PLANS FOR ANY MISCELLANEOUS STEEL. MISCELLANEOUS STEEL AND CONNECTIONS SHALL BE DESIGNED BY STEEL FABRICATOR.
6. HOT DIP GALVANIZE, IN ACCORDANCE WITH ASTM A123 AND ASTM A153, STRUCTURAL STEEL AND FASTENERS PERMANENTLY EXPOSED TO THE WEATHER.
7. STEEL SUPPORTING OR CONNECTED TO HVAC AND OTHER EQUIPMENT AS SHOWN ON THE DRAWINGS IS SHOWN FOR BIDDING PURPOSES ONLY CONTRACTOR SHALL COORDINATE EXACT LOCATION AND SIZE BEFORE COMMENCING WORK.
8. STRUCTURAL STEEL SHALL BE PAINTED WITH ONE COAT OF RUST INHIBITIVE PAINT.
9. STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED IN WHOLE OR IN PART FOR SHOP DRAWING SUBMITTALS.
10. PROVIDE 3 TONS OF RED IRON ALLOWANCE TO BE USED AS DIRECTED BY STRUCTURAL ENGINEER. INCLUDE LABOR COSTS IN THE ALLOWANCE. ANY UNUSED ALLOWANCE SHALL BE CREDITED BACK TO OWNER AT A COST OF $3500 PER TON.
11. ALL WELDED CONNECTION SHALL BE MADE WITH A 1/4" FILLET WELD U.N.O.
12. PROVIDE 1/2" GAP AT ALL PENETRATIONS THROUGH CMU WALL AND INFILL WITH ELASTOMERIC MATERIAL.
13. STEEL FABRICATOR SHALL BE CERTIFIED BY ONE OF THE FOLLOWING: AISC/ IBC/ IAS-ICC

SHOP DRAWINGS & SUBMITTALS

1. SUBMITTAL THAT WILL BE REQUIRED FOR APPROVAL INCLUDE:
    A. CONCRETE MIX DESIGN
    B. CURING COMPOUND FOR CONCRETE
    C. REINFORCING STEEL
    D. STRUCTURAL STEEL
    E. METAL PANELS
    F. CMU WALL COMPONENTS
    G. PRE-ENGINEERED BUILDING CALCULATIONS (INCLUDING REACTIONS)
2. ALLOW (2) WEEKS MINIMUM FOR REVIEW OF SHOP DRAWINGS.
3. PRIOR TO ISSUING THE SUBMITTALS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSION WITH ARCHITECTURAL PLANS.
4. REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE TO THE STRUCTURAL DRAWINGS. APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR FOR ANY ERRORS IN DIMENSIONS OR MATERIAL INDICATED ON THE SHOP DRAWINGS.

CONCRETE

1. ALL CONCRETE WORK SHALL BE EXECUTED IN ACCORDANCE WITH ACI 318 AND ACI 301 LATEST EDITION.
2. CEMENT SHALL CONFORM TO ASTM CI50 TYPE I AGGREGATE SHALL CONFORM TO ASTM C33.
3. CONCRETE SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH AS FOLLOWS:

MEMBER TYPE	STRENGTH	SLUMP	MAX AGG.
FOUNDATION	3000 PSI	4"-6"	1.5 IN.
AND SLAB			
PIERS	3000 PSI	6"-8"	1 IN.
COLUMNS	4000 PSI	4"-6"	1 IN.

4. INSTALL 10 MIL VAPOR RETARDER UNDER SLABS ON GRADE AND ALONG SIDE OF TRENCHES IN ACCORDANCE WITH ASTM E1643. LAP JOINTS MINIMUM OF 12 INCHES.
5. PLACE CONCRETE CONTINUOUSLY BETWEEN PRE-DETERMINED EXPANSION AND CONSTRUCTION JOINTS.
6. ALL CONSTRUCTION JOINT LOCATIONS TO BE APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER.
7. HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE PERMITTED.
8. CURE CONCRETE IN ACCORDANCE WITH ACI 308.1
9. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR LOCATIONS OF ALL DEPRESSIONS, OPENINGS, ACCESSORIES, ETC.
10. CONDUIT AND PLUMBING LINES SHALL BE PLACED BELOW SLAB REINFORCING AND SHALL BE NO BIGGER THAN 1 INCH.
11. FLYASH MAY BE USED TO REPLACE A PORTION OF THE PORTLAND CEMENT. THE RATIO OF FLYASH TO THE TOTAL OF THE FLYASH AND CEMENT IN A MIX SHALL NOT EXCEED 20%. FLYASH SHALL CONFORM TO ASTM C618, TYPE C OR F.
12. ALL FLOORS SHALL BE CONSTRUCTED WITH A MINIMUM FLATNESS FF = 35 AND A MINIMUM LEVELNESS OF FL = 25
13. CONTRACTION JOINTS TO BE INSTALLED WITHIN 12 HOURS OF POURING FOUNDATION.
14. TESTING OF CONCRETE SHALL BE DONE AS FOLLOWS:
    1) SETS SHALL CONSIST OF 3 CYLINDERS
        ONE TESTED AT 7 DAYS
        TWO TESTED AT 28 DAYS
    2) ONE SET SHALL BE TAKEN FOR EACH 150 CY AND FOR EVERY 5000 SF OF SURFACE AREA AND AT LEAST ONCE PER DAY OF POURING
    3) A MINIMUM OF 3 SETS SHALL BE TAKEN FOR EACH CLASS OF CONCRETE
15. NO WATER SHALL BE ADDED TO THE CONCRETE AT THE JOBSITE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE CONCRETE SUPPLIER TO ENSURE A PUMPABLE AND WORKABLE MIX WITHOUT THE ADDITION OF WATER AT THE JOBSITE. THE USE OF PLASTICIZERS, RETARDANTS AND OTHER ADDITIVES SHALL BE AT THE OPTION OF THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER. FOLLOW THE RECOMMENDATIONS OF THE MANUFACTURER FOR THE PROPER USE OF ADDITIVES. THE USE OF CALCIUM CHLORIDE OR OTHER CHLORIDE BEARING SALTS SHALL NOT BE PERMITTED.
16. PLACE CONCRETE IN A MANNER SO AS TO PREVENT SEGREGATION OF THE MIX. DELAY FLOATING AND TROWELING OPERATIONS UNTIL CONCRETE HAS LOST SURFACE WATER SHEEN OR ALL FREE WATER. DO NOT SPRINKLE FREE CEMENT ON THE SLAB SURFACE. FINISHING OF SLAB SURFACES SHALL COMPLY WITH THE RECOMMENDATIONS OF AC1 302.1 AND 304.
17. UNLESS SPECIFIED, CONCRETE MUST REACH THE FOLLOWING PERCENTAGES OF ITS 28-DAY COMPRESSIVE STRENGTH (F'c), BEFORE FORMS MAY BE REMOVED.

    WALL, COLUMNS, & BEAM SIDES.....40%
    JOIST PANS & BEAM BOTTOMS (IF RESHORED).....70%
    SHORING FOR FLOOR SYSTEMS (IF NOT RESHORED).....85%
18. NO CONCRETE SHALL BE PLACED OUTSIDE OF THESE SPECIFICATIONS WITHOUT THE OWNER'S PRIOR APPROVAL. ANY ITEMS NOT IN COMPLIANCE WITH THE OUTLINED SPECIFICATION SHALL BE REPORTED TO THE OWNER AND STRUCTURAL ENGINEER WITHIN 24 HOURS.
19. CONSTRUCTION VEHICLE LOADS SHALL NOT BE PERMITTED ON ELEVATED SLABS AT ANY TIME.
20. ALL RETAINING WALLS TO BE SHORED UNTIL UPPER SLAB IS IN PLACE AND HAS REACHED 70% OF ITS DESIGN STRENGTH OR THE RETAINING WALL HAS REACHED 100% OF ITS DESIGN STRENGTH. PROVIDE GRANULAR BACKFILL AND PERFORATED DRAIN PIPE CONNECTED TO SITE DRAINAGE, RE: CIVIL PLAN.

PRE-ENGINEERED METAL BUILDING AND COMPONENTS

1. REFER TO SCHEMATIC ROOF FRAMING PLAN AND DESIGN CRITERIA FOR DESIGN LOAD REQUIREMENTS AND SPECIFICATIONS FOR THE PRE-ENGINEERED METAL BUILDING.
2. PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL SUBMIT DESIGN CERTIFICATION SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS FOR THE STRUCTURAL FRAMING AND COVERING PANELS OF THE BUILDING SYSTEM. CERTIFICATION AND DESIGN SHALL MEET REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND ASCE 7.
3. PRE-ENGINEERED METAL BUILDING MANUFACTURER CERTIFICATION SHALL BE SUBMITTED WITH SEALED SHOP DRAWINGS WHEN SUBMITTED FOR REVIEW.
4. SHOP DRAWINGS AND CALCULATIONS INCLUDING BUILDING REACTIONS, SHALL BE PREPARED AND REVIEWED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS. SEALED SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW BY THE DESIGN TEAM.
5. ALL COMPONENTS SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS AND STANDARDS OF THE AISC. THIS WORK SHALL INCLUDE ALL MEMBERS AND BRACES NECESSARY TO BRACE MASONRY WALLS. LIGHT GAGE STEEL MEMBERS SHALL COMPLY WITH THE LATEST ADDITION OF THE AISI.
6. PURLINS AND EAVE STRUTS SHALL HAVE A MINIMUM YIELD STRESS OF 55 KSI AND SHALL BE PAINTED WITH ONE COAT OF RED OXIDE OR APPROVED SHOP COAT.
7. PURLIN SPACING SHOWN IN STRUCTURAL DRAWINGS ARE FOR SCHEMATIC PURPOSES ONLY. PURLIN SPACING TO BE DETERMINED BY METAL BUILDING MANUFACTURER. PURLINS SHALL HAVE A MAXIMUM TOTAL LOAD DEFLECTION OF L/180.
8. SAG STRAPS SHALL BE LOCATED AS SHOWN ON PLANS AND SHALL BE FABRICATED WITH A MINIMUM YIELD STRENGTH OF 50 KSI.
9. STANDING SEAM METAL ROOF SHALL NOT BE CONSIDERED TO PROVIDE LATERAL BRACING FOR PURLINS. BRIDGING SHALL BE DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER TO RESIST BOTH GRAVITY AND UPLIFT LOADS.
10. CROSS BRACING SHALL BE DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER TO PROVIDE AN ADEQUATE HORIZONTAL ROOF DIAPHRAGM FOR THE STRUCTURE.
11. PROVIDE PINNED BASE CONNECTION FROM COLUMN TO FOUNDATION.
12. ALL ANCHOR BOLTS SIZES, LENGTH, AND EMBEDMENT SHALL BE DESIGNED BY THE METAL BUILDING MANUFACTURER AND SUPPLIED BY THE CONTRACTOR. ANCHOR BOLT EMBEDMENT DEPTHS SHALL BE DESIGNED TO RESIST CONCRETE CONICAL SHEAR FAILURE.
13. THIS FOUNDATION HAS BEEN DESIGNED USING ASSUMED REACTIONS FROM THE PRE-ENGINEERED METAL BUILDING COMPONENTS AND IS FOR BID PURPOSES ONLY. THE CONTRACTOR SHALL SUBMIT BASE CONNECTION DETAILS (SIZE AND THICKNESS OF BASE PLATE AND DIAMETER AND LENGTH OF ANCHOR BOLTS) AND REACTIONS SO THE DESIGN ASSUMPTIONS CAN BE VERIFIED.
14. ANY ADDITIONAL COST OF FOUNDATION WORK REQUIRED BY REVISIONS OF THE FOUNDATION DESIGN AFTER PRE-ENGINEERED METAL BUILDING REACTIONS ARE SUBMITTED SHALL NOT BE INCURRED BY STRUCTURAL ENGINEER.
15. DRIFT CRITERIA FOR RIGID FRAMES AND METAL GIRTS SHALL HAVE A MAXIMUM DEFLECTION OF H/240 FOR MASONRY FINISHES AND A H/120 FOR METAL SIDING.

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Sheet Title
GENERAL NOTES

S1.0
Sheet Number

GENERAL NOTES

MASONRY

1. MATERIALS:
   A. CONCRETE BLOCK: MEDIUM WEIGHT ASTM C90 (HOLLOW) ASTM C145 (SOLID) MINIMUM COMPRESSIVE STRENGTH: 1900 PSI
   B. MORTAR: ASTM C270 TYPE S.
   C. GROUT: MINIMUM COMPRESSIVE STRENGTH: 2000 PSI
   D. NET AREA COMPRESSIVE STRENGTH: 1500 PSI TO BE TESTED IN ACCORDANCE TO ATSM C1314 STANDARDS.
   E. JOINT REINFORCING: MILL GALVANIZED FINISH, 9 GAGE MINIMUM SIDE WIRES AND CROSS WIRES (DUR-O-WALL). A HOHMANN + BARNARD COMPANY.
   F. BAR REINFORCING: ASTM A615, GRADE 60 (UNLESS NOTED OTHERWISE).
   G. TYPICAL CMU WALL REINFORCING SHALL BE #5 (V) AT 48" O.C. AND #5 (H) AT 8'-0" O.C. U.N.O. ON DRAWINGS.

2. REINFORCED MASONRY, WHERE VERTICAL BARS ARE TO BE GROUTED INTO CORES, THE FOLLOWING REQUIREMENTS APPLY:
   A. PROVIDE DOWELS FROM WALL, SAME SIZE AND SPACING AS WALL BARS. LAP 48 BAR DIAMETERS MINIMUM WITH WALL BAR.
   B. PROVIDE A CONTINUOUS VERTICAL CAVITY, AT LEAST 2" x 3" IN SIZE, FREE OF MORTAR DROPPINGS.
   C. PROVIDE REBAR ALIGNMENT DEVICES AT A MAXIMUM SPACING OF 96 BAR DIAMETERS (MINIMUM OF 2 PER BAR).
   D. AT SPLICES IN VERTICAL BARS, PROVIDE MECHANICAL COUPLERS OR 48 BAR DIAMETER LAP.
   E. ALL REINFORCEMENT MUST BE INSTALLED AND SECURELY ANCHORED IN PLACE PRIOR TO PLACEMENT OF GROUT.
   F. MAXIMUM HEIGHT OF GROUT LIFT = 4'-0". UNLESS HIGH LIFT GROUTING PROCEDURES ARE EMPLOYED IN ACCORDANCE WITH ASI 530-99

3. MISCELLANEOUS:
   A. FILL CORE SOLID AROUND ANCHOR BOLTS.
   B. PROVIDE SOLIDLY FILLED HOLLOW BLOCKS AT ALL EMBED ANCHOR LOCATIONS.
   C. SET WELD PLATES IN BOND BEAMS AFTER THE GROUT IS PLACED, BUT WHILE IT IS STILL PLASTIC.
   D. HOLLOW MASONRY UNITS TO BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. WEBS SHALL ALSO BE BEDDED IN ALL COURSES OF PIERS, COLUMNS, AND PILASTERS, AND IN THE STARTING COURSE ON FOOTING, AND WHEN ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED OR FILLED WITH CONCRETE OR GROUT. SOLID UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
   E. PROVIDE JOINT REINFORCING AT 16 INCHES, EXCEPT AS NOTED.
   F. LAP JOINT REINFORCING 6 INCHES FOR STANDARD, 15 INCHES FOR HEAVY WEIGHT.
   G. VERTICAL CONTROL JOINTS SHALL BE PROVIDED FULL HEIGHT OF MASONRY WALLS AS LOCATED ON THE DRAWINGS. THE JOINT SHALL BE PROVIDED AS A CONTINUOUS HEAD JOINT WITH MORTAR RAKED BACK 3/4" AT BOTH FACES AND 50% OF THE HORIZONTAL JOINT REINFORCING CUT AT THE JOINT. AFTER THE MORTAR IS SET, THE JOINT SHALL BE CAULKED.
   H. FILL ALL VOIDS AND CELLS WITHIN 12" EITHER SIDE OF CENTERLINE OF BEAM AND/OR COLUMN BEARING LOCATIONS WITH A #4 REINFORCING BAR AND GROUT U.N.O.
   I. ALL CMU WALLS MUST HAVE SPECIAL INSPECTION PER IBC CODE 2012 SECTION 1705.4 "MASONRY CONSTRUCTION" ON CHAPTER 17-"STRUCTURAL TEST & SPECIAL INSPECTION". THE CONTRACTOR MUST PROVIDE REPORTS OF THESE "SPECIAL INSPECTIONS".
   J. BARS SCHEDULED "CONTINUOUS" SHALL BE SPLICED AS FOLLOWS:

REINFORCING BAR SIZE	MIN. LAP SPLICE LENGTH
#5	30"
#6	36"
#7	42"
#8	48"
#9	54"
#10	MECHANICAL CONNECTOR
#11	

4. STABILITY AND BRACING:
   ALL MASONRY WALLS SHOWN ON THE CONTRACT DRAWINGS HAVE BEEN DESIGNED TO RESIST THE REQUIRED CODE VERTICAL AND LATERAL FORCES APPLIED TO THEM IN THEIR FINAL CONSTRUCTED POSITION ONLY ASSUMING FULL BRACING AT TOP, BOTTOM, AND/ OR SIDES AS INDICATED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT CONSTRUCTION RESIST ANY ERECTION VERTICAL OR LATERAL LOADS THAT COULD BE IMPOSED ON THE WALLS PRIOR TO CONSTRUCTION COMPLETION.

5. GENERAL CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING WITH STRUCTURAL ENGINEER AND MASONRY CONTRACTOR BEFORE MASONRY WORK COMMENCES.

CONTRACTOR NOTE

THE STRUCTURAL SYSTEM FOR THIS PROJECT SHALL NOT BE CONSTRUCTED BY USING THE STRUCTURAL DRAWINGS ALONE. THESE DRAWINGS WERE DEVELOPED FROM DATA DERIVED PRIMARILY FROM THE ARCHITECTURAL DRAWINGS AND SECONDARILY FROM MEP, CIVIL AND OTHER DISCIPLINES' DOCUMENTS. IT IS INTENDED THAT CONSTRUCTION PROCEED BY UTILIZING ALL OF THE INFORMATION CONTAINED IN THE ENTIRE SET OF CONSTRUCTION DOCUMENTS TAKEN AS A WHOLE; FAILURE TO DO SO WILL RESULT IN ERRORS WHICH SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

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STRUCTURAL TESTS AND SPECIAL INSPECTION

1. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THIS SECTION.

2. THE FOLLOWING TERMS AND PHRASES SHALL HAVE THE MEANINGS SHOWN BELOW AS IT PERTAINS TO THIS SECTION,
   A. APPROVED AGENCY- AN ESTABLISHED AND RECOGNIZED AGENCY REGULARLY ENGAGED IN CONDUCTING AND FURNISHING SPECIAL INSPECTION SERVICES.
   B. APPROVED FABRICATOR - AN ESTABLISHED AND QUALIFIED FIRM APPROVED BY BUILDING OFFICIAL. SPECIAL INSPECTIONS ARE NOT REQUIRED WHEN WORK IS PERFORMED ON THE PREMISES OF AN APPROVED FABRICATOR.
   C. SPECIAL INSPECTION, CONTINUOUS- THE FULL TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION.
   D. SPECIAL INSPECTION, PERIODIC - THE PART TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION.

3. SPECIAL INSPECTORS SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FURNISH REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED THEY SHALL BE BROUGHT TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

4. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION.

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]	IBC REFERENCE
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	——	X	APPLICABLE ASTM MATERIAL SPECIFICATIONS; AISC 360, SECTION A3.3	——
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	——	X	——	——
2. INSPECTION OF HIGH-STRENGTH BOLTING:				
a. BEARING-TYPE CONNECTIONS.	——	X	AISC 360, SECTION M2.5	1704.3.3
b. SLIP-CRITICAL CONNECTIONS.	X	X		
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL:				
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	——	——	ASTM A 6 OR ASTM A 568	1708.4
b. MANUFACTURERS' CERTIFIED MILL TEST REPORTS.	——	——	ASTM A 6 OR ASTM A568	
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:				
a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	——	——	AISC 360, SECTION A3.5	——
b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	——	——	——	——
5. INSPECTION OF WELDING:	——	——		
a. STRUCTURAL STEEL:				
1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	X	——	AWS D1.1	1704.3.1
2) MULTIPASS FILLET WELDS.	X	——		
3) SINGLE-PASS FILLET WELDS > 5/16"	X	——		
4) SINGLE-PASS FILLET WELDS ≤ 5/16"	——	X		
5) FLOOR AND ROOF DECK WELDS.	——	X	AWS D1.3	——
b. REINFORCING STEEL:	——	——	AWS D1.4 ACI 318: 3.5.2	——
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	——	X		
2) REINFORCING STEEL-RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS AND SHEAR REINFORCEMENT.	X	——		
3) SHEAR REINFORCEMENT.	X	——		
4) OTHER REINFORCING STEEL.	——	X		
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS:		X	——	1704.3.2
a. DETAILS SUCH AS BRACING AND STIFFENING.	——	——		
b. MEMBER LOCATIONS.	——	——		
c. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	——			

REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	——	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	——	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	——	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	——
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	——	X

REQUIRED VERIFICATION AND OF CAST-IN-PLACE DEEP FOUNDATION ELEMENTS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
1. OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	——
2. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	X	——
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	——	——

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]
1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK.			
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	——	X	APPLICABLE ASTM MATERIAL STANDARDS
b. MANUFACTURER'S CERTIFICATE TEST REPORTS.	——	X	——
2. INSPECTION OF WELDING:			
a. COLD-FORMED STEEL DECK:			
1) FLOOR AND ROOF DECK WELDS	——	X	AWS D1.3
b. REINFORCING STEEL:			
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	——	X	——
2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	X	——	AWS D1.4 ACI 318: SECTION 3.5.2
3) SHEAR REINFORCEMENT.	X	——	
4) OTHER REINFORCING STEEL.	——	X	

LEVEL 1 SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY OF INSPECTION: CONTINUOUS DURING TASK LISTED	FREQUENCY OF INSPECTION: PERIODICALLY DURING TASK LISTED	REFERENCE FOR CRITERIA: IBC SECTION	REFERENCE FOR CRITERIA: ACI 530/ ASCE 5/[a] TMS 402[a]	REFERENCE FOR CRITERIA: ACI 530.1/ ASCE 6/ TMS 602[a]
1. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:					
a. PROPORTIONS OF SITE-PREPARED MORTAR.	——	X	——	——	Art. 2.6A
b. CONSTRUCTION OF MORTAR JOINTS.	——	X	——	——	Art. 3.3B
c. LOCATION OF REINFORCEMENT , CONNECTORS, PRESTRESSING TENDONS AND ANCHORAGES.	——	X	——	——	Art. 3.4, 3.6A
d. PRESTRESSING TECHNIQUE.	——	X	——	——	Art. 3.6B
e. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.	——	X	——	——	Art. 2.4B, 2.4H
2. THE INSPECTION PROGRAM SHALL VERIFY:					
a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	——	X	——	——	Art. 3.3G
b. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION.	——	X	——	Sec. 1.2.2(e), 2.1.4, 3.1.6	——
c. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT	——	X	——	Sec. 1.13	Art. 2.4, 3.4
d. WELDING OF REINFORCING BARS.	X	——	——	Sec. 2.1.10.7.2, 3.3.3.4(b)	——
e. PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F).	——	X	Sec. 2104.3, 2104.4	——	Art. 1.8C, 1.8D
f. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.	——	X	——	——	Art. 3.6B
3. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:					
a. GROUT SPACE IS CLEAN.	——	X	——	——	Art. 3.2D
b. PLACEMENT OF REINFORCEMENT AND CONNECTORS AND PRESTRESSING TENDONS AND ANCHORAGES.	——	X	——	Sec. 1.13	Art. 3.4
c. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS.	——	X	——	——	Art. 2.6B
d. CONSTRUCTION OF MORTAR JOINTS.	——	X	——	——	Art. 3.3B
4. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS.	X	——	——	——	Art. 3.5
a. GROUTING OF PRESTRESSING BONDED TENDONS.	X	——	——	——	Art. 3.6C
5. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	X	——	Sec. 2105.2.2, 2105.3	——	Art. 1.4
6. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	——	X	——	——	Art. 1.5

Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
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Edinburg, Texas 78542

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TEL (956) 664-0286
FAX (956) 664-0302
TBPE FIRM #F-312

Revision No.	Date	Description

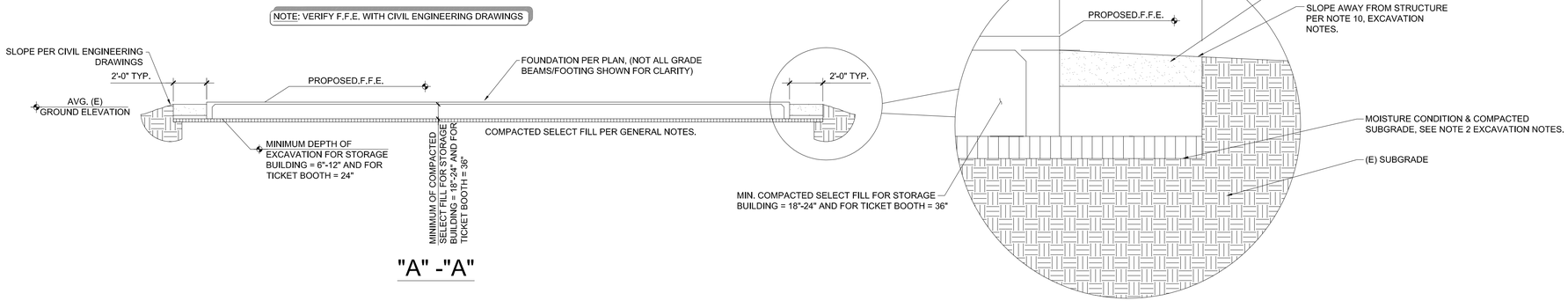
CHANIN ENGINEERING, LLC
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Sheet Title

GENERAL NOTES

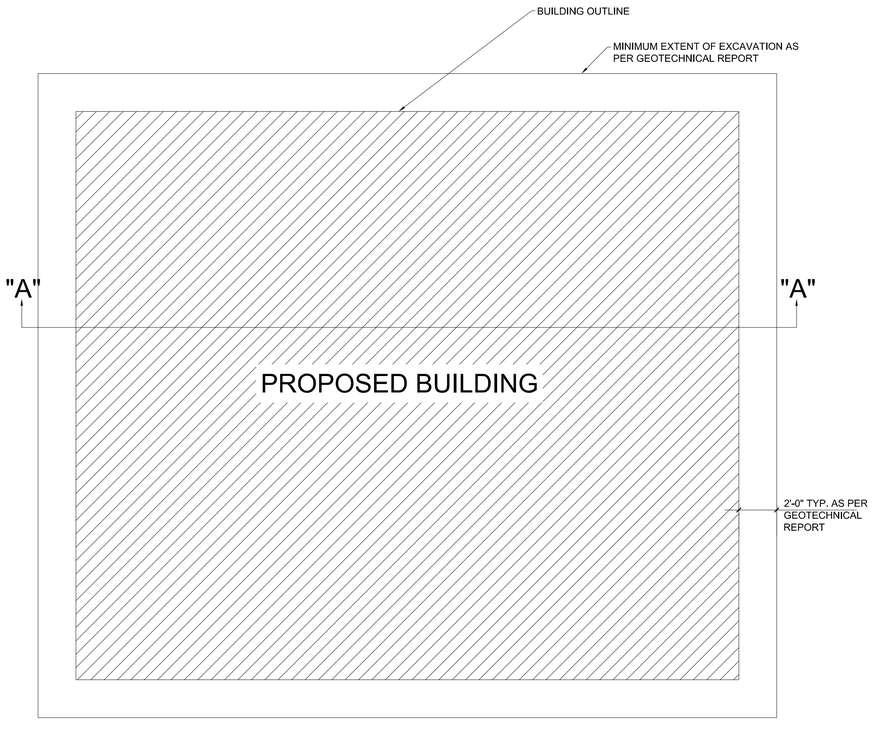
S1.1
Sheet Number



"A" -"A"

PROFILE

SCALE: NTS



EXCAVATION NOTES

1. CONSTRUCTION AREAS REMOVE AT LEAST 6"-12" OF TOP SOIL, VEGETATION, DEBRIS, ETC., FROM THE PROPOSED BUILDING AREA TO A DISTANCE OF 2'-0" OUTSIDE THE BUILDING LINE PROPOSED. FURTHER, EXCAVATE SOILS DOWN TO 24" BELOW EXISTING GROUND AT TICKET BOOTH ONLY.

2. EXPOSED SUBGRADE SHOULD BE MOISTURE CONDITIONED, COMPACTED, AND TESTED (MIN. DEPTH OF 12") TO A RANGE OF OPTIMUM MOISTURE CONTENT TO +3%. ABOVE OPTIMUM, AND COMPACTED TO A MINIMUM 95% OF THE MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM D-698. ANY SOFT AND/OR COMPRESSIBLE SOFT SPOTS NOTED DURING COMPACTION ACTIVITIES SHALL BE ORER-EXCAVATED AND REPLACED WITH SELECT FILL.

3. FILL BACK TO REQUIRED GRADE (A MINIMUM OF 18" TO 24" AT STORAGE BUILDING AND 36" AT TICKET BOOTH OF STRUCTURAL FILL IS REQUIRED. REFER TO CIVIL PLANS FOR FINISHED FLOOR ELEVATION TO DETERMINE ADDITIONAL AMOUNT OF SELECT FILL NEEDED) WITH MATERIAL SELECTED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS BELOW.

4. MATERIALS USED FOR STRUCTURAL FILL SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS OF TX DOT 2014 SPECIFICATION:

A. ITEM 247 TYPE E, GRADE 4 - CALICHE

RETAINED ON SQUARE SIEVE	PERCENT RETAINED
2"	0
1/2"	20-60
NO. 4	40-75
NO. 40	70-90
PLASTICITY INDEX, MAX	15
WET BALL PI, MAX	15
WET BALL MILL, % MAX	50

B. ITEM 247 TYPE A, GRADE 1- LIMESTONE

RETAINED ON SQUARE SIEVE	PERCENT RETAINED
2-1/2"	0
1-3/4"	0-10
7/8"	10-35
3/8"	30-65
NO. 4	45-75
NO. 40	65-90
PLASTIC LIMIT,% MAX	40
PLASTICITY INDEX, % MAX	10
WET BALL MILL, % MAX	40

5. STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM 98 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D698 AT MOISTURE CONTENTS RANGING BETWEEN -2% AND + 2% OF THE OPTIMUM MOISTURE CONTENT. FILL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 8 INCHES. THE FILL SHOULD BE PROPERLY COMPACTED IN ACCORDANCE WITH THESE RECOMMENDATION AND TESTED FOR COMPACTION AS SPECIFIED.

6. SAMPLES OF PROPOSED STRUCTURAL FILL SHALL BE FURNISHED TO THE TESTING LABORATORY 7 DAYS PRIOR TO INSTALLATION TO PERMIT TIME FOR SPECIFICATION COMPLIANCE INSPECTION AND APPROVAL.

7. SITE PREPARATION TESTING SHALL BE AS FOLLOWS:
   A. ATTERBERG LIMITS OF SELECT FILL MATERIAL:
      (1) ONE TEST PER 5,000 CY
   B. COMPACTION TEST:
      TO BE PERFORMED PER LIFT ON TEST PER 3,000 SF MINIMUM OF (4) FOUR TEST PER LIFT

8. IF 5' PERIMETER OVER EXCAVATION IS NOT COVERED BY CONCRETE FLATWORK, PROVIDE 2' THICK CLAY CAP IN OVER EXCAVATED ZONE. CLAY CAP SHOULD BE SLOPED AWAY FROM THE FOUNDATION AT A MINIMUM SLOPE OF 2%, AND SURROUNDING AREAS SHOULD HAVE POSITIVE DRAINAGE. THE LOW PERMEANCE CLAY CAP SHALL MEET THE USCS CLASSIFICATION OF CH OR CL WITH A MINIMUM P.I. OF 20, A MINIMUM OF 50% BY WEIGHT PASSING THE NO. 200 SIEVE, AND SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698. THE MOISTURE CONTENT OF THE SUBGRADE SHOULD BE MAINTAINED WITHIN THE RANGE OF OPTIMUM TO 4% ABOVE THE OPTIMUM MOISTURE.

9. GEOTECHNICAL REPORT SHALL BE CONSIDERED A PART OF THE CONSTRUCTION DOCUMENTS. CONTRACTOR TO REVIEW AND COMPLY WITH ALL EARTHWORK AND GRADING REQUIREMENT IN GEOTECHNICAL REPORT.

10. FINAL SITE GRADING TO SLOPE AWAY FROM THE STRUCTURE AND SHALL PREVENT WATER FROM PONDING IN THE AREAS ADJACENT TO THE STRUCTURE FOR A MINIMUM DISTANCE OF 10'-0". ANY PONDING CLOSE TO THE STRUCTURE MAY CREATE VOLUMETRIC CHANGES IN THE SOIL AND MAY LEAD TO LESS THAN OPTIMUM PERFORMANCE OF THE BUILDING FOUNDATION.

11. IT IS ALSO IMPORTANT TO MINIMIZE CHANGES IN MOISTURE CONTENT CREATED BY ROOF DRAINAGE, PLUMBING LEAKS, LANDSCAPING / IRRIGATION, AND DOWNSPOUT OUTFALLS. ANY PLUMBING LEAKS SHALL BE REPAIRED AS SOON AS POSSIBLE AND PROPER DRAINAGE PROVIDED AWAY FROM THE BUILDING. LARGE BUSHES AND TREES SHALL NOT BE PLACED IN AREAS DIRECTLY ADJACENT TO THE FOUNDATION AS THEIR ROOT SYSTEM MAY CREATE SUBSTANTIAL MOISTURE DIFFERENTIALS THAT MAY LEAD TO VOLUME CHANGES IN THE SOIL. LARGE BUSHES AND TREES SHOULD BE LOCATED AT A REASONABLE DISTANCE FROM THE FOUNDATION.

N

PLAN NORTH

EXCAVATION PLAN AT SANITATION FACILITY AND BOOTH

SCALE: NTS

Hidalgo County
Precinct 4 - Recovery and Motor Pool Improvements
1051 N. Doolittle Rd.
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10-10-16

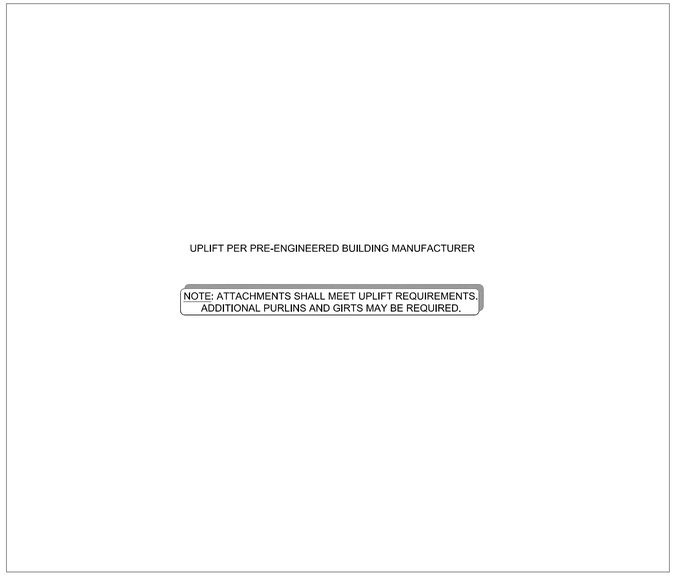
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Sheet Title

EXCAVATION PLAN

S1.2

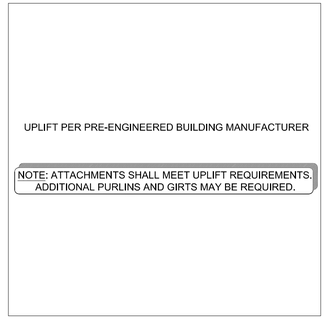
Sheet Number



N
PLAN NORTH

ROOF UPLIFT PLAN AT STORAGE

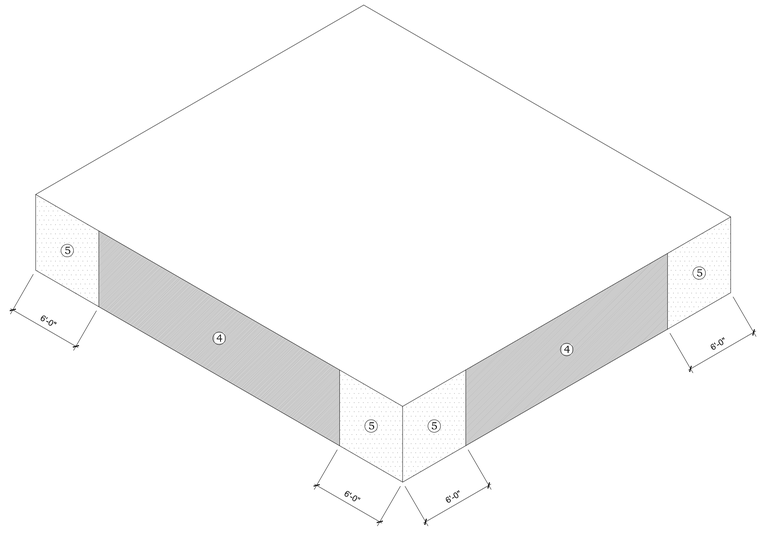
SCALE: NTS



N
PLAN NORTH

ROOF UPLIFT PLAN AT BOOTH

SCALE: NTS



ALLOWABLE STRESS DESIGN

EFFECTIVE WIND AREA	ZONE	MAX PRESSURE
10	④	25.5 psf
20	④	24.5 psf
50	④	23.1 psf
10	⑤	31.5 psf
20	⑤	29.4 psf
50	⑤	26.6 psf

COMPONENTS AND CLADDING

SCALE: NTS

Hidalgo County
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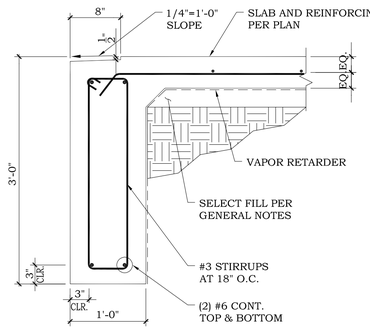
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Sheet Title

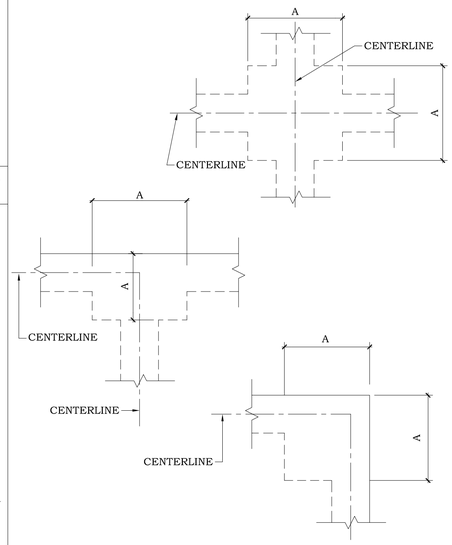
ROOF UPLIFT PLAN

S1.3
Sheet Number

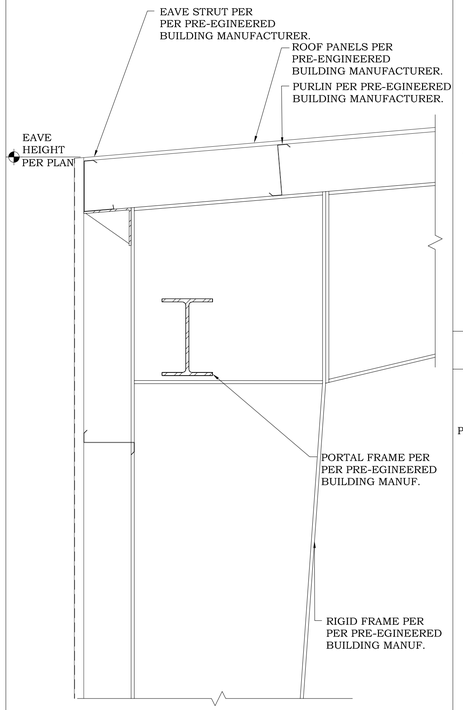


EXTERIOR FOOTING | 17

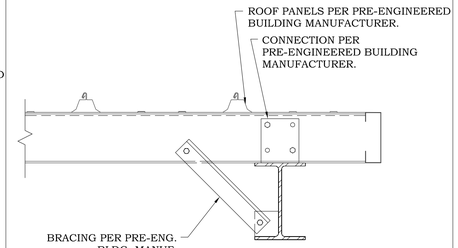
FOOTING SCHEDULE AT STEEL COLUMNS			
TYPE	A	DEPTH	REBAR REINFORCEMENT
S2	2'-6"	3'-0"	#5'S @ 12" O.C. E.W. TOP & BOTTOM
S3	3'-6"	3'-0"	#5'S @ 12" O.C. E.W. TOP & BOTTOM
S4	4'-6"	3'-0"	#5'S @ 12" O.C. E.W. TOP & BOTTOM
S5	5'-6"	3'-0"	#5'S @ 12" O.C. E.W. TOP & BOTTOM
S6	6'-6"	3'-0"	#5'S @ 12" O.C. E.W. TOP & BOTTOM



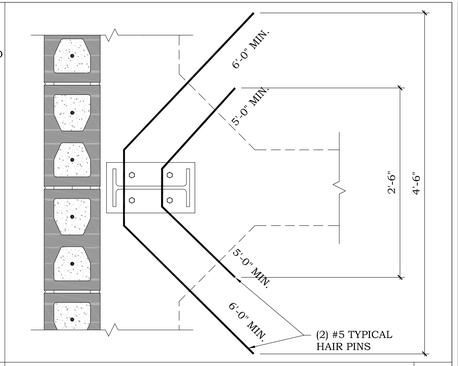
FOOTING SCHEDULE | 14



RIGID FRAME DETAIL | 10

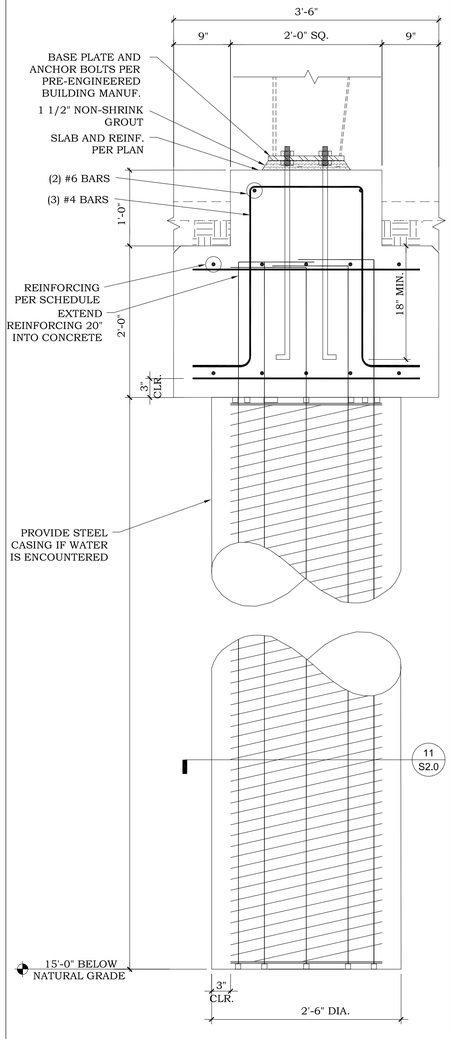


RIGID FRAME DETAIL | 5

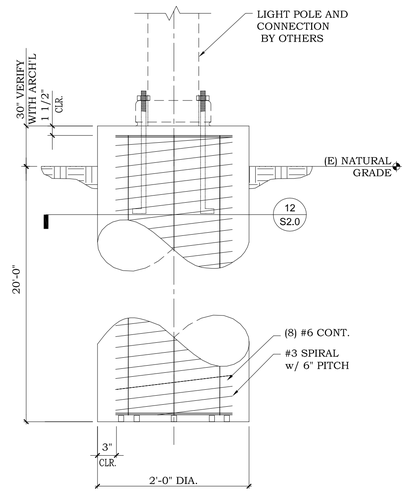


TYPICAL HAIR PINS | 1

NOTE:CONTRACTOR TO VERIFY IF PEDESTAL IS REQUIRED WITH OWNER/CIVIL ENG.

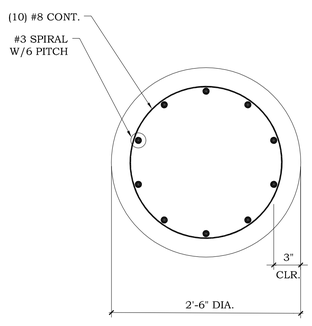


PIER DETAIL | 20

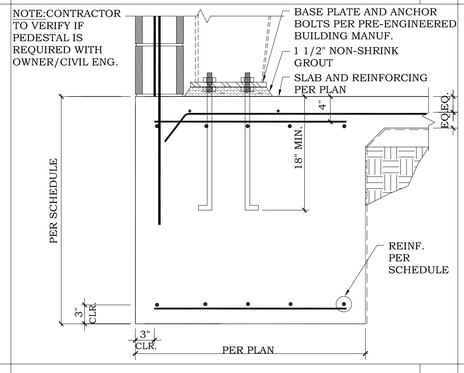


NOTE:
IF ANY GROUND WATER IS ENCOUNTERED DURING DRILLING OPERATIONS, STEEL CASING MAY BE REQUIRED.

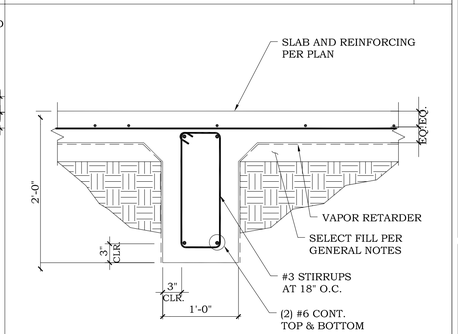
LIGHT POLE DETAIL | 16



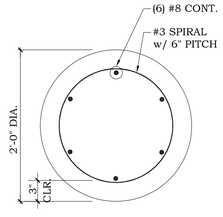
PIER DETAIL | 11



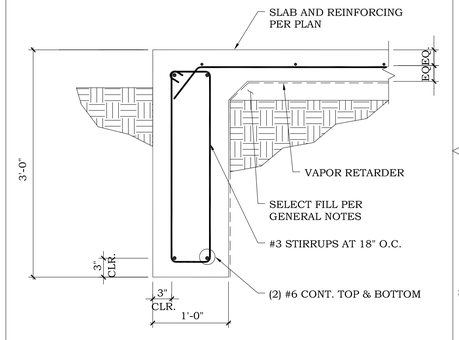
FOOTING AT STEEL COLUMN | 7



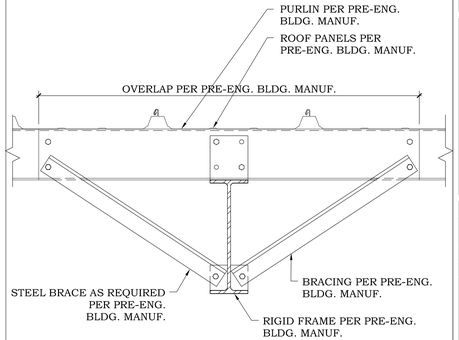
INTERIOR FOOTING | 3



PIER DETAIL | 12



EXTERIOR FOOTING | 8



RIGID FRAME DETAIL | 4

Hidalgo County
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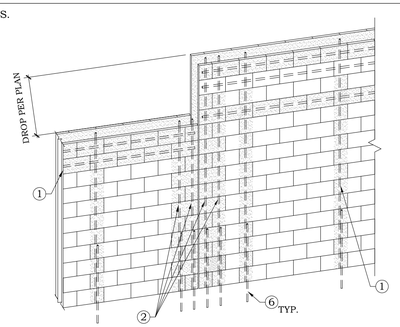
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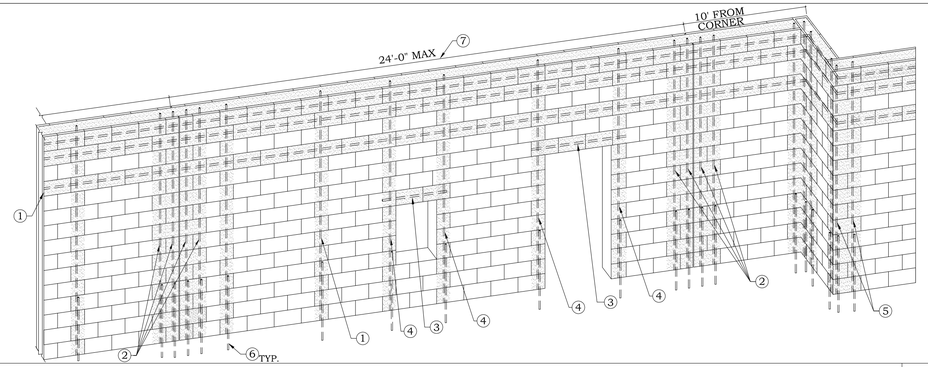
Sheet Title

TYPICAL DETAILS

S2.0
Sheet Number

1. TYPICAL WALL REINFORCING AS CALLED OUT IN PLANS AND GENERAL NOTES.
2. VERTICAL REINFORCING AT CONTROL JOINTS, REFER TO DETAIL 8/S2.1
3. LINTELS PER LINTEL SCHEDULE, REFER TO DETAIL 7/S2.1
4. ADDITIONAL VERTICAL REINFORCING AT JAMBS OF ALL OPENINGS
5. WALL CORNER REINFORCING, REFER TO DETAIL 2,3,4/S2.1
6. DOWELS TO MATCH VERTICAL REINFORCEMENT PER PLAN, TYPICAL
7. CONTROL JOINT SPACING AS NOTED IS MAXIMUM ALLOWED, COORDINATE CONTROL JOINT LOCATIONS w/OWNER.



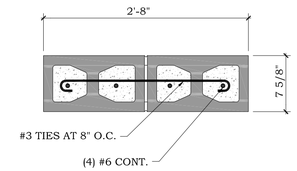


TYPICAL CMU WALL CONSTRUCTION | 5

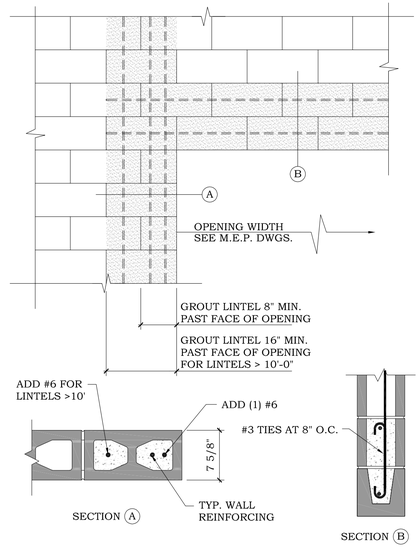
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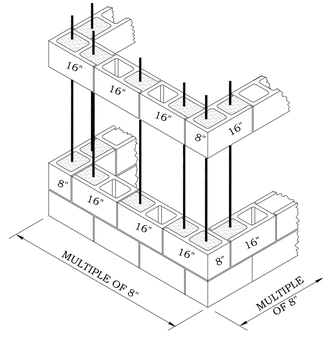
NOT USED | 18

NOT USED | 14



8" PILASTER "P1" | 10

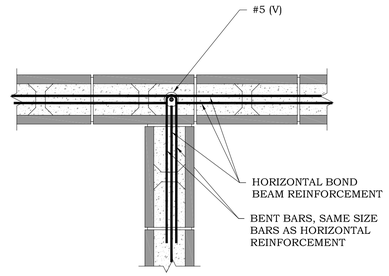




TYPICAL CMU CORNER DETAIL | 2

NOT USED | 19

NOT USED | 15

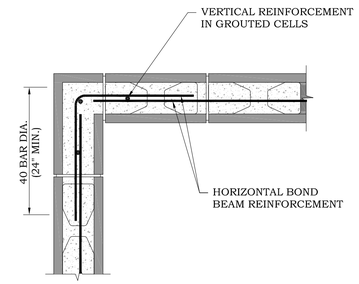


TYPICAL BOND BEAM INTERSECTION | 11

LINTEL SCHEDULE | 7

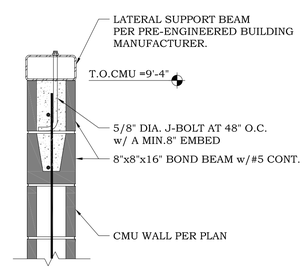
CLEAR SPAN	WIDTH	DEPTH	REINFORCING	#3 TIES AT:	REMARKS
<3'-4"	8"	8"	(1)#5		
<4'-8"	8"	16"	(1)#5 (T) & (B)	8"	
<6'-8"	8"	16"	(1)#6 (T) & (B)	8"	
<10'-0"	8"	24"	(1)#6 (T) & (B)	8"	
<12'-0"	8"	24"	(1)#7 (T) & (B)	8"	

TYPICAL BOND BEAM CORNER | 3



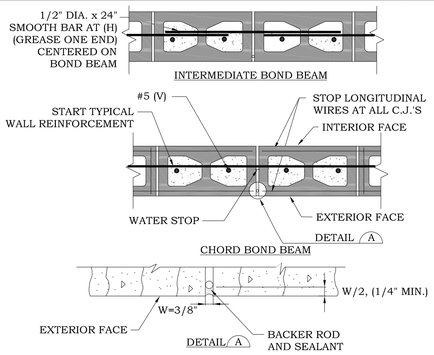
NOT USED | 20

NOT USED | 16



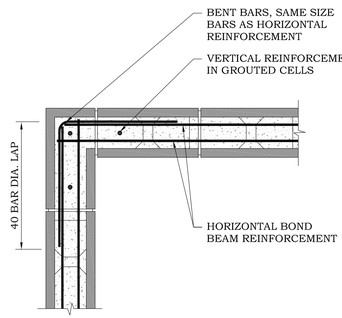
NOTE: ALL STEEL AND BOLT
EXPOSED TO THE WEATHER
SHALL BE HOT DIPPED GALVANIZED
(TYPICAL ALL PROJECT)

CMU WALL TO LATERAL SUPPORT BEAM | 12



CMU CONTROL JOINT (C.J.) | 8

TYPICAL BOND BEAM CORNER | 4



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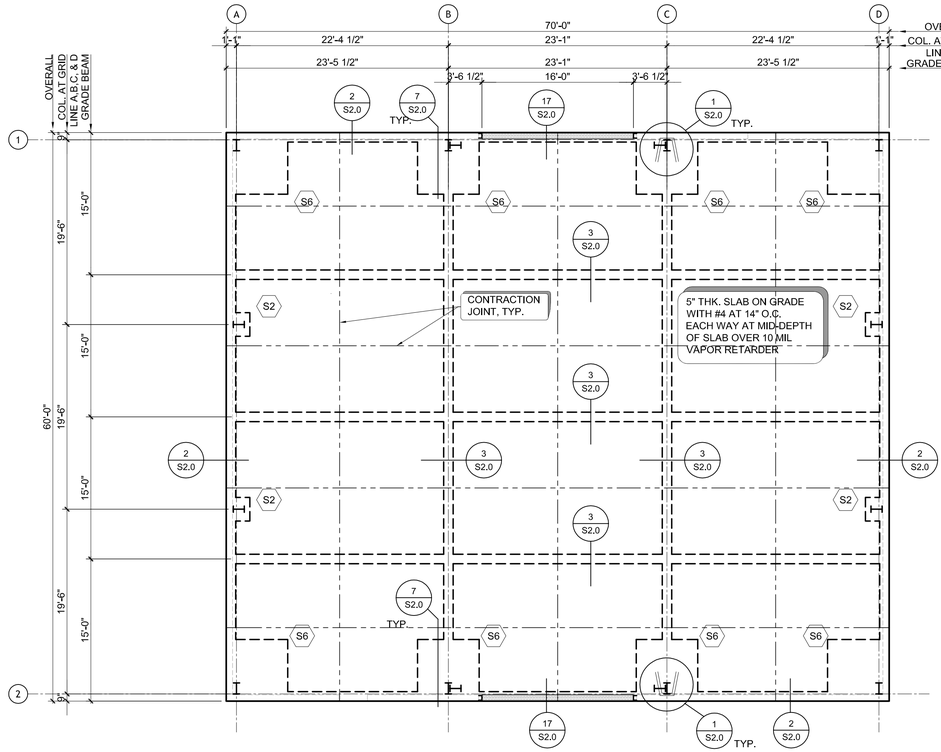
Revision No.	Date	Description

Project No.:	16218
Issued:	10 / 10 / 16
Drawn By:	A.V
Checked By:	M.C.
Scale:	N.T.S.

Sheet Title

TYPICAL DETAILS

S2.1
Sheet Number

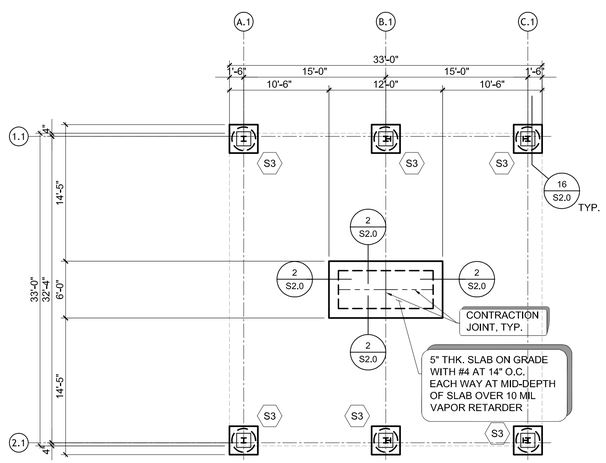


FOUNDATION NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH CIVIL M.E.P. PLANS BEFORE COMMENCING WORK.
2. CONTRACTOR TO VERIFY REQUIRED F.F.E. WITH CIVIL ENGINEERING DRAWINGS.
3. REFER TO FOOTING SCHEDULE FOR FOOTING SIZE AND REINFORCEMENT, SEE DETAIL 14/S2.0
4. [▨] INDICATES 1/2" SLAB DEPRESSION.

FOUNDATION PLAN

SCALE: 1/8"=1'-0"



FOUNDATION NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH CIVIL M.E.P. PLANS BEFORE COMMENCING WORK.
2. CONTRACTOR TO VERIFY REQUIRED F.F.E. WITH CIVIL ENGINEERING DRAWINGS.
3. REFER TO FOOTING SCHEDULE FOR FOOTING SIZE AND REINFORCEMENT, SEE DETAIL 14/S2.0
4. [▨] INDICATES 1/2" SLAB DEPRESSION.

FOUNDATION PLAN

SCALE: 1/8"=1'-0"

Hidalgo County Precinct 4 - Recovery and Motor Pool Improvements

1051 N. Doolittle Rd.
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FAX (956) 682-4032
TBPE FIRM #F-312

Revision No.	Date	Description

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McAllen, Texas 78504
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STATE OF TEXAS — MICHEL CHANIN — 93127 — REGISTERED PROFESSIONAL ENGINEER
10-10-16

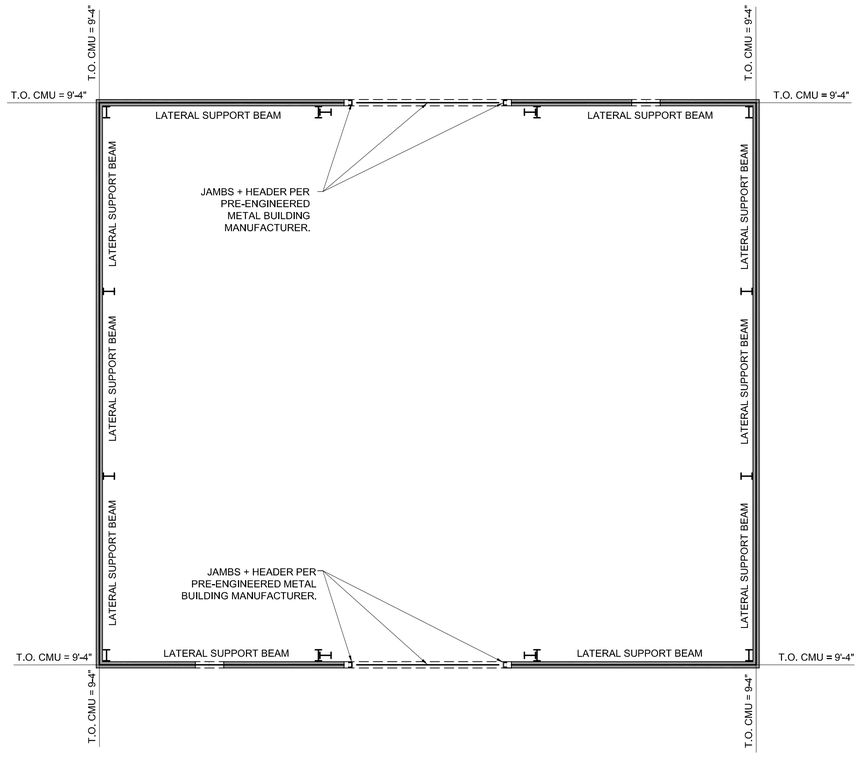
Project No.:	16218
Issued:	10 / 10 / 16
Drawn By:	A.V
Checked By:	M.C.
Scale:	1/8"=1'-0"

Sheet Title

FOUNDATION PLAN

S3.0

Sheet Number



CMU WALL LAYOUT NOTES:

1. IF ANY DISCREPANCIES ARE FOUND BETWEEN THESE DRAWINGS AND THE M.E.P. DRAWINGS THE CONTRACTOR SHALL NOTIFY THE M.E.P. ENGINEER AND ENGINEER BEFORE COMMENCING CONSTRUCTION.
2. FOR TYPICAL CMU WALL CONSTRUCTION SEE SHEET S2.1
3. ▭ INDICATES EXTERIOR 8" CMU WALL WITH #5 (V) AT 8" O.C. AND #5 (H) AT 8'-0" O.C., U.N.O.
4. ═ ═ INDICATES LINTEL, SEE DETAIL 7/S2.1
5. FOR SPECIAL INSPECTION REQUIREMENTS SEE GENERAL NOTES.
6. ALL TOP OF WALLS FROM FINISH FLOOR ELEVATION 0'-0".
7. SEE M.E.P. PLANS PLANS FOR EXACT LOCATION, LENGTH, AND HEIGHT OF ALL OPENINGS IN CMU WALLS.
8. FOR CONTROL JOINT LOCATIONS, SEE 5/S2.1
9. PROVIDE CMU LINTEL OVER ALL MECHANICAL SYSTEM PENETRATIONS IN CMU WALL. COORDINATE WITH MEP DRAWINGS FOR ALL LOCATIONS.
10. 8" CMU WALL IS A NOMINAL DIMENSION, ACTUAL WIDTH IS 7 5/8".

CMU WALL LAYOUT PLAN

SCALE: 1/8"=1'-0"

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www.chaninengineering.com

Revision No.	Date	Description

STATE OF TEXAS — MICHAEL CHANIN — 93127 — LICENSED PROFESSIONAL ENGINEER — 10-10-16

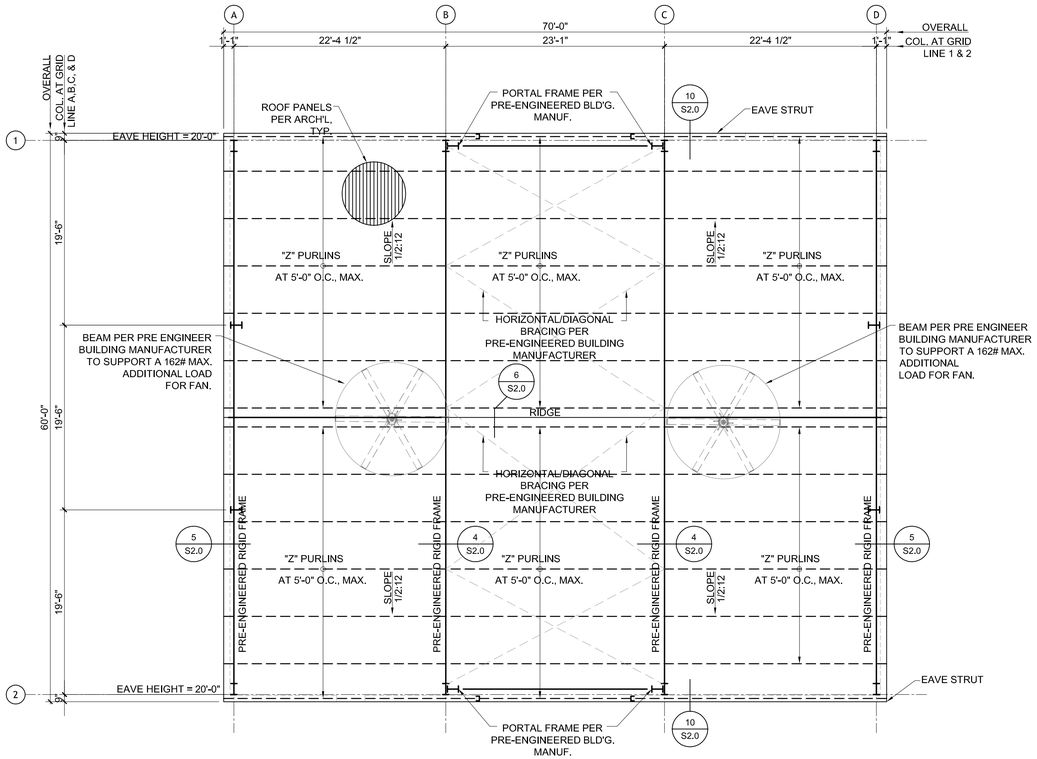
Project No.:	16218
Issued:	10 / 10 / 16
Drawn By:	A.V
Checked By:	M.C.
Scale:	1/8"=1'-0"

Sheet Title

CMU WALL LAYOUT PLAN

S4.0

Sheet Number



FRAMING NOTES:

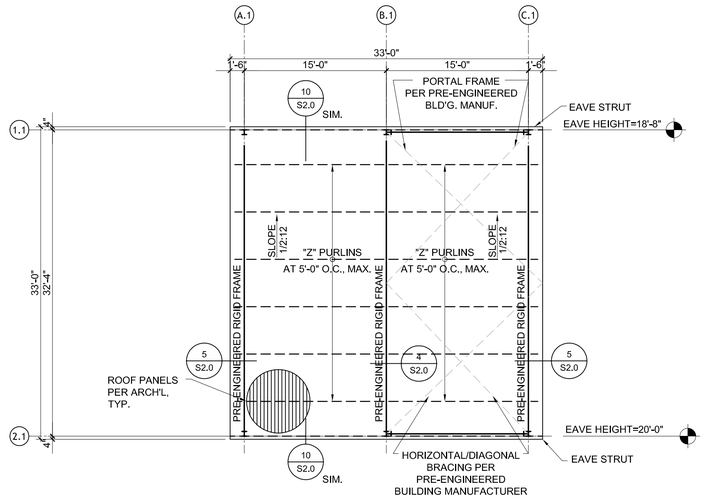
1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH CIVIL AND M.E.P. PLANS BEFORE COMMENCING WORK.
2. REFER TO CIVIL AND M.E.P. DRAWINGS FOR ANY ADDITIONAL DIMENSIONS.
3. CONTRACTOR TO COORDINATE ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SUPPORTED BY THE STRUCTURE WITH THE STRUCTURE MANUFACTURER.

N

PLAN NORTH

ROOF FRAMING PLAN

SCALE: 1/8"=1'-0"



FRAMING NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS WITH CIVIL AND M.E.P. PLANS BEFORE COMMENCING WORK.
2. REFER TO CIVIL AND M.E.P. DRAWINGS FOR ANY ADDITIONAL DIMENSIONS.
3. CONTRACTOR TO COORDINATE ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SUPPORTED BY THE STRUCTURE WITH THE STRUCTURE MANUFACTURER.

N

PLAN NORTH

ROOF FRAMING PLAN

SCALE: 1/8"=1'-0"

Hidalgo County Precinct 4 - Recovery and Motor Pool Improvements

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Revision No.	Date	Description

STATE OF TEXAS — MIGUEL CHANIN — 93127 — LICENSED PROFESSIONAL ENGINEER — 10-10-16

Project No.:	16218
Issued:	10 / 10 / 16
Drawn By:	A.V
Checked By:	M.C.
Scale:	1/8"=1'-0"

Sheet Title

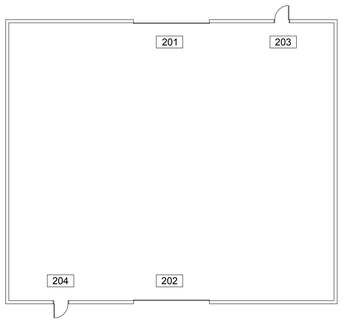
ROOF FRAMING PLAN

S5.0

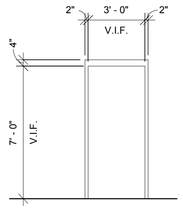
Sheet Number

DOOR SCHEDULE

DOOR							FRAME		REFERENCE DETAIL					
NUMBER	WIDTH	HEIGHT	THICKNESS	TYPE	FINISH	GLAZING	TYPE	FINISH	HEAD	JAMB	SILL	HARDWARE	FIRE RATING	REMARKS
201	16' - 0"	16' - 0"	PER MFR.	A	PAINT	-	-	-	4	5	-	BY MFR.	-	FIELD VERIFY EXISTING ROUGH OPENING SIZE
202	16' - 0"	16' - 0"	PER MFR.	A	PAINT	-	-	-	4	5	-	BY MFR.	-	FIELD VERIFY EXISTING ROUGH OPENING SIZE
203	3' - 0"	7' - 0"	1 3/4"	B	PAINT	-	A	PAINT	7	6	-	SEE SPECS	-	FIELD VERIFY EXISTING ROUGH OPENING SIZE
204	3' - 0"	7' - 0"	1 3/4"	B	PAINT	-	A	PAINT	7	6	-	SEE SPECS	-	FIELD VERIFY EXISTING ROUGH OPENING SIZE

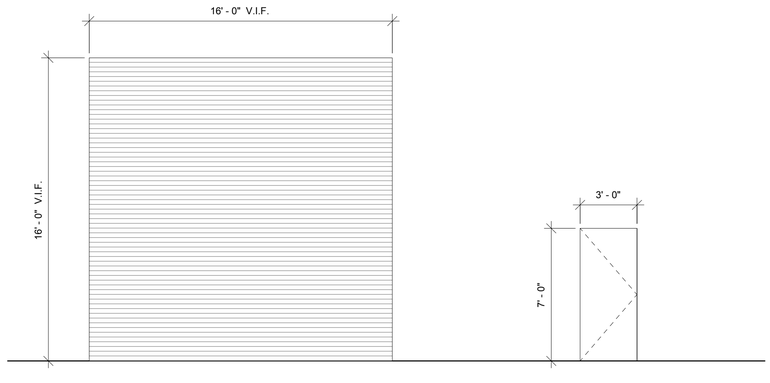


1 STORAGE BUILDING FLOOR PLAN
1/16" = 1'-0"



A HOLLOW METAL

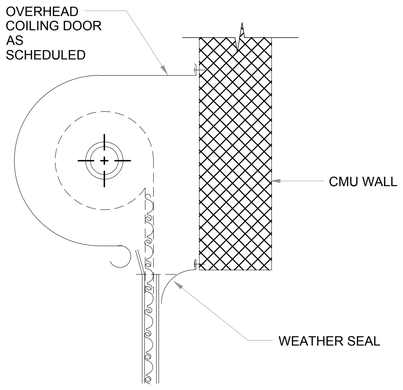
2 FRAME TYPES
1/4" = 1'-0"



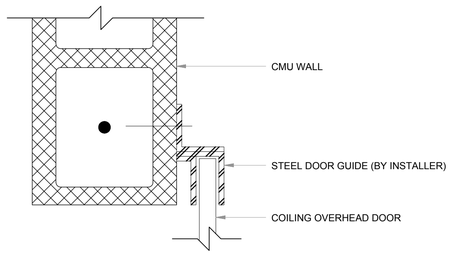
A OVERHEAD COILING DOOR

B HOLLOW METAL DOOR

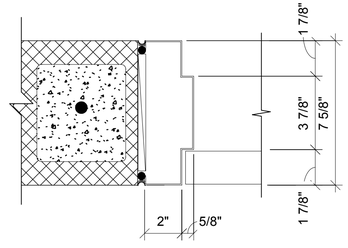
3 DOOR TYPES
1/4" = 1'-0"



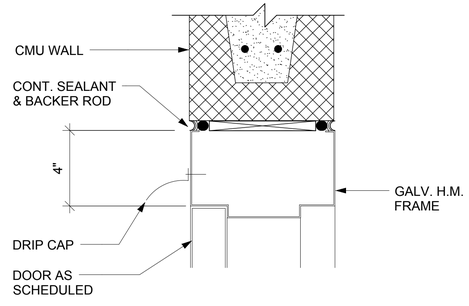
4 OVERHEAD DOOR HEAD
1 1/2" = 1'-0"



5 OVERHEAD DOOR JAMB
3" = 1'-0"



6 H.M. EXTERIOR JAMB
3" = 1'-0"



7 H.M. EXTERIOR HEAD
3" = 1'-0"

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FAX (956) 664-0292
TBPE FIRM #F-312

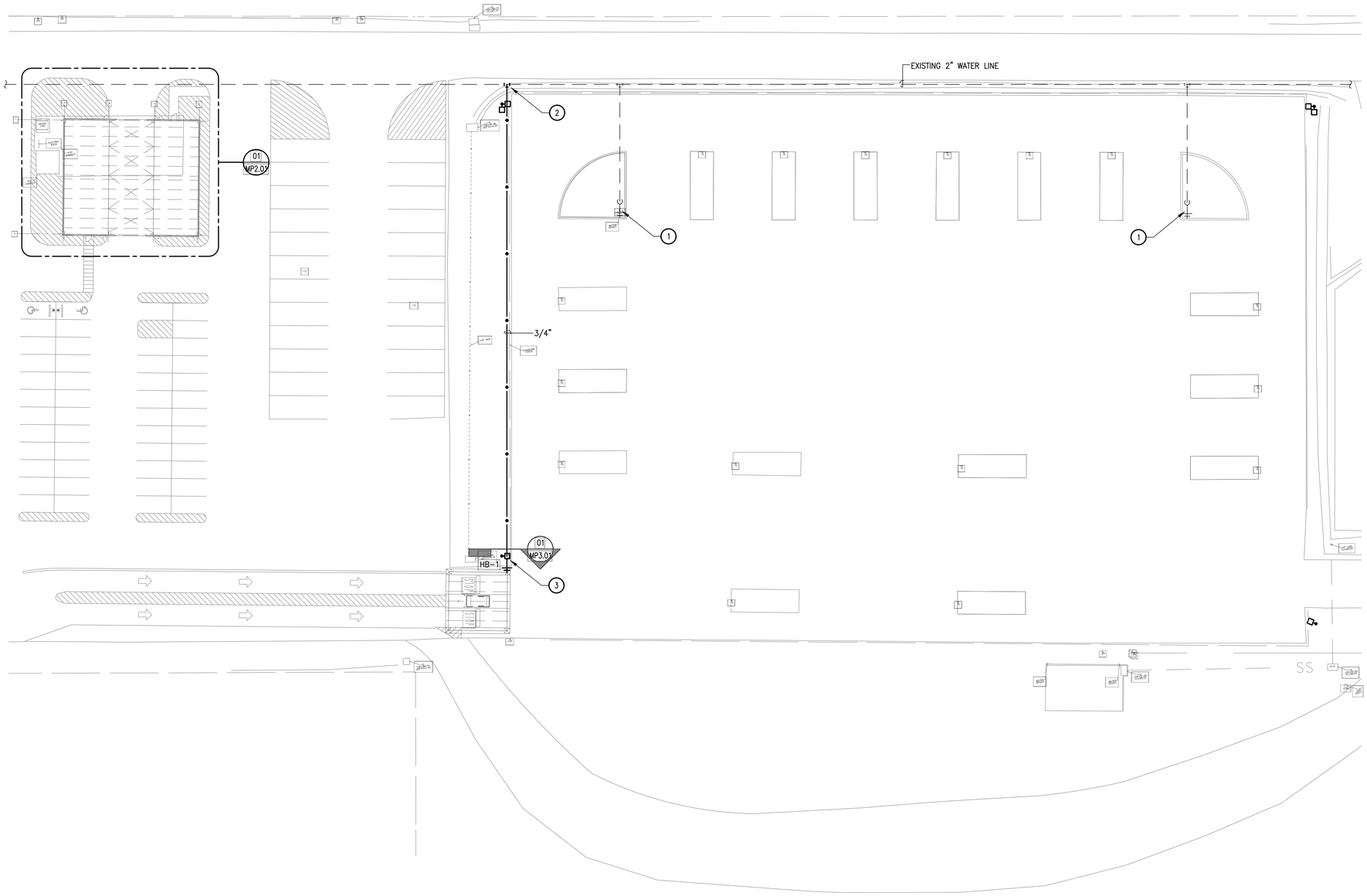
Revision No.	Date	Description

Project No.:	31806(WA01)
Issued:	10 / 10 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED

Sheet Title
STORAGE BUILDING DOORS

B-101
Sheet Number

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Current Tab (Layout): B-101 STORAGE BUILDING DOORS User: AH2522
Printed Date: 10/11/2016 8:16:32 AM



GENERAL NOTES:

A. PLUMBING CONTRACTOR SHALL ADHERE TO ALL CITY, STATE AND LOCAL CODES THAT HAVE AUTHORITY OVER THIS PROJECT.

KEY NOTES: (#)

1. EXISTING HOSE BIBS.
2. CONNECT TO EXISTING 2" WATER LINE.
3. COORDINATE LOCATION OF NEW HOSE BIB WITH OWNER IN THE FIELD.

01 PLUMBING SITE PLAN

SCALE: 1"=30'

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Revision No.	Date	Description

STATE OF TEXAS
MENTON J. MURRAY, III
87004
REGISTERED PROFESSIONAL ENGINEER
10.10.2016

Project No.:	31806(WA01)
Issued:	10 / 10 / 16
Drawn By:	CHAVEZ
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Scale:	AS NOTED

Sheet Title

SITE PLAN

MP1.01
Sheet Number

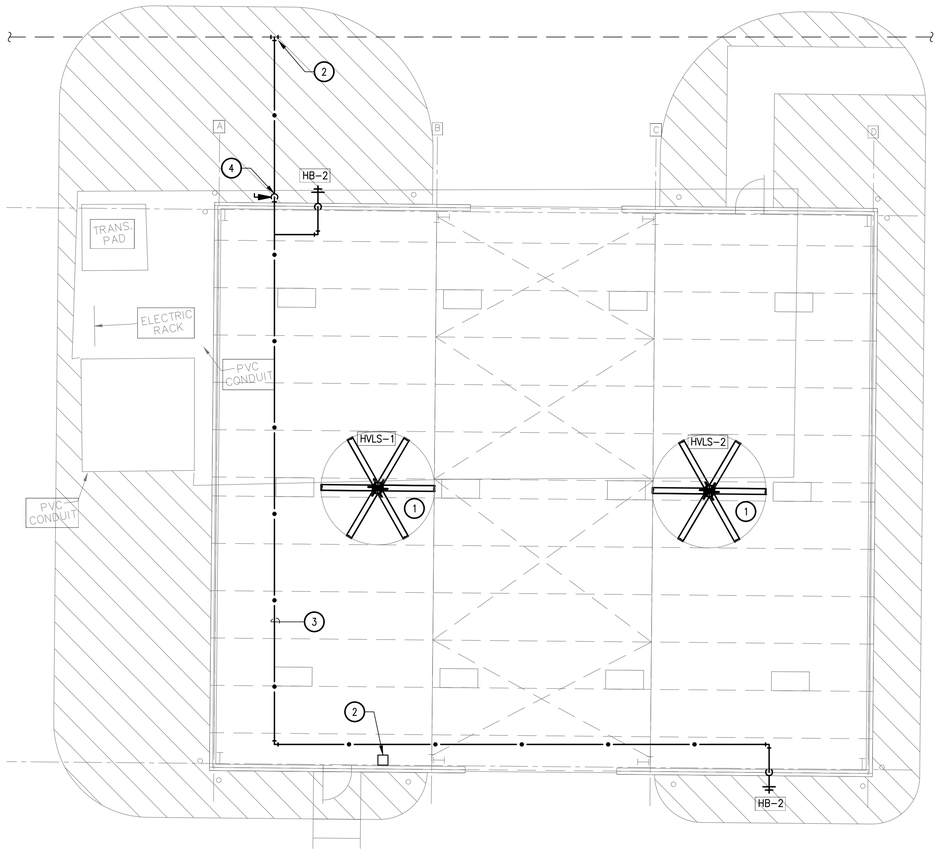
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Printed Date: 10/11/2016 8:25:09 AM

GENERAL NOTES:

A. INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.

KEY NOTES: (#)

1. COORDINATE MOUNTING OF HVLS FANS WITH BUILDING STRUCTURE AND OTHER TRADES.
2. COORDINATE INSTALLATION OF FAN CONTROLLER WITH ELECTRICAL DEVICES.
3. DOMESTIC WATER PIPING WITHIN INTERIOR OF BUILDING SHALL BE INSULATED WITH 1" MINERAL FIBER PREFORMED PIPE INSULATION TYPE 1.
4. EXPOSED DOMESTIC WATER PIPING AT EXTERIOR OF BUILDING SHALL BE INSULATED WITH 2" MINERAL FIBER PREFORMED PIPE INSULATION TYPE 1 AND FIELD APPLIED JACKET TO PREVENT FREEZING.



01 ENLARGED MECHANICAL & PLUMBING PLAN - STORAGE BUILDING
SCALE: 1/8" = 1'-0"

Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
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Edinburg, Texas 78542

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STATE OF TEXAS
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Scale:	AS NOTED

Sheet Title
ENLARGED MECHANICAL & PLUMBING PLAN - STORAGE BUILDING

MP2.01
Sheet Number

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Current Tab (Layout): MP2.01 ENLARGED MECHANICAL & PLUMBING PLAN - STORAGE BUILDING User: AH2522
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HVLS FAN SCHEDULE

TAG	DIAMETER	BLADE QTY.	HP	RPM	DRIVE	WEIGHT (LBS)	CFM	VOLT/PHASE	MCA/MOCP	POWER USAGE (W)	MANUFACTURER	MODEL	NOTES
HVLS-1	12 FT	6	1.05	137	DIRECT	162	106,000	208/1	7.3/10	920	MACRO AIR	AVD550	ALL
HVLS-2	12 FT	6	1.05	137	DIRECT	162	106,000	208/1	7.3/10	920	MACRO AIR	AVD550	ALL

NOTES:

1. FAN SHALL BE GEARLESS DIRECT DRIVE; NO GEARBOX OR VFD REQUIRED. MOTOR SHALL BE BRUSHLESS PERMANENT MAGNET, TRANSVERSE-FLUX DC MOTOR.
2. FAN SHALL BE VARIABLE SPEED.
3. PROVIDE FAN WITH FUSED DISCONNECT.
4. PROVIDE SINGLE CONTROLLER TO CONTROL ALL FANS.
5. PROVIDE FAN WITH ALL NECESSARY MOUNTING HARDWARE.
6. PROVIDE FAN WITH 50,000 HOUR WARRANTY AND 3 YEAR LABOR WARRANTY.
7. ENTIRE FAN ASSEMBLY SHALL BE UL LISTED.
8. MOUNT FAN NO LESS THAN 16 FEET A.F.F.
9. WASH DOWN DUTY RATING MUST BE IP66.

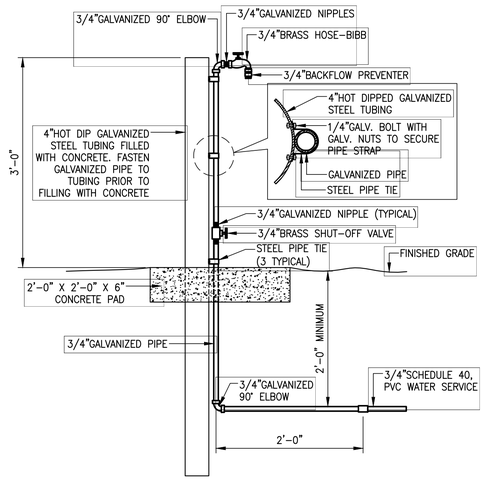
PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	DOMESTIC COLD WATER LINE	CW	COLD WATER
	CUT OFF VALVE	TYP	TYPICAL
	PIPE DROP		

NOTE: NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT

PLUMBING SCHEDULE

MARK	FIXTURE TYPE	CONNECTION SIZE				
		SEWER	VENT	CW	HW	
HB-1	HOSE BIB	-	-	3/4"	-	3/4" BRASS HOSE BIB EQUAL TO EVERBILT MODEL #103-004EB COMPLETE WITH BACKFLOW PREVENTER.
HB-2	HOSE BIB	-	-	3/4"	-	CHROME FINISH WALL MOUNTED FAUCET EQUAL TO WOODFORD MODEL #26-P, WITH BACK FLOW PREVENTER, AND LOOSE TEE KEY.



01 HOSE BIB INSTALLATION DETIAL
N.T.S.

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Revision No.	Date	Description

STATE OF TEXAS
MENTON J. MURRAY, III
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10.10.2016

Project No.:	31806(WA01)
Issued:	10 / 10 / 16
Drawn By:	CHAVEZ
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Sheet Title
MECHANICAL & PLUMBING SCHEDULES AND DETAILS

MP3.01
Sheet Number

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ELECTRICAL GENERAL LEGEND

ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

LIGHTING

SYMBOL	DESCRIPTION	MTG. HT. UNO (SEE NOTE 1)
	2'x4' LAY-IN LUMINARY HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN
	2'x2' LAY-IN LUMINARY HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN
	STRIP LIGHT HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN
	SUSPENDED LINEAR LUMINARY	REFER TO ARCH. CLG. PLAN
	DOWNLIGHT HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN
	WALL MOUNTED LUMINARY HATCHING = WITH EMERGENCY BATTERY PACK	REFER TO ARCH. CLG. PLAN
	EMERGENCY FIXTURE	9'-0" AFF U.N.O.
	POLE MOUNTED FIXTURE	REFER TO LUMINARIES SCHEDULE
	EXIT LIGHT, CEILING OR WALL MOUNTED - SHADING INDICATING SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED	REFER TO ARCH. CLG. PLAN

$ZMDSW-XXX	DIGITAL SWITCH - BASIS OF DESIGN: Z MAX #ZMDSW-X-X
	X=SWITCH ID, XX=# OF BUTTONS
		48" AFF

$D	DIMMER SWITCH	48" AFF
$	SINGLE POLE SWITCH	48" AFF
$3 / $4	3-WAY/4-WAY SWITCH	48" AFF
$T	TIMER SWITCH BASIS OF DESIGN: TORK #A530M W	48" AFF
$OC1	OCCUPANCY SENSOR (DUAL TECHNOLOGY WALL SWITCH SENSOR)	48" AFF
$OC2	OCCUPANCY SENSOR (DUAL TECHNOLOGY DUAL RELAY WALL SWITCH SENSOR)	48" AFF
$LK	LINE VOLTAGE KEY SWITCH : SINGLE	48" AFF
$LK3	LINE VOLTAGE KEY SWITCH : 3-WAY	48" AFF
$LK4	LINE VOLTAGE KEY SWITCH : 4-WAY	48" AFF
$W	WIRELESS SINGLE POLE SWITCH	-
OCS	CEILING MOUNT OCCUPANCY SENSOR (DUAL TECHNOLOGY SENSOR)	-
PC	PHOTOCELL DEVICE	-

SECURITY SYSTEM

CR	CARD READER - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
D	DOOR CONTACT - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
DH	DOOR HOLDER - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
DM	DOOR MONITOR - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
G	GLASS BREAK SENSOR - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
K	KEY PAD - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
M	MOTION DETECTOR - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
P	PANIC BUTTON - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
RX	REQUEST-TO-EXIT BUTTON - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
	CAMERA, WALL MOUNT - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-
	CAMERA, CEILING MOUNT - ROUGH-IN ONLY, PROVIDE ASSOCIATED CONDUITS, BOXES AND PULL STRINGS	-

POWER

SYMBOL	DESCRIPTION	MTG. HT. UNO (SEE NOTE 1)
	SINGLE RECEPTACLE - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF
	DUPLEX RECEPTACLE - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF
30A	220 RECEPTACLE - 250V/2P/3W/G (RATING AS INDICATED)	15" AFF
WP	DUPLEX RCPT. GFI/WATER PROOF - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF
	QUADRAPLEX RECEPTACLE (TWO DUPLEX RCPTS. UNDER ONE COVERPLATE)	15" AFF
	ISOLATED GROUND QUADRAPLEX RECEPTACLE (TWO DUPLEX RCPTS. UNDER ONE COVERPLATE)	15" AFF
	ISOLATED GROUND DUPLEX RECEPTACLE - 20A/125V NEMA 5-20R	15" AFF
E	DUPLEX RECEPTACLE ON EMERGENCY CIRCUIT	15" AFF
	FLOOR MOUNTED DUPLEX RECEPTACLE - FLUSH MOUNTED UNO	-
IG	ISOLATED GROUND FLOOR MOUNTED DUPLEX RECEPTACLE FLUSH MOUNTED UNO	-
	DUPLEX RCPT. SPLIT-WIRED - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF
	SPECIAL PURPOSE RECEPTACLE (NEMA NO. OR RATING AS INDICATED)	15" AFF
J	JUNCTION BOX - SIZE & MOUNTING AS REQUIRED	15" AFF
	MULTIOUTLET ASSEMBLY - LENGTH AND OUTLET SPACING AS INDICATED	-
30/-/3	DISCONNECT SWITCH - 30/-/3 INDICATES 30A, 3-POLE, NONFUSED; 30/30/3 INDICATES 30A, 3-POLE, 30A FUSE	AS REQD.
30/3	CIRCUIT BREAKER DISCONNECT SWITCH - THERMAL MAGNETIC CB IN NEMA 1 ENCL; AMPS/POLES AS INDICATED	-
30/30/3	DISCONNECT SWITCH - 30/30/3 INDICATES 30A, 3-POLE, 30A FUSE	AS REQD.
2	MOTOR STARTER FVNR UNO; NUMBER INDICATES NEMA SIZE	AS REQD.
2	COMBINATION MOTOR CONTROLLER/DISCONNECT SWITCH	AS REQD.
	PANELBOARD	AS REQD.
	TRANSFORMER	-
	MOTOR	-
~	SINGLE LINE CONTINUATION	-
	CIRCUIT HOME RUN TO PANELBOARD (2 #12, 1 #12G, 3/4"C. 20A/1P CB UNO)	-
X,X,X	THREE SINGLE POLE DEVICE CIRCUIT NUMBERS	-
X/X/X	MULTI-POLE DEVICE CIRCUIT NUMBERS	-

FIRE ALARM

SYMBOL	DESCRIPTION	MTG. HT. UNO (SEE NOTE 1)
F	FIRE ALARM PULL STATION - ROUGH-IN ONLY	48" AFF
F	FIRE ALARM AUDIBLE/VISUAL SIGNAL - ROUGH-IN ONLY	80" AFF
F	FIRE ALARM AUDIBLE SIGNAL - ROUGH-IN ONLY	80" AFF
F	FIRE ALARM VISUAL SIGNAL - ROUGH-IN ONLY	80" AFF
FS	FIRE ALARM SPRINKLER FLOW SWITCH - ROUGH-IN ONLY	-
TS	FIRE ALARM SPRINKLER TAMPER SWITCH - ROUGH-IN ONLY	-
R	SPRINKLER SYSTEM REGULATOR RELAY	-
S	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED - ROUGH-IN ONLY	-
H	HEAT DETECTOR CEILING OR WALL MOUNTED - ROUGH-IN ONLY	80" AFF
DS	DUCT SMOKE DETECTOR - ROUGH-IN ONLY	-
FACP	FIRE ALARM CONTROL PANEL	-
FAAP	FIRE ALARM ANNUNCIATOR PANEL	-
F	FIRE ALARM BELL BUZZER	-

COMMUNICATION

SYMBOL	DESCRIPTION	MTG. HT. UNO (SEE NOTE 1)
2/2	TELEPHONE/DATA OUTLET. WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING	15" AFF
2	TELEPHONE OUTLET. WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING	15" AFF
2	DATA OUTLET. WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING	15" AFF
2/2	FLOOR MOUNTED TELEPHONE/DATA OUTLET - FLUSH MOUNTED UNO	-
2	FLOOR MOUNTED TELEPHONE OUTLET - FLUSH MOUNTED UNO	-
2	FLOOR MOUNTED DATA OUTLET - FLUSH MOUNTED UNO	-
SC	SOUND CONSOLE (RACK)	48" AFF
S S	P.A. SPEAKER, CEILING OR WALL MOUNTED	-
M M	MICROPHONE OUTLET	9" BFC, UNO
DBL	CLOCK - SINGLE OR DOUBLE FACE	-
W	WIRELESS ACCESS POINT	-
TV TV	TELEVISION OUTLET. CLG. OR WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING	-
	PUSHBUTTON FOR INTERCOM CALL IN	-
	BUZZER/BELL	48" AFF
	TELEPHONE BOARD	-
	CABLE TRAY	-

GENERAL ABBREVIATIONS

ABS	ABOVE BACK SPLASH	EX	EXISTING	MTD	MOUNT OR MOUNTED	NL	NIGHT LIGHT	SW	SWITCH
AFF	ABOVE FINISHED FLOOR	F	FUSE	MTG	MOUNTING	NO (N.O.)	NORMALLY OPEN	UF	UNDERFLOOR
BFC	BELOW FINISHED CEILING	G	GROUND (EQUIPMENT)	NC (N.C.)	NORMALLY CLOSED	RCPT(S)	RECEPTACLE(S)	UG	UNDERGROUND
C	CONDUIT	GFI	GROUND FAULT INTERRUPTER	NF	NONFUSED	PNL	PANEL	WG	WIRE GUARD
CB	CIRCUIT BREAKER	H	HORIZONTAL MOUNTING	NIC	NOT IN CONTRACT	SO (S.O.)	SPACE ONLY	WP	WEATHERPROOF
CLG	CEILING	IC	INTERRUPTING CAPACITY	TYP	TYPICAL	SP	SPARE	XFMR	TRANSFORMER
EC	EMPTY CONDUIT	IG	ISOLATED GROUND	EP	ELECTRICAL PRIMARY	ST (S.T.)	SHUNT TRIP	UNO	UNLESS NOTED OTHERWISE

NOTES:
1. 48" AFF INDICATES TO TOP OF DEVICE;
   15" AFF INDICATES TO BOTTOM OF DEVICE;
   ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

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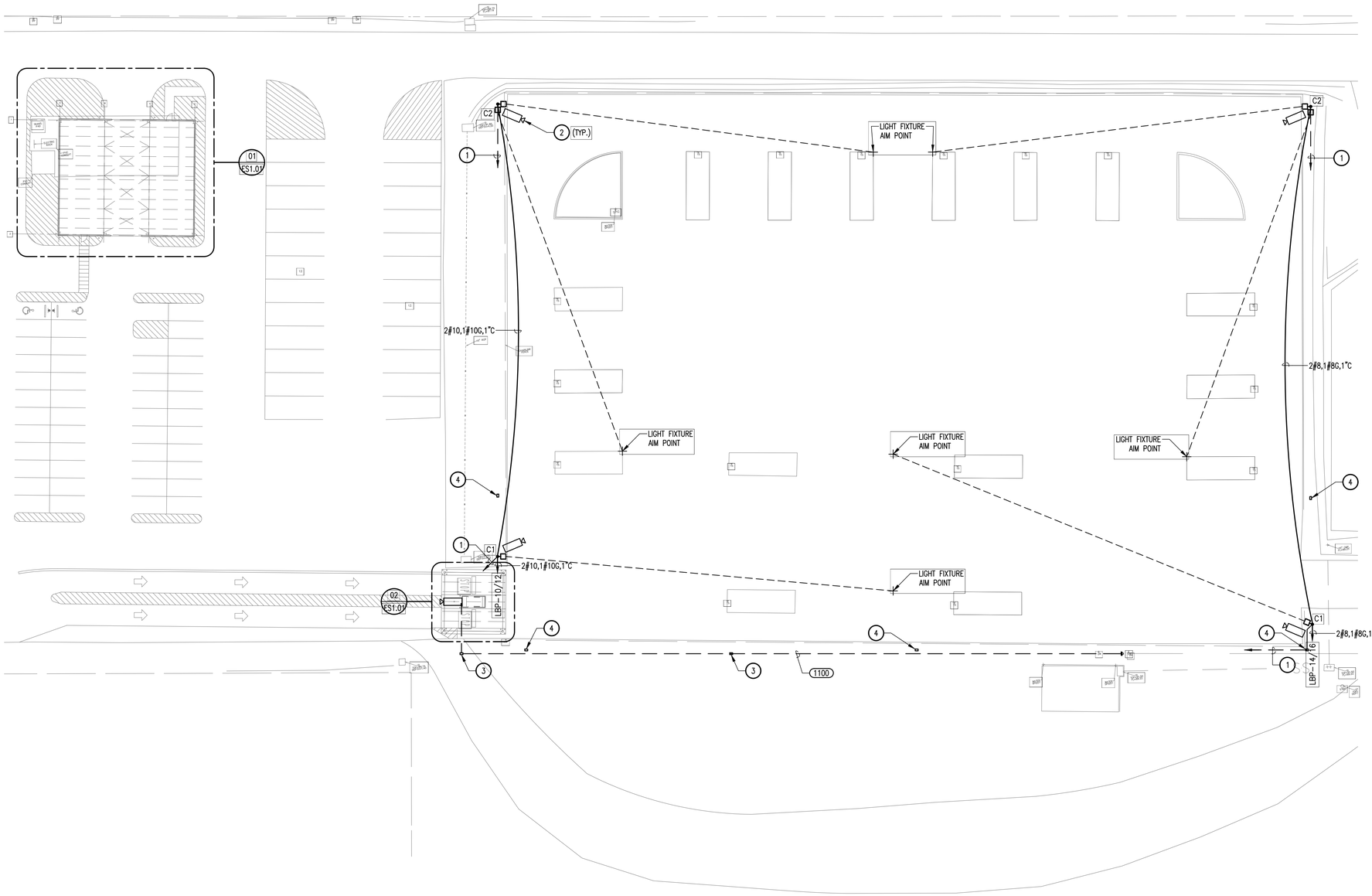
HALFF
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Revision No.	Date	Description

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STATE OF TEXAS
10/10/16

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01 ELECTRICAL SITE PLAN
SCALE: 1"=30'

GENERAL NOTES:

A. REFER TO E0.01 FOR GENERAL NOTES.

B. CONTRACTOR SHALL MINIMIZE THE AMOUNT OF TRENCHING WITHIN THE COLLECTION SITE. ROUTE ALL NEW CONDUIT IN GREEN AREA AROUND COLLECTION SITE FOR INSTALLATION OF NEW ELECTRICAL CIRCUITING AND FUTURE COMMUNICATION SYSTEMS.

C. CONTRACTOR SHALL COORDINATE ROUTING AND LOCATION OF TRENCHING TO MINIMIZE THE AMOUNT TRENCHING REQUIRED TO INSTALL NEW ELECTRICAL SYSTEMS. RUN NEW ELECTRICAL AND COMMUNICATIONS CONDUIT IN SAME TRENCH AS MUCH AS POSSIBLE.

KEY NOTES: (#)

1. PROVIDE 1-1/2" CONDUIT WITH PULL STRING FOR CAMERA INSTALLATION. EXTEND CAMERA ASSOCIATED CONDUIT TO NETWORK SWITCH AT NEW BOOTH. CAMERAS BY OTHERS.
2. CAMERA INSTALLATION BY OTHERS. PROVIDE POLE WITH REQUIRED MOUNTING PLATE AND PREDRILLED FOR ROUTING OF CAMERA WIRING. COORDINATE EXACT CAMERA REQUIREMENTS WITH CAMERA INSTALLER.
3. FOR SUB-FEED FEEDER TO PANEL 'LBP', PROVIDE WITH OLDCASTLE, SYNERTECH COMPOSITE DU013X24 WITH TIER 15 COVER.
4. FOR FUTURE SECURITY CAMERA ROUGH-IN, PROVIDE WITH OLDCASTLE, SYNERTECH COMPOSITE DU011X18 WITH TIER 15 COVER AT EVERY 200'-0".

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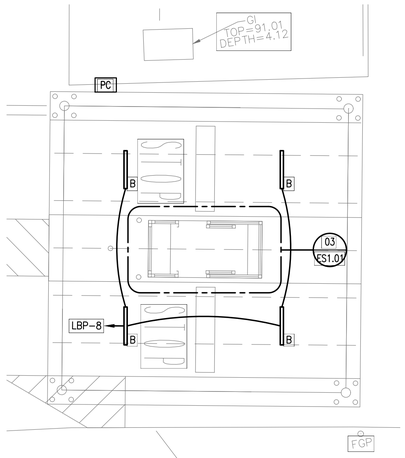
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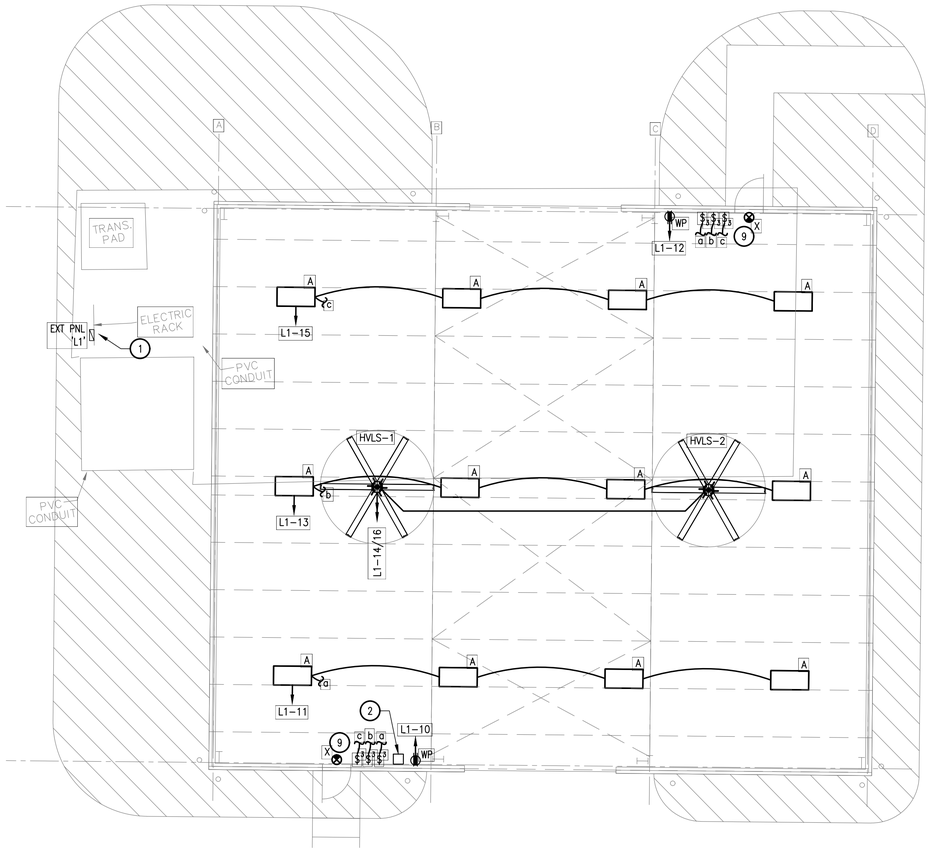
ELECTRICAL SITE PLAN

ES1.00
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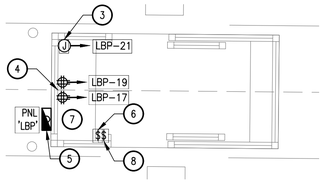
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02 ENLARGED ELECTRICAL PLAN - CANOPY
SCALE: 1/8" = 1'-0"



01 ENLARGED ELECTRICAL PLAN - STORAGE BUILDING
SCALE: 1/8" = 1'-0"



03 ENLARGED ELECTRICAL PLAN - BOOTH
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

A. INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.

B. IN ADDITION TO THE ELECTRICAL DEVICES PROVIDED WITH PREFABRICATED BOOTH, PROVIDE ELECTRICAL DEVICES SHOWN AND CIRCUIT AS SPECIFIED. REFER TO KEYNOTES ON THIS SHEET.

KEY NOTES: (#)

1. EXISTING ELECTRICAL RACK.
2. INSTALL MACROAIR NETWORK CONTROLLER 6 DEVICE AT THIS LOCATION. CONTROLLER SHALL OPERATE BOTH FANS.
3. PROVIDE WEATHER PROOF J-BOX AT ROOF LEVEL FOR POWER TO WIRELESS ANTENNA. COORDINATE POINT AND TYPE OF ELECTRICAL CONNECTION WITH ANTENNA PROVIDER, MAKE FINAL CONNECTION.
4. PROVIDE QUAD RECEPTACLE DEVICES, SURFACE MOUNTED AND AT COUNTER LEVEL, FOR POWER TO NETWORK SWITCH AND ACCESSORIES.
5. ELECTRICAL PANELBOARD PROVIDED WITH BOOTH.
6. SWITCH FOR CONTROL OF COLLECTION SITE LIGHTING.
7. STUB IN SECURITY CAMERA CONDUITS AT THIS LOCATION.
8. SWITCH FOR CONTROL OF CANOPY LIGHTING.
9. CONNECT EXIT LIGHT TO UN-SWITCHED LIGHTING CIRCUIT.

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LIGHTING FIXTURE SCHEDULE

TYPE	MANUF & MODEL NUMBER	LAMPS	VA	VOLTAGE	DESCRIPTION	NOTES
A	LITHONIA – #IBZ-454L-WDU-NLWG-GEB10PS90-LP850-HBBSJ36IC	T5HO	5000K 249	120	FLUORESCENT HIGHBAY FIXTURE WITH WIREGUARD, MULTI-TAP ELECTRONIC BALLAST AND 36" CHAIN HANGING MOUNT FIXTURES AT 16'-0" AFF.	KIT
B	LITHONIA – #FPG4-2-54T5HO-B1X20-MVOLT-GEB10PS90-GLR-LP841	T5HO	4000K 105	120	4', LOW PROFILE CANOPY LINEAR FLOURESCENT STRIP LIGHT, POLYCARBONATE LENS, AND ELECTRONIC BALLAST, U.L. LISTED FOR DAMP LOCATIONS.	
C1 P1	LITHONIA – #TFL-400M-RA2-208-SCWA-XX-DF-DNA-LPI KW INDUSTRIES – #RTSP 27-7-11-XX-2 BC	400W-MH	4000K 456	208	SINGLE METAL HALIDE FLOOD LIGHT, WITH TENNON MOUNT ON POLE. 30' POLE CUT TO 27' WITH MINIMUM 7.59 EPA AT 130MPH. FINISH TO BE SELECTED BY OWNER.	
C2 P2	LITHONIA – #TFL-400M-RA2-208-SCWA-XX-DF-DNA-LPI KW INDUSTRIES – #RTSP 27-7-11-XX-2 BC / FA2180-36-2-XX	400W-MH	4000K 912	208	DUAL METAL HALIDE FLOOD LIGHTS, WITH TENNON MOUNT ON POLE. 30' POLE CUT TO 27' WITH MINIMUM 7.59 EPA AT 130MPH WITH BULLHORN MOUNTING ADAPTER FOR TWO FIXTURES AT 180deg. FINISH TO BE SELECTED BY OWNER.	
X	LITHONIA – #LHQM S W 3 R N	INCLUDED	LED 6	120/277	POLYCARBONATE EMERGENCY EXIT LIGHT WITH EMERGENCY LAMPS LED LAMPS, SINGLE/DOUBLE FACE, PROVIDE WITH EMERGENCY BATTERY PACK	

PANELBOARD 'LBP'

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE — LOCATION: BOOTH EXTERIOR
100 A MAIN BREAKER — MOUNTING: SURFACE
BUSES: MAIN – 100 A; NEUTRAL – 100%; EQUIPMENT GROUND — Isc = 10,000 A RMS SYM AVAILABLE

VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	180		REC: PREWIRED	20/1	1	A	2	20/1	LTS: PREWIRED	500	0	
0	180		REC: PREWIRED	20/1	3	B	4	20/2	REC: PREWIRED FOR A/C	0	0	1550
0	180		REC: PREWIRED	20/1	5	C	6	–	"	0	0	1550
0	180		REC: PREWIRED	20/1	7	A	8	20/1	LTS: CANOPY	420	0	
0	180		REC: PREWIRED	20/1	9	B	10	20/2	LTS: COLLECTION	684	0	
0	180		REC: PREWIRED	20/1	11	C	12	–	"	684	0	
0	180		REC: PREWIRED	20/1	13	A	14	20/2	LTS: COLLECTION	684	0	
0	180		REC: PREWIRED	20/1	15	B	16	–	"	684	0	
0	720		REC: NETWORKING EQUIPMENT	20/1	17	C	18	20/1	SPARE	0	0	
0	720		REC: NETWORKING EQUIPMENT	20/1	19	A	20	20/1	SPARE	0	0	
0	540		PWR: WIRELESS ANTENNA	20/1	21	B	22	20/1	SPARE	0	0	
0	0		SPARE	20/1	23	C	24	20/1	SPARE	0	0	

VA:L (LIGHTING)	3656	CONNECTED		4570	DEMAND
VA:R (RECEPTACLES)	3420	CONNECTED		3420	DEMAND
VA:O (OTHER)	3100	CONNECTED		3100	DEMAND
VA: TOTAL	10176	CONNECTED		11090	DEMAND
AMPS: TOTAL	28	CONNECTED		31	DEMAND

L	R	O	TOTAL				
1604	1260	0	VA CONNECTED TO A PHASE	2864	VA =	24	AMPS CONNECTED TO A PHASE @ 120 VOLTS
1368	1080	1550	VA CONNECTED TO B PHASE	3998	VA =	33	AMPS CONNECTED TO B PHASE @ 120 VOLTS
684	1080	1550	VA CONNECTED TO C PHASE	3314	VA =	28	AMPS CONNECTED TO C PHASE @ 120 VOLTS
3656	3420	3100	TOTAL	10176	VA		

FEEDER / BRANCH CIRCUIT SCHEDULE

MARK	RACEWAY	PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS	REMARKS
S001	2"	3#3/0	1#3/0	----	----
1000	2"	3#3/0	----	1#6	----
1001	2"	3#3/0	1#3/0	1#6	----
1100	1 1/2"	3#3	1#3	1#8	----
EX1		3#3/0	1#3/0	----	IN EXISTING CONDUIT
EX2		3#3/0	1#3/0	1#6	IN EXISTING CONDUIT

EXISTING PANELBOARD 'L1'

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE — LOCATION: EXTERIOR ROOM
200A MAIN BREAKER — MOUNTING: SURFACE
BUSES: MAIN – 225 A; NEUTRAL – 100%; EQUIPMENT GROUND

VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	0		PWR: FUTURE PUMP EQUIPMENT	100/2	1	A	2	100/3	PWR: FUTURE PUMP EQUIPMENT	0	0	
0	0		"	–	3	B	4	–	"	0	0	
0	0		SPARE	20/1	5	C	6	–	"	0	0	
0	0		SPARE	20/1	7	A	8	20/1	RECEP: GFI AT RACK	0	0	
0	0		SPARE	20/1	9	B	10	–	SPACE	0	0	
0	0		SPACE	–	11	C	12	–	SPACE	0	0	
0	0		SPACE	–	13	A	14	–	SPACE	0	0	
0	0		SPACE	–	15	B	16	–	SPACE	0	0	
0	0		SPACE	–	17	C	18	–	SPACE	0	0	
0	0		SPACE	–	19	A	20	–	SPACE	0	0	
0	0		SPACE	–	21	B	22	–	SPACE	0	0	
0	0		SPACE	–	23	C	24	–	SPACE	0	0	
0	0		SPACE	–	25	A	26	–	SPACE	0	0	
0	0		SPACE	–	27	B	28	–	SPACE	0	0	
0	0		SPACE	–	29	C	30	–	SPACE	0	0	
0	0		SPACE	–	31	A	32	–	SPACE	0	0	
0	0		SPACE	–	33	B	34	–	SPACE	0	0	
0	0		SPACE	–	35	C	36	–	SPACE	0	0	
0	0		SPACE	–	37	A	38	–	SPACE	0	0	
0	0		SPACE	–	39	B	40	–	SPACE	0	0	
0	0		SPACE	–	41	C	42	–	SPACE	0	0	

VA:L (LIGHTING)	0	CONNECTED		0	DEMAND
VA:R (RECEPTACLES)	0	CONNECTED		0	DEMAND
VA:O (OTHER)	0	CONNECTED		0	DEMAND
VA: TOTAL	0	CONNECTED		0	DEMAND
AMPS: TOTAL	0	CONNECTED		0	DEMAND

L	R	O	TOTAL				
0	0	0	VA CONNECTED TO A PHASE	0	VA =	0	AMPS CONNECTED TO A PHASE @ 120 VOLTS
0	0	0	VA CONNECTED TO B PHASE	0	VA =	0	AMPS CONNECTED TO B PHASE @ 120 VOLTS
0	0	0	VA CONNECTED TO C PHASE	0	VA =	0	AMPS CONNECTED TO C PHASE @ 120 VOLTS
0	0	0	TOTAL	0	VA		

REVISED PANELBOARD 'L1'

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE — LOCATION: EXTERIOR ROOM
200A MAIN BREAKER — MOUNTING: SURFACE
BUSES: MAIN – 225 A; NEUTRAL – 100%; EQUIPMENT GROUND

VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	0	8320	PWR: FUTURE PUMP EQUIPMENT	100/2	1	A	2	100/3	PWR: FUTURE PUMP EQUIPMENT	0	0	9600
0	0	8320	"	–	3	B	4	–	"	0	0	9600
0	0		SPARE	20/1	5	C	6	–	"	0	0	9600
0	0		SPARE	20/1	7	A	8	20/1	RECEP: GFI AT RACK	0	180	
0	0		SPARE	20/1	9	B	10	20/1	RECEP: STORAGE	0	180	
996	0		LTG: HIGHBAY	20/1	11	C	12	20/1	RECEP: STORAGE	0	180	
996	0		LTG: HIGHBAY	20/1	13	A	14	20/2	PWR: HVLS-1 & HVLS-2	0	0	920
996	0		LTG: HIGHBAY	20/1	15	B	16	–	"	0	0	920
0	0		SPARE	20/1	17	C	18	20/1	SPARE	0	0	
0	0		SPARE	20/1	19	A	20	20/1	SPARE	0	0	
0	0		SPARE	20/1	21	B	22	20/1	SPARE	0	0	
0	0		SPACE	–	23	C	24	–	SPACE	0	0	
0	0		SPACE	–	25	A	26	–	SPACE	0	0	
0	0		SPACE	–	27	B	28	–	SPACE	0	0	
0	0		SPACE	–	29	C	30	–	SPACE	0	0	
0	0		SPACE	–	31	A	32	–	SPACE	0	0	
0	0		SPACE	–	33	B	34	–	SPACE	0	0	
0	0		SPACE	–	35	C	36	–	SPACE	0	0	
0	0		SPACE	–	37	A	38	–	SPACE	0	0	
0	0		SPACE	–	39	B	40	–	SPACE	0	0	
0	0		SPACE	–	41	C	42	–	SPACE	0	0	

VA:L (LIGHTING)	2988	CONNECTED		3735	DEMAND
VA:R (RECEPTACLES)	540	CONNECTED		540	DEMAND
VA:O (OTHER)	47280	CONNECTED		47280	DEMAND
VA: TOTAL	50808	CONNECTED		51555	DEMAND
AMPS: TOTAL	141	CONNECTED		143	DEMAND

L	R	O	TOTAL				
996	180	18840	VA CONNECTED TO A PHASE	20016	VA =	167	AMPS CONNECTED TO A PHASE @ 120 VOLTS
996	180	18840	VA CONNECTED TO B PHASE	20016	VA =	167	AMPS CONNECTED TO B PHASE @ 120 VOLTS
996	180	9600	VA CONNECTED TO C PHASE	10776	VA =	90	AMPS CONNECTED TO C PHASE @ 120 VOLTS
2988	540	47280	TOTAL	50808	VA		

NEW CIRCUITS

Hidalgo County
Precinct 4 - Recovery and
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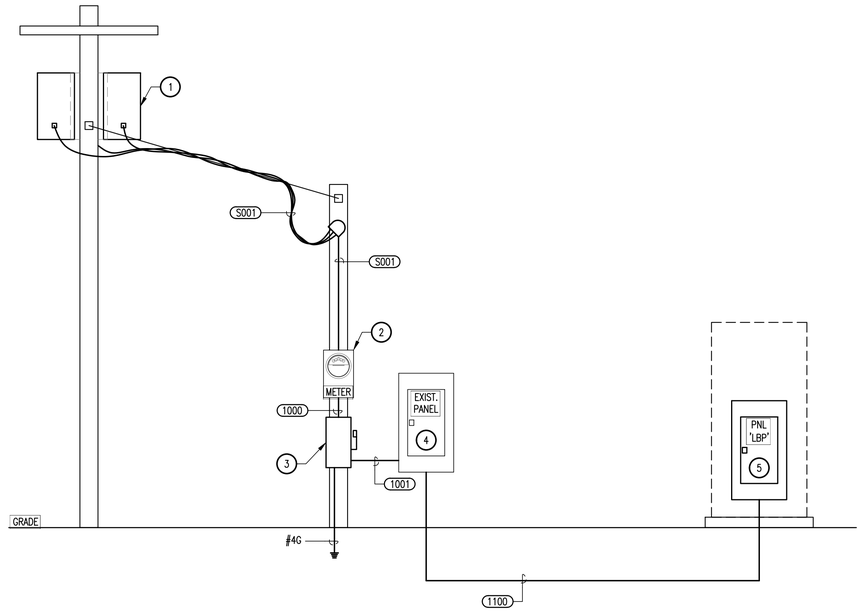
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	E2.01
Sheet Number	

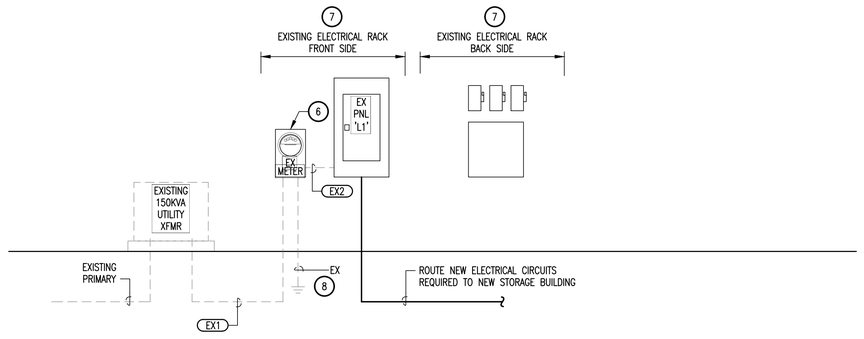
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GENERAL NOTES:

A. INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.



01 ELECTRICAL RISER DIAGRAM - COLLECTION SITE
N.T.S.



02 ELECTRICAL RISER DIAGRAM - STORAGE BUILDING
N.T.S.

KEY NOTES: (#)

1. EXISTING POLE MOUNTED UTILITY TRANSFORMERS.
2. RE-INSTALL EXISTING METER ENCLOSURE AT NEW LOCATION.
3. PROVIDE NEW 200/200/3, 240V, NEMA-3R DISCONNECT SWITCH.
4. REINSTALL EXISTING ELECTRICAL PANEL AT NEW LOCATION.
5. REFER TO PANEL SCHEDULE AND SPECIFICATION SECTION FOR BOOTH.
6. EXISTING METER SOCKET.
7. EXISTING ELECTRICAL EQUIPMENT RACK. REFER TO SITE PLAN FOR LOCATION.
8. FIELD VERIFY EXISTING GROUNDING ELECTRODE CONDUCTOR IS #4 IN SIZE, IF EXISTING CONDUCTOR IS SMALLER THAN #4 REPLACE WITH #4 AND CONNECT TO EXISTING GROUNDING ROD(S).

Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
1051 N. Doolittle Rd.
Edinburg, Texas 78542

HALFF
5900 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
FAX (956) 664-0502
TBPE FIRM #F-312

Revision No.	Date	Description

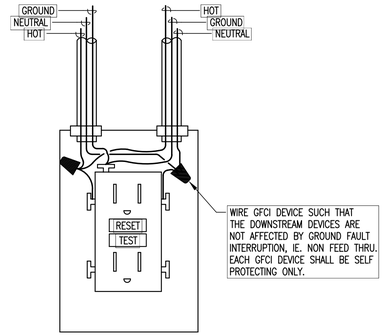
JOSE A. DELGADO
101998
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
10/10/16

Project No.:	31806(WA01)
Issued:	10 / 10 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED

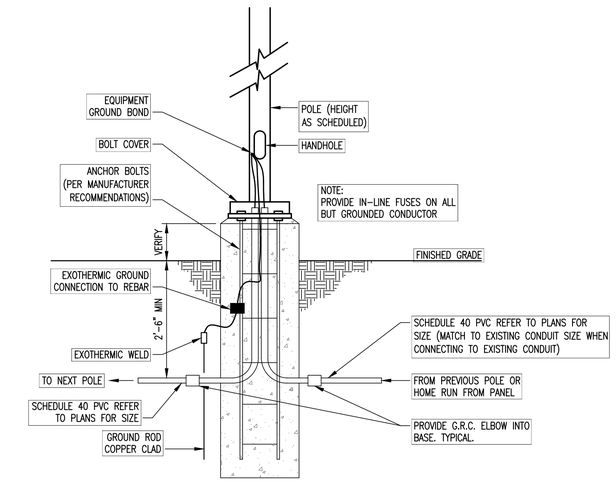
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E3.01
Sheet Number

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02 GFCI RECEPTACLE - WIRING DIAGRAM
N.T.S.



NOTE:
POLE BASE SHOWN FOR ELECTRICAL REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR POLE CONSTRUCTION

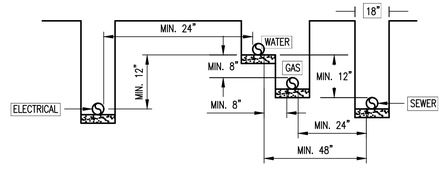
01 ELECTRICAL POLE BASE DETAIL
N.T.S.

GENERAL NOTES:

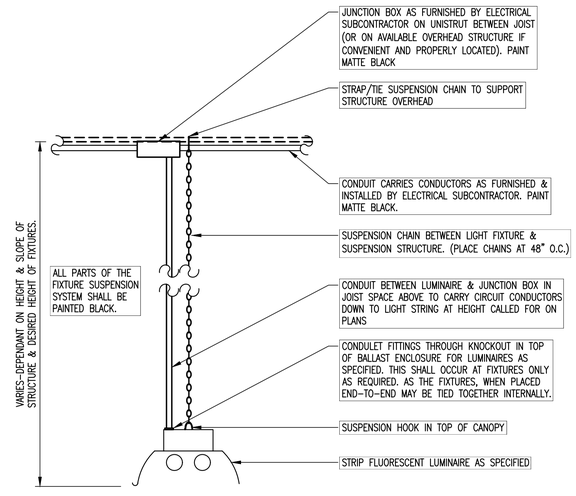
a. CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.

b. MAINTAIN ALL MINIMUM 48 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES.

c. COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.



04 TRENCH DETAIL - UTILITIES
N.T.S.



03 LIGHT SUSPENSION DETAIL
N.T.S.

Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
1051 N. Doolittle Rd.
Edinburg, Texas 78542

HALFF
5900 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0288
FAX (956) 664-0282
TBPE FIRM #F-312

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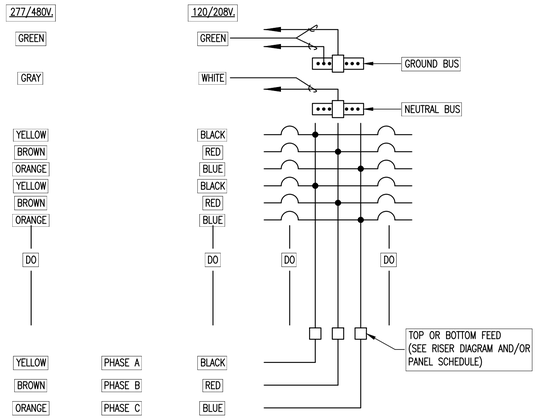
STATE OF TEXAS
JOSE A. DELGADO
101998
LICENSED
PROFESSIONAL ENGINEER
10/10/16

Project No.:	31806(WA01)
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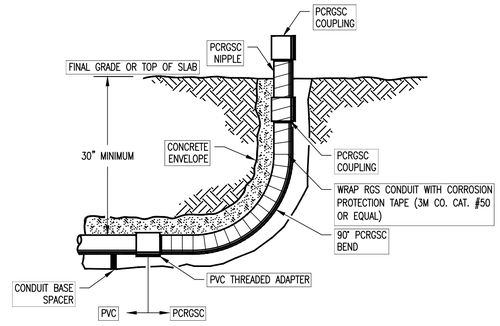
Sheet Title
ELECTRICAL DETAILS

E4.01
Sheet Number

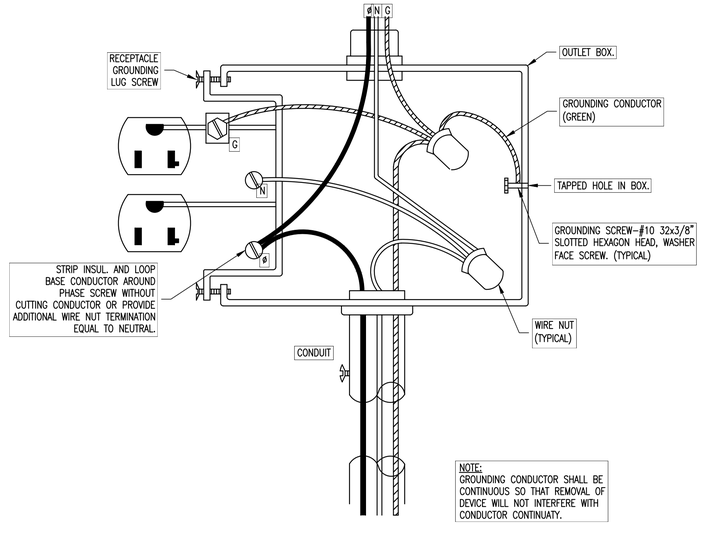
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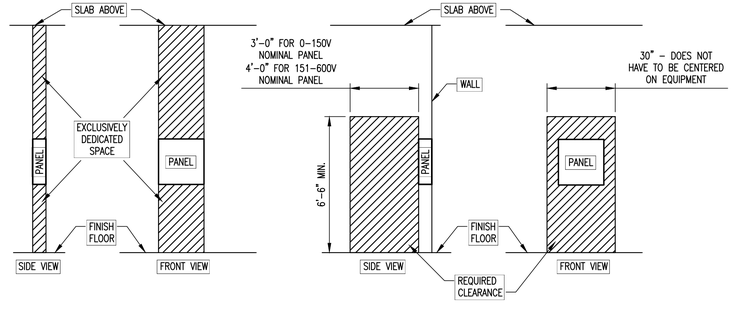
02 TYPICAL PANEL COLOR CODE
N.T.S.



01 TYPICAL CONDUIT STUB-UP DETAIL
N.T.S.



04 TYPICAL RECEPTACLE GROUNDING DETAIL
N.T.S.



03 TYPICAL PANELBOARD REQUIRED CLEARANCE
N.T.S.

Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
1051 N. Doolittle Rd.
Edinburg, Texas 78542

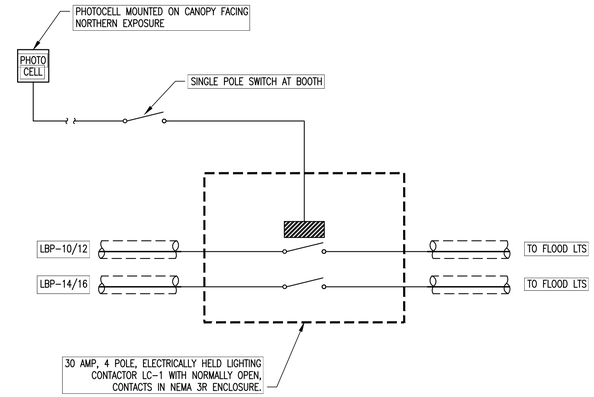
HALFF
5900 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
FAX (956) 664-0282
TBPE FIRM #F-312

Revision No.	Date	Description

JOSE A. DELGADO
101998
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
10/10/16

Project No.:	31806(WA01)
Issued:	10 / 10 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED
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Sheet Number	E4.02

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01 LIGHTING CONTROL CONTACTOR
N.T.S.

Hidalgo County
Precinct 4 - Recovery and
Motor Pool Improvements
1051 N. Doolittle Rd.
Edinburg, Texas 78542

HALFF
5900 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
FAX (956) 664-0292
TBPE FIRM #F-312

Revision No.	Date	Description

STATE OF TEXAS
JOSE A. DELGADO
101998
LICENSED
PROFESSIONAL ENGINEER
10/10/16

Project No.:	31806(WA01)
Issued:	10 / 10 / 16
Drawn By:	CHAVEZ
Checked By:	J.D.
Scale:	AS NOTED

Sheet Title
ELECTRICAL DETAILS

E4.03
Sheet Number

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PROJECT MANUAL

Hidalgo County Precinct 4 Recovery and Motor Pool Improvements

RFB No. 2017-067-02-15-TDL

Edinburg, Texas

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HIDALGO COUNTY PRECINCT 4
RECOVERY AND MOTOR POOL IMPROVEMENTS

MECHANICAL/PLUMBING ENGINEER:
HALFF ASSOCIATES, INC.
5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
P: (956) 664-0286
F: (956) 664-0282

MENTON J. 'TREY' MURRAY, III, P.E.



ELECTRICAL ENGINEER:
HALFF ASSOCIATES, INC.
5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
P: (956) 664-0286
F: (956) 664-0282

JOSE A. DELGADO, P.E., LEED AP BD+C



CIVIL ENGINEER:
HALFF ASSOCIATES, INC.
5000 WEST MILITARY, STE. 100
MCALLEN, TEXAS 78503
P: (956) 664-0286
F: (956) 664-0282

RAUL GARCIA JR, P.E.



STRUCTURAL ENGINEER:
CHANIN ENGINEERING
400 NOLANA, SUITE N2
MCALLEN, TEXAS 78504
P: (956) 687-9421
F: (956) 687-3211

MIGUEL CHANIN, P.E.

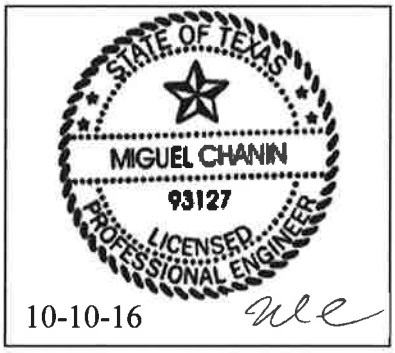


TABLE OF CONTENT
2017-067-02-15-TDL
"RECOVERY AND MOTOR POOL IMPROVEMENTS"

1) Advertisement and Invitation for Bids
2) Hidalgo County Revised Legal Notice
3) Information to Bidders
4) Statement of Credentials
5) Bid Form
6) Bid Bond
7) Draft Contract
8) Non Collusion
9) Payment Bond
10) Performance Bond

11) Exhibit "C"

   a. Insurance Requirements

12) Title 29 Labor
13) Standard General Condition of Construction Contract
14) Supplemental General Condition

15) Exhibit A General Notes & Standard Specifications

   a. Technical Specifications
   b. Hidalgo County Specifications as per 340

16) Exhibit "B"

   a. Debartment
   b. W-9
   c. Bidder/Vendor Application
   d. Conflict of Interest Questionnaire
   e. Sales Tax and Local Sales Tax Certificate

17) Exhibit "D" Border Wage Rates

   a. Government Code Ch. 2258
   b. Prevailing Wage Rate
   c. Davis Bacon (USE MOST CURRENT)

18) Exhibit "E"

a. Change Order
b. Payment of Application
c. Schedule of Values
d. Partial Release of Lien
e. Contractor's Affidavit of Payment of Debts and Claims
f. Prevailing Wage Rates Certificate Statement
g. Certificate of Construction Completion
h. Contractor's Affidavit of Release of Lien
i. Payment Schedule
j. Quantity Work Sheet

19) Construction Identification Sign

REQUEST FOR BIDS

TO SUPPLY HIDALGO COUNTY with sealed bids on: **"Recovery and Motor Pool Improvement"**

A BIDDER'S BOND from a reliable surety company licensed to operate in the State of Texas or certified Cashier's Check, payable without recourse to the County of Hidalgo, for the amount of not less than **5%** of the total bid shall accompany the bid as guaranty that, if awarded the contract, the bidder will enter into a contract with the County of Hidalgo. Payment and Performance Bonds shall be executed except in the event into a single payment contract with the County of Hidalgo in lieu of a Performance Bond. In the event the total amount bid is $25,000 or less, the successful contract has the option to enter into a single payment contract with the County of Hidalgo in lieu of a Payment and Performance Bond.

Bid Packets may be obtained from the office of Halff Associates, Inc. 5000 West Military Ste. 100 McAllen, Texas 78503 Phone No. **(956) 664-0286** for the amount of **$150.00.** General and/or Prime Contractors submitting bids and/or proposals to the County of Hidalgo shall be **non-refundable**.

PRE-BID CONFERENCE is scheduled for **WEDNESDAY, February 8, 2017** at **2:30P.M.** at **HIDALGO COUNTY NEW ADMINISTRATION BUILDING-PURCHASING DEPARTMENT 2812 S Business Hwy 281, EDINBURG, TEXAS 78539.**

UPON SUBMITTING SEALED BID, bidders are required to properly identify (handwritten, typed or printed) sealed envelope and/or packet as follows: Bidder's name and address on the upper left hand corner of the sealed envelope and/or package and Bid No.: **2017-067-02-15-TDL–"Recovery and Motor Pool Improvement"** on the lower left hand corner of sealed envelope/and or packet. **OVERNIGHT MAIL MUST ALSO BE PROPERLY LABELED ON THE OUTSIDE OF EXPRESS ENVELOPE OR PACKAGE.**

The sealed bid must contain one (1) original and three (3) copies of bid and must be clearly identified and addressed for delivery to:

Martha L. Salazar, CPPB, Hidalgo County Purchasing Agent
Hidalgo County Purchasing Department

US Postal Mail/Courier Address
Hidalgo County New Administration Building
2812 S. Business Hwy281
Edinburg, Texas78539

Physical Location:
Hidalgo County New Administration Building
2802 S. Business Hwy. 281
(Southeast of Canton Rd& Business 281)
Edinburg, Texas78539

Sealed bids will be accepted until **9:30 a.m. on Wednesday, February 15, 2017** at which time they will be opened in the Hidalgo County Purchasing Department Conference Room at **Physical Location: 2802 S. Business Hwy 281, Hidalgo County New Administration Building, Edinburg, Texas 78539**. NO FACSIMILES OR LATE ARRIVALS WILL BE ACCEPTED. ANY BID RECEIVED AFTER THAT TIME WILL NOT BE OPENED AND WILL BE RETURNED

Attention is called to the fact that not less than, the federally determined prevailing (**Davis-Bacon and Related Acts**) wage rate, as issued and contained in the contract documents, must be paid on this project. In addition, the successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex, age, disability or national origin (if applicable.)

BIDS MAY BE HELD by the County of Hidalgo for a period not to exceed ninety (90) days from the date of the opening of bids for the purpose of reviewing the bids and investigating the qualifications of bidders, prior to awarding of the contract.

THE COUNTY reserves the right to refuse and reject any/all bids and to waive any/all formalities or technicalities, or to accept the bids considered the best and most advantageous to the County.

Typed written bidding RFI's shall be faxed to: Menton J. "Trey" Murray, III @ 956-664-0282 or e-mailed to tmurray@halff.com . Please call 956-664-0282 to confirm receipt of faxed RFI. RFI's **will not be answered by phone**. NO HAND WRITTEN RFI'S will be processed/answered. All inquiries shall be forwarded by **5:00 PM Wednesday February 8, 2017.** Responses to said inquiries will be sent to all applicants via facsimile by no later than **5:00 PM Friday February 10, 2017**. Inquiries beyond this date will not be responded to. Contact project architect's office for copies of Addenda. All bidders who paid a deposit will be required to return Addenda as part of the Construction Documents in order to receive full deposit or refund.

BY ORDER OF THE COMMISSIONERS COURT OF HIDALGO COUNTY, TEXAS on this the **4th** of **October 2016**.

MARTHA L. SALAZAR, CPPB
HIDALGOCOUNTY PURCHASING AGENT

REPORT ROAD HAZARDS @ 1-866-HCR-SAFE OR 1-866-427-7233

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Bid No: 2017-067-02-15-TDL	Buyer : Tanya De Lira	Tel. No: (956) 318-2626 ext 4878

REQUEST FOR BIDS

HIDALGO COUNTY
"Recovery and Motor Pool Improvements"

BID OPENING
February 15, 2017

Contact Person:

Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department
Physical Address: 2802 S. Business Hwy. 281 -New Administration Building
Mailing/Postal Address: 2812 S. Business Hwy. 281
Edinburg, Texas 78539
956 318-2626

Form HCPD-03

1. Sealed bids will be received for **"HIDALGO COUNTY -"Recovery and Motor Pool Improvements"** in accordance with the specifications attached as **Exhibit "A"** hereto. Bids should address all specifications set forth. Bidders may suggest substitutions of features which they feel would be in the best interest of Hidalgo County ("County"). Strong rationale must be presented for any deviation from the specifications. Hidalgo County reserves the right to reject the deviation and its effect on the overall bid.

2. **One (1) original and Three (3) copies** of all bids are required with the bidders name and return address clearly typed and or/printed on upper left hand corner and the proper notation clearly typed/printed on the lower left hand corner of the envelope and/or package: **BID NO.: 2017-067-02-15-TDL "HIDALGO COUNTY-Recovery and Motor Pool Improvements"** and at County's Purchasing Department with a physical address: 2802 S. Business 281 and a mailing address: 2812 S. Business Hwy 281, New Administration Building, Edinburg, Texas**, on or before 9:30 A.M, WEDNESDAY, February 15, 2017. NO FACSIMILES, EMAILS OR LATE ARRIVALS WILL BE ACCEPTED. ANY RFB RECEIVED AFTER THAT TIME WILL NOT BE OPENED AND WILL BE RETURNED. OVERNIGHT MAIL MUST ALSO BE PROPERLY LABELED ON THE OUTSIDE OF EXPRESS ENVELOPE OR PACKAGE WITH REFERENCE TO** "**HIDALGO COUNTY depts. Name -RFB NO.: 2017-067-02-15-TDL"** Hidalgo County reserves the right to refuse and reject any/all bids and to waive any/all formalities or technicalities, or to accept the bids considered the best and most advantageous to Hidalgo County.

   Additionally, all forms listed below must be properly executed and included with your bid:

   1. Legal Notice (See page 8);
   2. Bid Page – Procurement Form – Areas of Specialization (See **Exhibit "B"**);
   3. Insurance pages with Acknowledgment Forms (See **Exhibit "C"**);
   4. Form CIQ-Conflict of Interest Questionnaire (See **Exhibit "D"**);
   5. Vendor Bidder Application & W-9 forms (See **Exhibit "E"**);
   6. Certification Regarding Debarment (See **Exhibit "F"**); and
   7. SAMS.gov Registration Acknowledgement (See Number 18 below).

3. Hidalgo County reserves the right to: A. separate and accept, or eliminate any item(s) listed under this bid that it deems necessary to accommodate budgetary and/or operational requirements; B. reject any or all bids submitted and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best bid for approval; C. award the bid to one bidder or to multiple bidders if the County determines it is in its best interest to do so; D. award the contract to the responsible bidder who submits the lowest and best bid. "Lowest and best" means a bid or offer providing the best value considering associated direct and indirect costs, including transport, maintenance, reliability, life cycle, warranties, and customer service after a sale.

4. The Bidder shall not substitute items named in the bid without the express written consent of Hidalgo County. Failure of the delivered item to perform as specified or failure to meet the stated delivery schedule shall release Hidalgo County from all obligations to the contracting party with regard to the item(s) in question. In such event, County may elect to award the contract to the next-lowest responsible bidder, or to reject all bids and re-advertise.

5. For work to be performed at a County owned or operated location, each bidder shall, in its sole discretion, visit the job site before preparing the bid and thoroughly familiarize himself/herself with

existing conditions. Bidder should take field dimensions and note all circumstances which affect the dollar amount of the bid.

6. Descriptive specifications are referenced in this document to indicate the general kind and quality of equipment desired by Hidalgo County. Due to various styles and models of equipment, bidders are required to include illustrations, specifications, explanation of warranties, and service data with their bid including catalogue numbers and any necessary references.

7. No bid may be withdrawn within thirty (30) days from the scheduled time to open bids.

8. Proposed prices are to remain firm for a minimum of ninety (90) days after bid opening.

9. Any interpretations, amendments, corrections or changes to this bid document must be in a written addendum and signed by the County Judge or his designee. Addenda will be mailed to all who are known to have received a copy of the Request for Bids. Bidders shall acknowledge receipt of all addenda as a part of their bid.

10. County reserves the right to accept or reject any or all Bids.

11. Costs are to be net F.O.B., County Prepaid.

12. County is exempt from Federal Excise Tax, State Tax and Local Tax. Do Not include tax in cost figure. If it is determined that tax was included in the cost figures it will not be included in the tabulation of any awards. Tax exemption certificates will be furnished upon request.

13. Funds for this procurement have been provided through the County budget for this fiscal year only. County, on an annual basis, has the right to reconsider a contract during the budget process for ensuing years if financial resources of County are insufficient to meet the liabilities of said contract. The award of a bid or contract hereunder will not be construed to create a debt of the County which is payable out of funds beyond the current fiscal year.

14. Upon award and prior to execution of a contract, Sole Proprietorships are required to submit a copy of their social security cards to the Hidalgo County Auditor's Office in order to establish an account with the County. All awarded vendors must submit a completed W-9 and a copy of their Federal ID Number Certificate.

15. DELIVERY INSTRUCTIONS:

- No deliveries accepted after 3:00 P.M., Monday-Friday.

- At least seventy two (72) hours prior notice of delivery must be given to Martha L. Salazar, Purchasing Agent before delivery will be accepted.

- If you need additional information call the office listed below:

Hidalgo County Purchasing Department
Martha L. Salazar, Purchasing Agent
(956) 318-2626

16. BILLING AND PAYMENT INSTRUCTIONS:

- Invoices must include:
  a) Name and address of successful bidder

b) Name and address of receiving department or official
c) Purchase Order Number (if any)
d) Notation - "HIDALGO COUNTY -RFB NO.: 2017-67-02-15-TDL"
Descriptive information as to the items or services delivered, including product code, item number, quantity, etc.
e) Contract number must be indicated on all invoices

. Discount payments will be considered when offered.
. Contact person for Billing and Payment questions:

Hidalgo County Auditor's Office
2808 S. Business Hwy 281
Edinburg, TX 78539
(956) 318-2511

17. SCHEDULE OF EVENTS

Bid Opening, 9:30 A.M.	February 15, 2017
Award of Contract	_____, 2016
Commence Work or Deliver Products	_____ _, 2016

18. BID OR PERFORMANCE BOND AND DEBARMENT CERTIFICATION; PAYMENT UNDER CONTRACT:

. If the contract proposed is for the construction of public works or is for a contract for goods & services exceeding $100,000, all bidders shall furnish a good and sufficient bid bond in the amount of five percent of the total contract price. A bid bond must be executed with a surety company authorized to do business in Texas. All bidders are also required to furnish a certification or acknowledgment stating that the contractor or vendor is free from suspension or debarment pursuant to federal regulation 45CFR Part 76. Register at SAMs System for Award Management @ www.sam.gov.

. Together with the signing of a contract or issuance of a purchase order following the acceptance of a bid, and prior to commencement of the actual work, the bidder shall furnish a performance bond to the County for the full amount of the contract, if that contract exceeds $50,000.

. If the contract is for $50,000 or less, no money will be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County, and, if applicable, the receipt by County of satisfactory evidence that all subcontractors and material men have been paid.

. If a contract is for the construction, alteration or repair of public buildings or public works, the contractor *shall* provide a payment bond for a contract in excess of Twenty Five Thousand Dollars ($25,000.00), as required by Tex. Govt. Code Ch. 2253.

For requirements contracts, bond requirements are determined by applying the proposed unit price to the estimated quantities included in the specifications.

19. TITLE VI NOTICE/ NONDISCRIMATION

a. "The County of Hidalgo, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat.252, 42 U.S.C. §§2000d to 2000d-4) and the Regulations, hereby notifies all

bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."

b. The appropriate clauses of Appendices "A" through "E" as delineated in the USDOT Standard Title VI/Nondiscrimination Assurances - Specific Assurances are hereby incorporated by reference as applicable. Title VI Appendices "A" through "E" are attached as **Exhibit "G.**

c. Bidder will attach all applicable notices to which it is obligated to provide or submit as part of the bid, including Form FHWA 1273 to be submitted by all contractors and subcontractors in relation to construction contracts.

20. ETHICAL STANDARDS:

. It shall be a breach of ethics to offer, give or agree to give any elected official, department head or employee, or former elected official, department head or employee, of the County, or for any elected official, department head or employee or former elected official, department head or employee of the County, to solicit, demand, accept or agree to accept from another person, entity or organization, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore pending before any department or agency of the County.

. It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for the County, or any person associated therewith, as an inducement for the award of a subcontract or order.

. No public official shall have an interest in a contract awarded hereunder except in accordance with Tex. Loc. Govt. Code Chapter 171.

NOTICE:
ALL COMMUNICATIONS BY A VENDOR TO THE COUNTY, ITS OFFICIALS, AND DEPARTMENT HEADS REGARDING THIS PROCUREMENT SHALL BE DONE THROUGH THE HIDALGO COUNTY PURCHASING DEPARTMENT.

21. DISCLOSURE OF CONFLICT OF INTEREST

. Effective January 1, 2016, Chapter 176 of the Texas Local Government Code requires that any vendor, person, consultant or contractor considering doing business with Hidalgo County ("the County") to disclose in the Conflict of Interest Questionnaire (the "CIQ") attached as Exhibit E, the vendor, person, consultant or contractor's affiliation or business relationship that might cause a conflict of interest with the County. By law, the CIQ must be filed with the Hidalgo County Clerk's Office no later than the seventh business day after the date the person becomes aware of facts that require that statement to be filed. The disclosure requirement applies to a person or business who contracts or seeks to contract with Hidalgo County for the sale or purchase of property, goods or service. Any purchase order or contract resulting from this process shall be considered null and void if the successful bidder fails to comply with Texas Local Government Code Chapter 176. Vendors, consultants, contractors and others who desire to conduct business with Hidalgo County are encouraged to refer to Texas Local Government

Code Chapter 176 for the details of this law. An offense under Texas Local Government Code Chapter 176 is a Class C Misdemeanor.

Completed Form CIQ must be submitted to the Hidalgo County Clerk's Office located at 100 N. Closner, Edinburg, Texas 78539 - Hidalgo County Courthouse.

COMPLETION AND SUBMISSION OF FORM CIQ IS THE SOLE RESPONSIBILITY OF THE PROSPECTIVE RESPONDENT. QUESTIONS REGARDING COMPLIANCE SHOULD BE DIRECTED TO YOUR LEGAL COUNSEL.

22. CERTIFICATE OF INTERESTED PARTIES (FORM HB1295)

As of January 1, 2016, to comply with Texas Government Code Section §2252.908, and the rules issued by the Texas Ethics Commission found in Title 1, Section 46.1, 46.3 and 46.5 of the Texas Administrative Code, we have updated and revised our RFB packet. In accordance with these requirements, business must submit a completed Certificate of Interested Parties Form 1295 to the County before the County may enter into a contract with the business entity. In box 3 of Form 1295, you will provide the RFB Project No. (2016-000), as shown on the packet. Once completed and filed with the Texas Ethics Commission, Form 1295 must be printed and signed in the presence of a notary and submitted to our office either by facsimile transmission to (956) 292-7612 or via email to: tanya.delira@co.hidalgo.tx.us. Hidalgo County cannot enter into a contract until Form 1295 is submitted. Therefore, failure to timely submit Form 1295 signed and notarized may result in delay of award. Full instructions for completion and submittal of Form 1295 may be found on the Texas Ethics Commission website:

https://www.ethics.state.tx.us/tec/1295-Info.htm

THE AWARDED VENDOR WILL HAVE THIRTY (30) DAYS FROM THE DATE THE HIDALGO COUNTY COMMISSIONER'S COURT APPROVES THIS AGREEMENT TO SUBMIT THE SIGNED NOTARIZED FORM 1295. *HIDALGO COUNTY CANNOT ENTER INTO A CONTRACT UNTIL FORM 1295 IS SUBMITTED.*

23. If, during the life of any contract or bid awarded, the successful bidder's net prices generally available to other customers for items awarded herein are reduced below the contracted price, it is understood and agreed that the benefits of such reduction shall be extended to the County.

24. Bids, and all goods and services provided hereunder, shall comply with all federal, state and local laws concerning this type(s) of goods and/or services.

25. Minimum Standards for Responsible Prospective Bidders: A prospective bidder must affirmatively demonstrate bidder's responsibility. A prospective bidder, by submitting a bid, represents to County that it meets the following requirements:

- Possess or is able to obtain adequate financial resources as required to perform under the bid;
- Be able to comply with the required or proposed delivery schedule;
- Have a satisfactory record of performance;
- Have a satisfactory record of integrity and ethics;
- Be otherwise qualified and eligible to receive an award.

26. Successful bidder will pay or cause to be paid, without cost or expenses to County, all FICA, FUTA/SUTA and Federal Income Withholding Taxes of all employees, and all wages and benefits as required by Federal or State law. Successful bidder's officers, agents and/or employees will not be entitled to any benefits of an employee or elected official of County, including, but not limited to, benefits associated with County's civil service system.

27. Any contract award to a successful bidder will be in effect until (a) the contract expires, (b) delivery and acceptance of products, and/or performance of services ordered, or (c) terminated by County with thirty day's written notice prior to cancellation.

28. County reserves the right to enforce performance of any contract awarded hereunder in any manner prescribed by law or deemed to be in the best interest of the County in the event of breach or default by successful bidder; County reserves the right to terminate any contract immediately in the event a successful bidder fails to:

    A. Meet schedules;
    B. Pay any required fees or taxes; or
    C. Otherwise perform in accordance with the specifications.

29. Successful bidder shall defend, indemnify and save harmless County and all its elected officials, officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful bidder, or of any agent, employee, subcontractor or supplier of successful bidder in the execution of, or performance under, any contract which may result from bid award or which arises from any event or casualty happening on or within County premises themselves or happening upon or in any halls, elevators, entrances, stairways or approaches of or to such County facilities. Successful bidder shall pay any judgment with costs which may be obtained against County growing out of such injury or damages, and shall, upon request, provide a defense to County by counsel reasonably acceptable to County. Successful bidder's indemnity hereunder shall include, but is not limited to, claims relating to patent, copyright or trademark infringement, and the like, arising out of the goods and services provided by successful bidder.

30. Successful bidder shall warrant that all items/services shall conform with the specifications and/or all warranties provided under the Uniform Commercial Code and be free from all defects in material, workmanship and the like. Items supplied under a contract pursuant to this Request for Bids shall be subject to County's approval. Items found to be defective or not meeting specifications shall be replaced by successful bidder within two business days at no expense to County. Items not picked up within one (1) week after notification shall be deemed a donation to County and may be used or disposed of at County's discretion and without waiver of any other rights of County as to the item's nonconformity.

31. This document and any disputes arising hereunder shall be governed and construed according to the laws of the State of Texas, and will be performable exclusively in Hidalgo County, Texas.

32. The successful bidder shall not assign, sell, transfer or convey its rights under any awarded contract, in whole or in part, without the prior written consent of County.

LEGAL NOTICE

Bid
for
HIDALGO COUNTY
(Dept. Name)
"Recovery and Motor Pool Improvements"
BID NO.: 2017-067-02-15-TDL

To: Martha L. Salazar, CPPB, Purchasing Agent
Physical Address: 2802 S. Business Hwy. 281 -New Administration Building
Mailing/Postal Address: 2812 S. Business Hwy. 281
Edinburg, Texas 78539

In accordance with the Specifications, and subject to all laws and regulations of the United States and state and local laws, the undersigned bidder proposes and commits to furnish all labor, equipment, material, software and services as set forth in the documents hereinbefore mentioned. The undersigned bidder further agrees, upon acceptance of its bid, to execute a contract and/or Purchase Order issued by Hidalgo County for performing and completing the work described in the Specifications within the time stated and for the prices proposed in the documents attached hereto and made a part hereof.

Bidder acknowledges receipt of all of the pages of the documents referenced in the Invitation to Bid Checklist presented in connection with this procurement. Bidder understands that Hidalgo County reserves the right to reject any or all bids and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best bid.

Bidder agrees that this bid shall be good and may not be withdrawn for a period of ninety (90) calendar days after the scheduled closing time for receiving bids, as contained in the Specifications.

Respectfully submitted,

Bidder: _____

Address: _____

By: _____

Printed Name: _____

Title: _____

EXHIBIT "G"

APPENDICES

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations**: The contractor (hereinafter includes consultants)will comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Nondiscrimination**: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of49 CFR Part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment**: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

4. **Information and Reports**: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance**: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

   a. withholding payments to the contractor under the contract until the contractor complies; and/or
   b. cancelling, terminating, or suspending contract, in whole or in part.

6. **Incorporation of Provisions**: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX B

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the **COUNTY OF HIDALGO** will accept title to the lands and maintain the project constructed thereon in accordance with all applicable federal statutes, the Regulations for the Administration of all Department of Transportation programs, and the policies and procedures prescribed by the Federal Highway Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the **COUNTY OF HIDALGO** all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit 1 attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto **COUNTY OF HIDALGO** and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the **COUNTY OF HIDALGO**, its successors and assigns.

The **COUNTY OF HIDALGO**, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over ,or under such lands hereby conveyed [,] [and]* (2) that the **COUNTY OF HIDALGO** will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and(3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land ,and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverted clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX C

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the **COUNTY OF HIDALGO** pursuant to the provisions of Assurance 7(a):

A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:

1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permitted, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended)such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, **COUNTY OF HIDALGO** will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*

C. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the **COUNTY OF HIDALGO** will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the **COUNTY OF HIDALGO** and its assigns.*

(*Reverted clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX D

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by **COUNTY OF HIDALGO** pursuant to the provisions of Assurance 7(b):

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color ,or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.

B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Nondiscrimination covenants, **COUNTY OF HIDALGO** will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said(license, permit, etc., as appropriate) had never been made or issued.*

C. With respect to deeds, in the event of breach of any of the above Nondiscrimination covenants, **COUNTY OF HIDALGO** will there upon revert to and vest in and become the absolute property of **COUNTY OF HIDALGO** and its assigns.*

(*Reverted clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

Pertinent Nondiscrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of1970, (42U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23U.S.C. § 324et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49CFRPart 27;
- The Age Discrimination Act of 1975, as amended,(42U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49U.S.C. § 4 71, Section 4 7123),as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987,(PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189)as implemented by Department of Transportation regulations at 49C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U .S.C. 1681 et seq).

HIDALGO COUNTY PURCHASING OFFICE
2812 S. Business Highway 281
Administration Building
Edinburg, Texas 78539
(956) 318-2626/ Fax: (956) 292-7612

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HIDALGO COUNTY
"Recovery and Motor Pool Improvements"
RFB NO: 2017-067-02-15-TDL

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The above mentioned items shall be found in this Request for Bids-Goods/Products-RFB packet that is attached herewith. Should you find that any of the listed items are not attached in its entirety, please contact Purchasing by calling (956) 318-2626 or e-mail, to advise us of the missing documentation, and Purchasing will forward information either through facsimile, e-mail or by U.S. Mail.

Thank you.

_____ _____

Martha L. Salazar, CPPB, Purchasing Agent Date

Revised 09/13/16

INFORMATION FOR BIDDERS

1. Receipt and Opening of Bids

The Hidalgo County (herein called the "Owner"), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the Hidalgo County Purchasing department until Wednesday, February 15, 2017 at 9:30 a.m. and then at said office publicly open and read aloud. The envelopes containing the bids must be sealed, addressed to Martha L. Salazar, Hidalgo County Purchasing Agent at 2812 S Business 281, Edinburg, Texas 78539 and designated as Bid for Hidalgo County.

The owner may consider informal any bid not prepared and submitted in accordance with provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 90 days after the actual date of the opening thereof.

2. Preparation of Bid

Each bid must be submitted on the prescribed forms and Certification by Bidder (contractor), concerning Labor Standards and Prevailing Wage Requirements. All blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures, and the foregoing Certificates must be fully completed and executed when submitted.

Each bid must be submitted in a sealed envelopes bearing on the outside the name of the bidder, his address, and the name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another enveloped addressed as specified in the bid form.

3. Subcontracts

The bidder is specifically advised that any person, firm, or other party to whom is proposed to ward a subcontract under this contract –

a Must be acceptable to the Owner after verification of the current eligibility status, and,
b Approval of the proposed subcontract award cannot be given by the Owner unless and until the proposed subcontractor has submitted the Certification and/or other evidence showing that it has fully complied with any reporting requirements to which it is or was subject. Although the bidder is not required to attach such Certification by proposed subcontractors to his bid, the bidder is here advised of this requirement so that appropriate action can be taken to prevent subsequent delay in subcontract awards.

4. Telegraphic Modification

Any bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Owner prior to the

closing time, and provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the closing time. The telegraphic communication should not reveal the bid price but should provide the additional or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened. If written confirmation is not received within two days from the closing time, no consideration will be given to the telegraphic modification.

5. Method of Bidding

The Owner invites the following bid(s): Project Name:_____

6. Qualifications of Bidder

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request, the Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract to complete the work contemplated therein. Conditional bids will not be accepted.

7. Bid Security

Each bid must be accompanied by certified check of the bidder, or a bid bond prepared on the form of bid bond attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of 5% of the bid. Such checks or bid bonds will be returned to all except the three lowest bidders within three days after the opening of bids, and the remaining checks, or bid bonds will be returned promptly after the Owner and the accepted bidder have executed the contract, or if no award has be made within 90 days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

8. Liquidated Damages for Failure to enter into Contract

The successful bidder, upon his failure or refusal to execute and deliver the contract and bonds required within 10 days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

9. Time of Completion and Liquidated Damages

Bidder must agree to commence on or before a date to be specified in a Written "Notice to Proceed" of the Owner and to fully complete the project within **60 consecutive calendar days** thereafter. Bidder must agree also to pay as liquidated damages, the sum of **$250.00** for each consecutive calendar day thereafter as hereinafter provided in the General Conditions.

10. Condition of Work

Each bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract. Insofar as possible the contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with work of any other contractor.

11. Addenda and Interpretations

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally.

Every request for such interpretation should be in writing addressed to Halff Associates, Inc., 5000 West Military Ste. 100, McAllen, Texas 78503 attn: Menton J. "Trey" Murray, III and to be given consideration must be received at least five days prior to the date fixed for the opening of bids. Any all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will mailed by certified mail with return receipt requested to all prospective bidders (at the respective addresses furnished for such purposes), not later than three days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.

12. Security for Faithful Performance

Simultaneously with his delivery of the executed contract; the contractor shall furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner.

13. Power of Attorney

Attorney-in-fact who sign bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

14. Notice of Special Conditions

Attention is particularly called to those parts of the contract documents and specification which deal with the following;

a Inspection and testing of materials
b Insurance requirements
c Wage rates
d States allowances

15. Laws and Regulations

The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

16. Method of Award – Lowest Qualified Bidder

If at the time this contract is to be awarded, the lowest base bid submitted by a responsible bidder does not exceed the amount of funds then estimated by the Owner as available to finance the contract the contract will be awarded on the base bid only. If such bid exceeds such amount, the Owner may reject all bids or may award the contract on the base bid combined with such deductible alternates applied in numerical order in which they are listed in the form of Bid, as produces a net amount which is within the available funds.

17. Obligation of Bidder

At the time of the opening of bids each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his bid.

Supplement to Form HUD-4238-B®
INFORMATION FOR BIDDERS

18. SAFETY STANDARDS AND ACCIDENTS PREVENTION

With respect to all work performed under this contract, the contractor shall:

1 Comply with the safety standards provision of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associates General Contractors or America, the requirements of the Occupational Safety and Health Act of 1970 (Public Laws 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, No 75, Saturday, April 17, 1971.

2 Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.

3 Maintain at his office or other well known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employee), whom may be injured on the job site. In no case shall employee be permitted to work at a job site before the employer has made a standing arrangement for removal of injured person to a hospital or a doctor's care.

SPECIAL PROVISIONS

1. The County of Hidalgo reserves the right to partially award the contract in order to meet the budget.

2. It shall be the Contractor's responsibility to locate underground utilities, whether shown or not shown on the drawings, sufficiently in advance of operations to preclude damage to same.

3. Water, sewer, or other utility serves shall not be interrupted. Any damages to existing utilities will be Contractor's responsibility.

4. In the event of damage to underground facilities, whether shown or not shown in the drawings, the Contractor shall make the necessary repairs to place the facilities back in service at no increase in the Contractors price and all such repairs shall conform to the requirements of the company or agency servicing the facility

5. The Contractor shall exercise extra care to prevent damage to all other structures in the area including, fence, roads, pipelines, utilities, etc., whether publicly or privately owned.

6. Until acceptance by the Engineer of any part or all of the construction, as provided for in the plans and these specifications, it shall be under the charge and care of the contractor, and he shall take every necessary precaution against injury or damage to any part of the work. The Contractor shall rebuild, repair, restore and make good, at his own expense, all injuries or damage to any portion of the work before its completion and acceptance.

7. In case the Contractor deems extra compensation is due him for proposed work not covered in the contract, the Contractor shall notify the Engineer in writing of his claim for such extra compensation before he begins the work. Failure on the part of the Contractor to give such notification shall constitute a waiver of claim for such extra compensation. The Contractor shall not proceed until a written Change Order is approved by the Owner, Engineer, and Contractor.

8. Prospective bidders should make a careful examination of the projects sites.

9. Contractor shall review his overall method and schedule of construction with the County Prior to construction for proper coordination of inspection.

10. No open trenches or excavation shall be left open overnight.

STATEMENT OF CREDENTIALS
for Facility Construction and Related Projects
(Non-road Improvements)

1. GENERAL: In order to assist the Owner in determining the ability of each Bidder to properly fulfill the requirements of this proposed contract, the Bidder will complete the following items. **All questions must be answered** and the data given must be clear and comprehensive. **This statement must be notarized.** If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he/she desires.

Name of Bidder: _____

Address: _____

_____

Date Organized: _____ Date Incorporated: _____

Office Number: _____ Fax Number: _____

Number of years in business under present name: _____

Type of work performed by your company: _____

_____

Have you ever failed to complete any work awarded to you? _____

Have you ever defaulted on a contract? _____

2. EXPERIENCE: The Bidder will give below a list of similar projects which he/she has completed within the last five (5) years.

1. Owner: _____

Address: _____

Ph/Fx Number: _____ Email: _____

Scope of Work Description: _____

Date Completed: _____Total Cost: _____

****

2. Owner: _____

Address: _____

Ph/Fx Number: _____ Email: _____

Scope of Work Description: _____

Date Completed: _____Total Cost: _____

****

3. Owner: _____

Address: _____

Ph/Fx Number: _____ Email: _____

Scope of Work Description: _____

Date Completed: _____Total Cost: _____

****

4. Owner: _____

Address: _____

Ph/Fx Number: _____ Email: _____

Scope of Work Description: _____

Date Completed: _____Total Cost: _____

****

5. Owner: _____

Address: _____

Ph/Fx Number: _____ Email: _____

Scope of Work Description: _____

Date Completed: _____Total Cost: _____

****

3. **CONTRACTS ON HAND:** The Bidder shall provide below a list of any contracts/projects he/she currently has on hand:

_____

_____

_____

_____

_____

_____

_____

4. **SUBCONTRACTORS:** List any subcontractors you propose to use on the Hidalgo County's project. Use additional page if necessary. This information is considered preliminary and may be revised prior if bid is awarded and re-submitted during the pre-construction phase. However, it is expressly understood that the use of any subcontractor other than those listed with bid shall require written approval from Hidalgo County.

   Failure to submit the information as required may result in a disqualification of your bid.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

5. **PERFORMANCE OF WORK BY BIDDER:** Except as otherwise provided, the **general contractor/**bidder shall perform no **more** than eighty percent **(80%)** of the work with his own organization, and **no less than** twenty percent **(20%)** of the work may be subcontracted.

   The organization of the specifications into divisions, sections, articles, etc., and the arrangement and titles of project drawings shall not control the Bidder in dividing the work among subcontractors or in establishing the extent of work to be performed by any trade.

   Awarded bidder shall assign a project superintendent who is directly employed by the Bidder, that superintendent will be required to be on the job on a daily basis. No subcontractors will be allowed to act as project superintendents at any point during the construction of said project.

   Bidder shall have a significant business presence with the Rio Grande Valley Area, the business must be headquartered in either Hidalgo, Cameron, or Starr County or a local office must be located in either of the three counties (Hidalgo, Cameron, Starr) with at least thirty percent (30%) of the total company workforce employed at the local office. County reserves the right to request payrolls and any necessary documentation to confirm that the local office meets these requirements.

   Bidders shall carefully examine the plans, specifications and other documents, visit the site of the work, and fully inform themselves as to all conditions and matters which can affect the work or cost thereof. Should the bidder find discrepancies in, or omissions from the plans, specifications or other documents, or should he/she be in doubt as their meaning, he/she should at once notify the Engineer and obtain clarification by addendum prior to submitting any bid.

   Bidder herby certifies that said company carried liability coverage and workers compensation insurance coverage that meets the requirements set forth in this Request for Bids/Proposals when performing work on this project for Hidalgo County.

   Furthermore, bidder certifies that any subcontractor on the project shall provide the said company with a certificate relating that all employees of the subcontractor also are provided with workers' compensation insurance coverage. Bidder will provide copies of all of these certificates to Hidalgo County during the course of the project for all subcontractors working on the project.

   All subcontractors must comply with federally determined prevailing Davis-Bacon and Related Acts wage rate.

   Hidalgo County encourages the hiring of minority women subcontractors and/or suppliers whenever and wherever feasible.

The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the owner in verification of the recitals comprising this Statement of Credentials.

Executed this _____ day of _____, 20_____.

_____

By_____

Title_____

Subscribed and sworn to me this ____ day of _____, 20___.

By:_____

Notary Public in and for _____County, Texas

My commission expires _____

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SEALED BID FORM

PROJECT: Hidalgo County Precinct 4, Recovery and Motor Pool Improvements
1051 North Doolittle Road
Edinburg, Texas

DATE: Wednesday, February 15, 2017

TIME: 9:30 A.M.

TO: Martha L. Salazar, CPPB
Hidalgo County Purchasing Agent

1. Pursuant to and in compliance with the invitation to Bid and the proposed contract documents dated September 7, 2016, and relating to the above referenced project, the undersigned hereby proposes and agrees to fully perform the work within the time stated and in strict accordance with the proposed Contract Documents, and addenda thereto, for the following sum of money:

    A. Base Bid - All labor, materials, services, and equipment necessary for the work shown on drawings and specification by the date set forth as the completion date of the project.

    _____Dollars ($_____)

2. If Awarded this contract, the undersigned will execute a satisfactory Construction Contract, Performance Bond, Labor and Material Payment Bond and Proof of Insurance coverage, with the Owner for the entire work as per the Contract Documents within ten (10) days after the Notice of Award. It is agreed that his proposal is subjected to the owner's acceptance for a period of ninety (90) days from the above date.

3. Enclosed is a Certificate Check or Bidders Bond in the amount of $_____ in compliance with the specifications requirements. (5% of highest amount bid) The above check or Bidders Bond is to become the property of the Owner in the event the Construction Contract (when offered by the Owner) and the bonds and proof of insurance are not within the time set forth above.

4. Extra Work:
   The undersigned agrees that should any change in the work or extra work be ordered, the allowance for overhead and profit contained shall be ten (10%) percent.

   The undersigned agrees to the following:

    A. To furnish all labor and materials as shown, specified, and reasonably inferred.
    B. To complete the base proposal including anticipated delay days to inclement weather or muddy ground conditions in 60 calendar days from issuance of Notice to Proceed.

5. Receipt is acknowledged of the following addendums

   No. _____ Date: _____ No. _____ Date: _____

   No. _____ Date: _____ No. _____ Date: _____

6. The bidder attest and affirms that he and his subcontractors are skilled experienced in the use and interpretation of plans, specifications addenda, and related bid documents and has found them to be free of conflict and/or ambiguities and sufficient for bidding and construction purposes. Further, he has carefully examined the site of the work, and through his own personal observations has satisfied himself as to the nature, location and requirement of the work; the character, quality and quantity of materials required; the difficulties likely to be encountered; the other items and/or conditions which may affect the satisfactory performance of the work. He has based his bid solely on these documents and personal observation and has not relied in any way explanation or interpretation and or written from any source other than those written and issued by the Engineer.

7. The Bidder agrees that the owner has the right to accept or reject any or all bids and to waive all informalities.

8. The undersigned bidder, by signing and executing this bid, certifies and represents to Hidalgo County that bidder has nor offered, conferred or agreed to confer any pecuniary benefits, as defined by TEX. PENAL CODE ANN. S218, or any other thing or value, as consideration for the receipt of information or any specs treatment or advantage relating to this bid; the Bidder also certifies, and presents, that the Bidder has not offered, conferred or agreed to confer any penicuniary benefit or other thing conferred of value as consideration not authorized by the law, the bidder also certifies and represents that bidder has not received any information not available to other bidders so as to give the undersigned a preferential advantage with respect to this bid; the bidder further certifies and represents that bidder has not violated any state, federal or local low, regulation or ordinance relating to bribery, improper influence, collusion or that the bidder will not, in the future, offer, confer, to agree to confer any pecuniary benefit or other thing of value to any officer, trustee, agent, or employee of the Hidalgo County, in return for the person having exercised the person's official discretion, power or duty with respect to this bid, the Bidder certifies and represents that is has now, and will not in the future, offer, confer, or agree to confer a pecuniary benefit or other thing of value of any officer, trustee, agent, or employee of the Hidalgo County in connection with information regarding this bid; the submission of this bid, the award of this bid or the performance, delivery or sale pursuant to this bid.

Respectfully submitted;

Proposal Prepared By:

Bidder: _____ Signed by: _____
Name of Firm

Address: _____ Name: _____

_____ Title: _____

Phone No: _____ Date: _____

Email: _____ Website: _____

(Seal if bidder is a corporation)

END OF SECTION

HIDALGO COUNTY

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned _____

_____ as Principal, and _____

_____ as Surety, are hereby held and firmly bound

unto _____ as OWNER in the penal sum of _____

_____

for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____ day of _____, 2_____.

The condition of the above obligation is such that whereas the Principal has submitted to _____

_____ a certain BID, attached hereto and

hereby made a part hereof to enter into a contract in writing for the

_____

_____

_____

_____

NOW, THEREFORE,

(a) If said Bid shall be rejected, or

(b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and Shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then, this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation is herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____(L.S.)
Principal

_____
Surety

By:_____

IMPORTANT – Surety companies executing BONDS must appear on the Treasury Department's most current list (circular 570 as amended) and be authorized to transact business in the state where the project is located.

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

CONSTRUCTION CONTRACT
C-XX-XXX-XX-XX

This Agreement, entered into this _____day of _____, 2___ by and between Hidalgo County (hereinafter called the "OWNER," and, _____ (a Texas corporation), of County of Hidalgo, and State of Texas, hereinafter called "CONTRACTOR".

WITNESSETH

That for and in consideration of the payments and agreement hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

NAME OF PROJECT

Hereinafter called the project, for the sum of _____ Dollars and _____ Cents and all extra work in connection therewith, under the terms and stated in the General and Special Conditions of the Contract; and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, the General Conditions and Special Conditions printed or written explanatory matter thereof, the specifications and contract documents therefore as prepared by ___ _____engineer_____, entitled the Architect/Engineer, and as enumerated in Paragraph 1.01.A.12 of the General Conditions, all of which are made a part hereof and collectively evidence and constitute the contract.

The CONTRACTOR hereby agrees to commence work under this contract on or after a date to be specified in written "Notice to Proceed" of the OWNER and to fully complete the project within _____consecutive calendar days thereafter. The CONTRACTOR further agrees to pay, as liquidated damages, the sum of $_____for each consecutive calendar day thereafter.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the contract, subject to additions and deductions, as provided in the General Conditions of the contract, and to make payments on account thereof as provided in Paragraphs 14.02.C and 14.07.C of the General Conditions.

DRAFT

IN WITNESS WHEREOF, the parties to these present have executed this contract in six (6) counterparts, each of which shall be deemed an original, in year and day first above mentioned.

APPROVED BY COMMISIONERS COURT ON, _____, 2_____.

CONTRACTOR:_____
Print Name & Title: _____
Name of Firm: _____
_____
Address: _____
_____
Fed I.D. #/SS #: _____

STATE OF TEXAS

COUNTY OF HIDALGO

This instrument was acknowledged before me on this the _____day of _____,

2_____, by _____Of and on behalf of _____
(Title) (A corporation)

_____
Notary Public-Signature

APPROVED AS TO FORM:

BY: _____ DATE: _____
Atlas, Hall & Rodriguez, LLP

ATTEST: COUNTY OF HIDALGO:

_____ _____
Arturo Guajardo, Jr., County Clerk Ramon Garcia, County Judge

DRAFT

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of .....)

County of.……)

_____, being first duly sworn, deposes and says that:

(1) He is _____, of

_____, the Bidder that has submitted the attached Bid;

(2) He is fully informed respecting the preparation and contents of this attached bid and of all pertinent circumstances respecting such bid;

(3) Such bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representative:, employees or parties in interest, including this affiant, has in any way colluded, conspired a collusive or sham Bid in connection with the Contract for which the attaché Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication of conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner or any person interested in the proposed Contract; and

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

_____
(Title)

Subscribed and sworn to before me on this _____

Day of _____

_____

_____

Title

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PAYMENT BOND

(To be used in Texas under V.A.T.S. 5160)

THE STATE OF _____

COUNTY OF _____

KNOW ALL MEN BY THESE PRESENTS: That we (1) _____, a (2) _____, hereinafter called Principal and (3)_____ of _____, hereinafter called the Surety, are held and firmly bound unto (4) _____ of _____, hereinafter called Owner, and unto all persons, firms, and corporations who may furnish materials for, or perform labor upon the building or improvements hereinafter referred to the penal sum of _____ ($_____) Dollars in lawful money of the United States to be paid in (5) _____, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly be these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with (6)_____ _____, the Owner, dated the _____ day of _____, A.D. 200__, a copy of which is hereto attached and made a part hereof for the construction of:

HIDALGO COUNTY PRECINCT #_____

These footnotes refer to numbers in body of contract above:

Date of Bond must not be prior to date of contract

(1) Correct name of Contractor
(2) A Corporation, a Partnership or an Individual, as case may be
(3) Correct name of Surety
(4) Correct name of Owner
(5) County and State
(6) Owner

NOW, THEREFORE, the condition of this obligation is such that, if the –1- Principal shall promptly make payment to all claimants as defined in Article 5160 Revised Civil Statutes of Texas, 1925, as amended by House Bill 344, Act 56th Legislature, Regular Session, 1925 effective April 27, 1959, supplying labor and materials in the prosecution of the work provided for in said Contract, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

This bond is made and entered into solely for the prosecution of all claimants supplying labor and material in the prosecution of the work provided for in said Contract, and all such claimants shall have a direct right of action under the bond as provided in Article 5160, Revised Civil Statutes 1925, as amended by House Bill 344, Acts 56th Legislature, Regular Session, 1959

PROVIDED FURTHER, that if any legal action be filed upon this bond, venue shall lie in Hidalgo County, State of Texas, and that the said surety,

for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specification accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in six counterparts, each one of which shall be deemed an original, this the _____ day of ____ _____. A.D., 20_____.

ATTEST:

Principal_____

_____ By_____

(Principal) Secretary

(Seal) (Address)_____

_____ Telephone Number:_____

Witness as to Principal

_____ _____

(Address) Surety

ATTEST:

_____ By_____

(Surety) Secretary

(Seal) (Address)_____

_____ _____

Witness as to Surety NOTE:If Contractor is partnership all Partners should execute bond

_____ Telephone Number:_____

(Address)

PAYMENT BOND FORM

_____ _____
(Individual Principal)

_____ _____
(Address) (Business Address)
Telephone Number:_____ Telephone Number:_____

_____
(Corporate Principal)

_____
(Business Address) (Affix Corporate SEAL)
Telephone Number:_____
BY_____

_____ _____
ATTEST: _____

_____
(Business Address)(Affix Corporate SEAL)

BY_____
Telephone Number:_____

CERTIFICATES AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ Secretary of the corporation named as Principal in the within bond; that _____,who signed the said bond on behalf of the Principal was then _____ of said corporation; and I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said corporation by authority of its governing body.

_____
(TITLE)
DATE_____ _____
(AFFIX CORPORATE SEAL)

Telephone Number:_____

The rate of premium on this bond is _____ per thousand. Total amount of premium charge $_____.
(The above must be filled in by corporate surety.) (Power-of-Attorney of person signing for surety company must be attached.)

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PERFORMANCE BOND

(To be used in Texas under V.A.T.S. 5160)

THE STATE OF _____

COUNTY OF _____

KNOW ALL MEN BY THESE PRESENTS: That we (1) _____, a (2) _____ OF _____, hereinafter called Principal and (3)_____ of _____, State of _____, hereinafter called the Surety, are held and firmly bound unto (4) _____ _____ of_____, hereinafter called Owner, in the penal sum of _____ ($_____) Dollars in lawful money of the United States to be paid in (5) _____, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly be these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with (6)_____, the Owner, dated the _____ day of _____, A.D. 200__, a copy of which is hereto attached and made a part hereof for the construction of:

HIDALGO COUNTY PRECINCT #_____

hereinafter called the “Work”).

These footnotes refer to the numbers in body of contract above:

Date of Bond must not be prior to date of contract
(1) Correct name of Contractor
(2) A Corporation, a Partnership or an Individual, as case may be
(3) Correct name of Surety
(4) Correct name of Owner
(5) County and State
(6) Owner
(Texas Performance Bond) – Page 2.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform the work in accordance with the plans, specifications, and contract documents during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED FURTHER, that if any legal action be filed upon this bond, venue shall lie in Hidalgo County, State of Texas, and that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the

work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alternation or addition to the terms of the contract or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument is executed in six counterparts, each one of which shall be deemed an original, this the _____ day of ____ _____. A.D.

ATTEST:

Principal_____

_____ By_____

(Principal) Secretary

(Seal) (Address)_____

_____ Telephone Number:_____

Witness as to Principal

_____

(Address)

ATTEST:

_____ By_____

(Surety) Secretary

(Seal) (Address)_____

_____ Telephone Number:_____

Witness as to Surety

_____

(Address)

NOTE: If Contractor is a partnership, all partners should execute bond.

PERFORMANCE-PAYMENT BOND FORM

_____ _____
(Individual Principal)

_____ _____
(Address) (Business Address)
Telephone Number:_____ Telephone Number:_____

_____
(Corporate Principal)

_____
(Business Address) (Affix Corporate SEAL)
Telephone Number:_____
BY_____

_____ _____
ATTEST:

_____
(Business Address)(Affix Corporate SEAL)

BY_____
Telephone Number:_____

CERTIFICATES AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____ Secretary of the corporation named as Principal in the within bond; that _____,who signed the said bond on behalf of the Principal was then _____ of said corporation; and I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said corporation by authority of its governing body.

_____
(TITLE)
DATE_____ _____
(AFFIX CORPORATE SEAL)

Telephone Number:_____

The rate of premium on this bond is _____ per thousand. Total amount of premium charge $_____.
(The above must be filled in by corporate surety.) (Power-of-Attorney of person signing for surety company must be attached.)

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EXHIBIT "C"
Insurance Requirements

The Bidder awarded the contract shall furnish proof of insurnce, which will also include any subcontractor that is subcontracted by the bidder in at least the following limits, to be in place prior to providing any services under this Contract and to continue at all times in force in effect during the term of this Contract:

1. A Five Hundred Thousand Dollar ($500,000.00) Comprehensive General Liability insurance policy providing additional coverage to all underlying liabilities of County.

2. Automobile liability insurance policy with limits of at least Three Hundred Thousand Dollars ($300,000.00) per person and Five Hundred Thousand Dollars ($500,000.00) per occurrence. Coverage should include injury to or death of persons and property damage claims with limits up to Five Hundred Thousand ($500,000.00) arising out of the services provided to County hereunder.

3. Uninsured/Underinsured motorist coverage in an amount equal to the bodily injury limits set forth immediately above;

4. Workers compensation insurance in amounts established by Texas law, unless the Bidder is specifically exempted from the Texas Workers Compensation Act, Texas Labor Code Chapter 401, et. seq.

Certificates of insurance naming County as an additional insured shall be submitted to County for approval prior to any services being performed by Contractor. Each policy of insurance required hereunder shall extend for a period equivalent to, or longer than the term of the Contract, and any insurer hereunder shall be required to give at least thirty (30) days written notice to the County prior to the cancellation of any such coverage on the termination date, or otherwise. This Contract shall be automatically suspended upon the cancellation, or other termination, of any required policy of insurance hereunder, and such suspension shall continue until evidence adequate replacement coverage is provided to County. If replacement coverage is not provided within thirty (30) days following suspension of the Contract, this Contract shall automatically terminate.

Insurance Requirement Acknowledgment

I, _____, authorized representative for _____,
Company/Vendor

hereby acknowledge receipt of the County's required insurance limits. Said requirements:

☐ will be acquired within 10 working days after notification from Purchasing Department of bid awarded by the Hidalgo County Commissioners= Court;

☐ will acquire additional amounts required to meet the County's requirements within 10 working days after notification from Purchasing Department of bid award by the Hidalgo County Commissioners= Court; currently carry the following:

Automobile Liability: $_____ General Liability: $

☐ have already been met, see attached copy of insurance certificate.

_____ _____.
Authorized Representative Date

Notice to Bidder:
A certificate of insurance for the required insurance limits shall be provided to the Purchasing Department's Contract Managers in order to qualify for award of bid and to execute a contract between your Company and the County

Failure to provide Certificates of Insurance to the Purchasing Department's Contract Managers will cause the bid award to be rescinded and re-awarded to next lowest bidder. Certificates of Insurance will be monitored and verified on a **quarterly basis** to ensure coverage policy is in place. It is the Company=s obligation to maintain the appropriate insurance coverage throughout the term of the contract.

THIS FORM MUST ACCOMPANY BID PACKET

PROJECT REQUIREMENTS ACKNOWLEDGMENT

This is to certify that I, _____, possess all of the APPLICABLE:

1. Licenses: _____.
2. Bonds: _____.
3. Certificates: _____.
4. Permits: _____.
5. Other: _____.

necessary to carry out the required project. Furthermore, I am providing copies of the required documentation so that, if my company is awarded this bid, I may be eligible to enter into a contract with Hidalgo County and proceed to complete the project in a timely manner.

* Any licenses, bonds, certificates, permits, etc. which are required must be presented as part of the bid packet in order to expedite the bid evaluation process. Failure to provide said documentation will result in the disqualification of your bid.

_____ _____.
Authorized Signature Date

_____.
Company

_____.
Address

_____.
City, State, Zip

ACORD

CERTIFICATE OF INSURANCE

DATE (MM/DD/YY)

PRODUCER

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURERS AFFORDING COVERAGE

INSURED

INSURER A:

INSURER B:

INSURER C:

INSURER D:

INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THER TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	**GENERAL LIABILITY** COMMERCIAL GENERAL LIABILITY ☐ CLAIMS MADE ☐ OCCUR ☐ OWNER'S & CONT. PROT ☐ OWNER'S PROTECTIVE LIABILITY GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PROJECT ☐ LOC				EACH OCCURRENCE FIRE DAMAGE (Any one fire) MED (Any one person) PERS & ADV INJURY AL AGGREGATE ODUCTS – COMP/OP AGG	$ $ $ $ $ $
B	**AUTOMOBILE LIABILITY** ☐ ANY AUTO ☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ☐ NON-OWNED AUTOS ☐ _____				COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $
	GARAGE LIABILITY ☐ ANY AUTO				AUTO ONLY-EA ACCIDENT OTHER THAN AUTO ONLY EA ACC AGG	$ $ $
C	**EXCESS LIABILITY** ☐ OCCUR ☐ CLAIMS MADE ☐ DEDUCTIBLE ☐ RETENTION $				EACH OCCURENCE AGGREGATE	$ $
D	**WORKERS COMPENSATION AND EMPLOYER'S LIABILITY**				WC STATU-TORY LIMITS ☐ OTHER E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT	 $ $ $
	OTHER					

DESCRIPTION OF OPERATIONS / LOCATION / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

County of Hidalgo shall be named as additional insured on all Commercial General Liability policies.

CERTIFICATE HOLDER

Hidalgo County
Attn: Purchasing Department
2812 S Highway Bus. 281
Edinburg, Texas 78539

ADDITIONAL INSURED; INSURER LETTER: _____

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BY CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL ***30*** DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

SAMPLE

Title 29 - LABOR

Subtitle A - Office of the Secretary of Labor

PART 3 - CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

Sec.

3.1 Purpose and scope
3.2 Definitions
3.3 Weekly statement with respect to payment of wages
3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.
3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.
3.6 Payroll deductions permissible with the approval of the Secretary of Labor.
3.7 Applications for the approval of the Secretary of Labor
3.8 Action by the Secretary of Labor upon applications.
3.9 Prohibited payroll deductions.
3.10 Methods of payment of wages.
3.11 Regulations part of contract.

AUTHORITY: The provisions of this Part 3 issued under R.S. 16 1, sec. 2, 48 Stat. §48; Reorg. Plan No. 14 of 1950, 64 Stat. 1267, 5 U.S.C. Appendix; 5 U.S.C. 301; 40 U.S.C. 276c.

SOURCE: The provisions of this Part 3 appear at 29 F.R. 97, Jan. 4, 1964, unless otherwise noted.

Section 3.1 Purpose and Scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with Federally assisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

Section 3.2 Definitions.

As used in the regulations in this part:

(a) The terms "building" or "work" generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all @s, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, powerlines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing, and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials,

articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of the regulations in this part.

(b) The terms construction," 4; prosecution," @'completion," or repair" mean all types of work done

on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

(c) The terms "public building" or "public work" include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal agency is a contracting party, regardless of whether title thereof is in a Federal agency.

(d) The term "building or work financed in whole or in part by loans or grants from the Unites States" includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directive or indirectly from funds provided by loans or grants by a Federal agency. The term includes building or work for which the Federal assistance granted is in the form of loan guarantees or insurance.

(e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is "employed" and receiving 44 wages," regardless of any contractual relationship alleged to exist between him and the real employer.

(f) The term "any affiliated person" includes a spouse, child, parent, or other close relative of the contractor or subcontractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary or otherwise, and an officer or agent of such corporation.

(g) The term "Federal agency" means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentality's of the United States and of the District of Columbia, including corporations. all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentality's.

(a) Each weekly statement required under §3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or if there is no representative of a Federal or State agency at the site of the building or work, the statement shall

(29 **FR** 97, **Jan. 4, 1964, as amended at** 33 **FR** 32575, **Nov.** 27, 1973)

Section 3.3 Weekly statement with respect to payment of wages.

(a) As used in this section, the term "employee" shall not apply to persons in classifications higher than that of laborer or mechanic and those who are the immediate supervisors of such employees.

(b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States, shall furnish each week a statement with respect to the wages paid each of its employees engaged on work covered by 29 CFR Parts 3 and 5 during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer of employee of the contractor or subcontractor who supervises the payment of wages, and shall be on form @ 348, "Statement of Compliance," or on an identical form on the back of @ 347, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Sample copies of @ 347 and @ 348 may be obtained from the Government contracting or sponsoring agency, and copies of these forms may be purchased at the Government Printing Office.

(c) The requirements of this section shall not apply to any contract of $2,000 or less.

(d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.
(29 F.R. 95, Jan. 4, 19(A, as ==tied at 33 F.R. 10186, July 17,1968)

Copeland Act Regulations

Section 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.

be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures

prescribed by the United States Department of Labor.

(b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract. The payroll records shall set out accurately and completely the name and address of each taborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.

Section 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

(a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.

(b) Any deduction of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A "bona fide prepayment of wages" is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.

(c) Any deduction of amounts required by court process to be paid to another, unless, the deduction is in favor of the contractor, subcontractor or any affiliated person, or when collusion or collaboration exists.

(d) Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions, or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: Provided, however, That the following standards are met: (1) The deduction is not otherwise prohibited by law; (2) it is either: (i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or (ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; (3) no profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and (4) the deductions shall serve the convenience and interest of the employee. (e) Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.

(f) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.

(g) Any deduction voluntarily authorized by the employee for the making of contributions to

governmental or quasi-governmental agencies, such as the American Red Cross.

(h) Any deduction voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.

(i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: Provided, however, That a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.

0) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of this title. When such a deduction is made the additional records required under §516.27(a) of this title shall be kept.

violative of the Fair Labor Standards Act or prohibited by other law, if the cost on which the deduction is based does not exceed the actual cost to the employer where the equipment is purchased from him and does not include any direct or indirect monetary return to the employer where the equipment is purchased from a

third person, and if the deduction is either (1) voluntarily consented to be the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance; or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees.
(36 F.R. 9770, May 28,1971.)

Section 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any

deduction not permitted under §3.5. The Secretary may grant permission whenever he finds that:

(a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit

directly or indirectly from the deduction either in the form of **a** commission, dividend, or otherwise;

(b) The deduction is not otherwise prohibited by law;

(c) The deduction is either (1) voluntarily consented to by the employee **in** writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in **a** bona **fide** collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and

(d) The deduction serves the convenience and interest of the employee.

Section 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under §3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

(a) The application shall be in writing and shall be addressed to the Secretary of Labor.

(b) The application need not identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions on all current and future contracts of the applicant for a period of I year. A renewal of permission to make such payroll deduction will be granted upon the submission of an application which makes reference to the original application, recites the date of the Secretary of Labor's approval of such deductions, states affirmatively that there is continued compliance with the standards set forth in the provisions of §3.6, and specifies any conditions which have changed in regard to the payroll deductions.
(36 F.IL 9770, May 29, 1971.)

(c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of §3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.

(d) The application shall include a description of the proposed deduction, the purpose to be served there by, and the classes of laborers or mechanics from whose wages the proposed deduction would be made.

(e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant. -

Section 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of §3.6; and shall notify the applicant in writing of his decision.

Section 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which **are** not found to be permissible under §3.6 are prohibited.

Section 3.10 Methods of payment of wages.

The payment of wages shall be by cash, negotiable instruments pkvable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

Section 3.11 Regulations part of contact.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see §5.5(a) of this subtitle.

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Work.

3. *Application for Payment*--The form acceptable to ENGINEER which is to be used by CONTRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

7. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.

8. *Bonds*--Performance and payment bonds and other instruments of security.

9. *Change Order*--A document recommended by ENGINEER which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*--The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.

13. *Contract Price*--The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.

15. *CONTRACTOR*--The individual or entity with whom OWNER has entered into the Agreement.

16. *Cost of the Work*--See paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *ENGINEER*--The individual or entity named as such in the Agreement.

20. *ENGINEER's Consultant*--An individual or entity having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.

21. *Field Order*--A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

22. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

23. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

24. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

25. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

26. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

27. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

28. *Notice of Award*--The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.

29. *Notice to Proceed*--A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform the Work under the Contract Documents.

30. *OWNER*--The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.

31. *Partial Utilization*--Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.

32. *PCBs*--Polychlorinated biphenyls.

33. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

34. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.

35. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

36. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

37. *Resident Project Representative*--The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.

40. *Site*--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.

41. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

42. *Subcontractor*--An individual or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the Site.

43. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

44. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

45. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.

46. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

47. *Unit Price Work*--Work to be paid for on the basis of unit prices.

48. *Work*--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

49. *Work Change Directive*--A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

50. *Written Amendment*--A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

1.02 *Terminology*

A. *Intent of Certain Terms or Adjectives*

1. Whenever in the Contract Documents the terms "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.10 or any other provision of the Contract Documents.

B. *Day*

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

C. *Defective*

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.04 or 14.05).

D. *Furnish, Install, Perform, Provide*

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.

E. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 *Delivery of Bonds*

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

2.02 *Copies of Documents*

A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times com-

mence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

A. *CONTRACTOR's Review of Contract Documents:* Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.

B. *Preliminary Schedules:* Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:

1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and

3. a preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

C. *Evidence of Insurance:* Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.

2.06 *Preconstruction Conference*

A. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to ENGINEER.

1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor.

2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.

3. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.

C. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.

3.02 *Reference Standards*

A. *Standards, Specifications, Codes, Laws, and Regulations*

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

3.05 *Reuse of Documents*

A. CONTRACTOR and any Subcontractor or Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER or ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

B. Upon reasonable written request, OWNER shall furnish CONTRACTOR with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and OWNER's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and

2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, includ-

ing, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or

2. is of such a nature as to require a change in the Contract Documents; or

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *ENGINEER's Review:* After receipt of written notice as required by paragraph 4.03.A, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

C. *Possible Price and Times Adjustments*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.08 and 11.03.

2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or

c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.

3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be

made therefor as provided in paragraph 10.05. However, OWNER, ENGINEER, and ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.

2. If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price of Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

4.05 *Reference Points*

A. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.

B. *Limited Reliance by CONTRACTOR on Technical Data Authorized:* CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:

1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.

D. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or anyone for whom CONTRACTOR is responsible creates a Hazardous Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) notify OWNER and ENGINEER (and promptly thereafter confirm such notice in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a Claim therefor as provided in paragraph 10.05.

F. If after receipt of such written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in paragraph 10.05. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or

Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.F shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.

B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

C. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain. OWNER shall deliver to CONTRACTOR, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by CONTRACTOR or any other additional insured) which OWNER is required to purchase and maintain.

5.04 *CONTRACTOR's Liability Insurance*

A. CONTRACTOR shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed by CONTRACTOR, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to

perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:

1. with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the CONTRACTOR pursuant to paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment (and CONTRACTOR shall furnish OWNER and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to OWNER and any such additional insured of continuation of such insurance at final payment and one year thereafter).

5.05 *OWNER's Liability Insurance*

A. In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.04, OWNER, at OWNER's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property

insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER;

5. allow for partial utilization of the Work by OWNER;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with paragraph 5.07.

D. OWNER shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of CONTRACTOR, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by CONTRACTOR, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policies provided under paragraph 5.06, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the Site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.

5.07 *Waiver of Rights*

A. OWNER and CONTRACTOR intend that all policies purchased in accordance with paragraph 5.06 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and all other

individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. OWNER and CONTRACTOR waive all rights against each other and their respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) under such policies for losses and damages so caused.

None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

B. OWNER waives all rights against CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to OWNER's property or the Work caused by, arising out of, or resulting from fire or other peril whether or not insured by OWNER; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by OWNER during partial utilization pursuant to paragraph 14.05, after Substantial Completion pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.

C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against CONTRACTOR, Subcontractors, ENGINEER, or ENGINEER's Consultants and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with OWNER and made payable to OWNER as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.B. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

B. OWNER as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, OWNER as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, OWNER as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the

certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with

the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences,
and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.02 *Labor; Working Hours*

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the

Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly

run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 as it may be adjusted from time to time as provided below.

1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances described below.

1. *"Or-Equal" Items:* If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;

b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.

c. The procedure for review by ENGINEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.

d. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify

that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.

C. *Engineer's Evaluation:* ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.05.A and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.

D. *Special Guarantee:* OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

E. *ENGINEER's Cost Reimbursement:* ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's Consultants for evaluating each such proposed substitute.

F. *CONTRACTOR's Expense:* CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. CONTRACTOR shall submit an acceptable replacement

for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.

E. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.06, the agreement between the CONTRACTOR and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same.

6.07 *Patent Fees and Royalties*

A. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for

the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

6.09 *Laws and Regulations*

A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in paragraph 10.05.

6.10 *Taxes*

A. CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations,

and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER.

6.13 *Safety and Protection*

A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals will be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.E.

B. CONTRACTOR shall also submit six (6) Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.

C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

D. *Submittal Procedures*

1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and

d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or

Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

E. *ENGINEER's Review*

1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. ENGINEER's review and approval will be only to determine if the items covered by the submittals

will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.3 and ENGINEER has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

F. *Resubmittal Procedures*

1. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

6.18 *Continuing the Work*

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.19 *CONTRACTOR's General Warranty and Guarantee*

A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or

2. normal wear and tear under normal usage.

B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:

1. observations by ENGINEER;

2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;

4. use or occupancy of the Work or any part thereof by OWNER;

5. any acceptance by OWNER or any failure to do so;

6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;

7. any inspection, test, or approval by others; or

8. any correction of defective Work by OWNER.

6.20 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:

1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and

2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.

B. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of CONTRACTOR under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or

2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

ARTICLE 7 - OTHER WORK

7.01 *Related Work at Site*

A. OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and

2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in paragraph 10.05.

B. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of

such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.02 *Replacement of ENGINEER*

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

8.03 *Furnish Data*

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

8.04 *Pay Promptly When Due*

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

8.06 *Insurance*

A. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

8.09 *Limitations on OWNER's Responsibilities*

A. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *OWNER'S Representative*

A. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and will not be changed without written consent of OWNER and ENGINEER.

9.02 *Visits to Site*

A. ENGINEER will make visits to the Site at intervals appropriate to the various stages of construction as ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, ENGINEER, for the benefit of OWNER, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defective Work.

B. ENGINEER's visits and observations are subject to all the limitations on ENGINEER's authority and responsibility set forth in paragraph 9.10, and particularly, but without limitation, during or as a result of ENGINEER's visits or observations of CONTRACTOR's Work ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.10 and in the Supplementary Conditions. If OWNER designates another representative or agent to represent OWNER at the Site who is not ENGINEER's Consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Clarifications and Interpretations*

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Docu-

ments. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification or interpretation, a Claim may be made therefor as provided in paragraph 10.05.

9.05 *Authorized Variations in Work*

A. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefor as provided in paragraph 10.05.

9.06 *Rejecting Defective Work*

A. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.07 *Shop Drawings, Change Orders and Payments*

A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.

B. In connection with ENGINEER's authority as to Change Orders, see Articles 10, 11, and 12.

C. In connection with ENGINEER's authority as to Applications for Payment, see Article 14.

9.08 *Determinations for Unit Price Work*

A. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR the ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.05.

9.09 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.

B. When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

9.10 *Limitations on ENGINEER's Authority and Responsibilities*

A. Neither ENGINEER's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such

authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. ENGINEER will not supervise, direct, control, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

C. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

E. The limitations upon authority and responsibility set forth in this paragraph 9.10 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants. See Article 18.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:

1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change.

10.05 *Claims and Disputes*

A. *Notice:* Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER and the other party to the Contract within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).

B. *ENGINEER's Decision:* ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:

1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or

2. if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.

D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of CONTRACTOR in the perfomance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work

shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

3. Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such bids to OWNER, who will then determine, with the advice of ENGINEER, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph 11.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the perfomance of the Work, and cost, less market value, of such items used but not consumed which remain the property of CONTRACTOR.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.

i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.

j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.01.A.1 or specifically covered by paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.

3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

4. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.

C. *CONTRACTOR's Fee:* When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.02 *Cash Allowances*

A. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:

1. the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

2. CONTRACTOR's costs for unloading and handling on the Site, labor, installation costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

B. Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of

Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.

B. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).

C. *CONTRACTOR's Fee:* The CONTRACTOR's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under paragraphs 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;

b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.

B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.

12.03 *Delays Beyond CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in paragraph 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.04 *Delays Within CONTRACTOR's Control*

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.05 *Delays Beyond OWNER's and CONTRACTOR's Control*

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.06 *Delay Damages*

A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:

1. delays caused by or within the control of CONTRACTOR; or

2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility

owners or other contractors performing other work as contemplated by Article 7.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. OWNER, ENGINEER, ENGINEER's Consultants, other representatives and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish ENGINEER the required certificates of inspection or approval.

D. CONTRACTOR shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER's and ENGINEER's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation.

F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in

question, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

13.05 *OWNER May Stop the Work*

A. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this sentence. If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.09 *OWNER May Correct Defective Work*

A. If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.06.A, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

B. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractors, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.

C. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefor as provided in paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.

D. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. *Applications for Payments*

1. At least 20 days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge CONTRACTOR's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to pro-gress payments will be as stipulated in the Agreement.

B. *Review of Applications*

1. ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application.

2. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's observations on the Site of the executed Work as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Comple tion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.08, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work.

3. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents; or (ii) that there may not be other matters or issues between the parties

that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

4. Neither ENGINEER's review of CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials, or equipment has passed to OWNER free and clear of any Liens.

5. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.02.B.2. ENGINEER may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;

b. the Contract Price has been reduced by Written Amendment or Change Orders;

c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or

d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.

C. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.

D. *Reduction in Payment*

1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:

a. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;

b. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWNER to secure the satisfaction and discharge of such Liens;

c. there are other items entitling OWNER to a set-off against the amount recommended; or

d. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.

2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld. OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.

3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

14.03 *CONTRACTOR's Warranty of Title*

A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

14.04 *Substantial Completion*

A. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Promptly thereafter, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Use by OWNER at OWNER's option of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRACTOR will certify to OWNER and ENGINEER that such part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will promptly make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. *Application for Payment*

1. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

B. *Review of Application and Acceptance*

1. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.09. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

C. *Payment Becomes Due*

1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

14.08 *Final Completion Delayed*

A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not

fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by CONTRACTOR against OWNER other than those previously made in writing which are still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 OWNER May Suspend Work

A. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefor as provided in paragraph 10.05.

15.02 *OWNER May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);

2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;

3. CONTRACTOR's disregard of the authority of ENGINEER; or

4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

C. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.03 *OWNER May Terminate For Convenience*

A. Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. for all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. for reasonable expenses directly attributable to termination.

B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *CONTRACTOR May Stop Work or Terminate*

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days written notice to OWNER and ENGINEER, and provided OWNER or ENGINEER do not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.03. In lieu of terminating the Contract and without prejudice to any other right or remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09 and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to

exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

SUPPLEMENTAL GENERAL CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 Edition) and other provisions of the Contract Documents as indicated below. All provisions, which are not so amended or supplemental, remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings indicated below, which are applicable to both the singular and plural thereof.

SC-6.10 Delete paragraph 6.10 in its entirely and insert the following in its place:

The owner qualifies for the state and local tax exemption in the purchase of certain materials and equipment the Contractor shall utilize the form provided herewith in exhibit "D".

SC-11.01 Delete paragraph 11.01 in its entirety.

SC-11.02 Delete paragraph 11.02 in its entirety.

SC-12.01B.25 & B.3. Delete paragraph 12.01B.2 & B.3 in its entirety.

SC-12.01.C.2 Delete paragraph 12.01.C.2 in its entirety.

SC Article 14.02 C.1 Replace **"Ten days"** with **"Thirty days"** to read as follows: Thirty days after presentation of the Application for Payment to OWNER with ENGINEER'S recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER TO CONTRACTOR.

SC Article 16 Add the following language at the end of the paragraph of Article 16:

There are no dispute resolution methods and procedures set forth in the Supplemental Conditions:

GENERAL PREVAILING WAGE LEGAL REQUIREMENTS

The Contractor's attention is called to Texas Government Code Chapter 2258, which must be complied with attached herewith as Exhibit "C"

HIDALGO COUNTY PRECINCT 4 RECOVERY AND MOTOR POOL IMPROVMENTS

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SECTION 011000

SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Phased construction.
4. Work by Owner.
5. Work under separate contracts.
6. Future work.
7. Purchase contracts.
8. Owner-furnished products.
9. Contractor-furnished, Owner-installed products.
10. Access to site.
11. Coordination with occupants.
12. Work restrictions.
13. Specification and drawing conventions.
14. Miscellaneous provisions.

B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

A. Project Identification: Hidalgo County Precinct 4, Recovery and Motor Pool Improvements.

1. Project Location: 1051 North Doolittle Road, Edinburg, Texas.

B. Owner: Hidalgo County Commissioner’s Court.

1. Owner's Representative: Maria Lucio. (956) 292-7000 ext. 4026.

C. Engineer: Halff Associates, Inc.

D. Engineer''s Consultants: The Engineer has retained the following design professionals who have prepared designated portions of the Contract Documents:

1. Structural Engineer: Chanin Engineering.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

1. Interior and Exterior improvements to existing facility.

B. Type of Contract:

1. Project will be constructed under a single prime contract.

1.5 PHASED CONSTRUCTION

A. The Work shall be conducted in one phase.

1.6 WORK BY OWNER

A. General: Cooperate fully with Owner so work may be carried out smoothly, without interfering with or delaying work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.

1.7 WORK UNDER SEPARATE CONTRACTS

A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract or other contracts. Coordinate the Work of this Contract with work performed under separate contracts.

B. Concurrent Work: Owner will award separate contract(s) for the following construction operations at Project site. Those operations will be conducted simultaneously with work under this Contract.

1. Sanitary Collections Facility: Site improvements east of building including paving, metal building, and canopy work.

1.8 OWNER-FURNISHED PRODUCTS

1. None.

1.9 CONTRACTOR-FURNISHED, OWNER-INSTALLED PRODUCTS

1. None.

1.10 ACCESS TO SITE

A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.

B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. Limits: Confine construction operations to areas of work.
2. Driveways, Walkways and Entrances: Keep driveways loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.

a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

1.11 COORDINATION WITH OCCUPANTS

A. Full Owner Occupancy: Owner will occupy site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

1.12 WORK RESTRICTIONS

A. Work Restrictions, General: Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.

B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:

1. Notify Engineer’s not less than **two** days in advance of proposed utility interruptions.
2. Obtain Enginer’s written permission before proceeding with utility interruptions.

C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.

1. Notify Engineer not less than two days in advance of proposed disruptive operations.
2. Obtain Engineer’s written permission before proceeding with disruptive operations.

D. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet (8 m) of entrances, operable windows, or outdoor-air intakes.

E. Controlled Substances: Use of tobacco products and other controlled substances within the existing building is not permitted.

F. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.

G. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.

1. Maintain list of approved screened personnel with Owner's representative.

1.13 SPECIFICATION AND DRAWING CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.

C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.
3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

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SECTION 012100

ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements governing allowances.

1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

B. Types of allowances include the following:
1. Contingency allowances.

C. Related Requirements:
1. Section 014000 "Quality Requirements" for procedures governing the use of allowances for testing and inspecting.

1.3 ACTION SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

1.4 COORDINATION

A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.5 CONTINGENCY ALLOWANCES

A. Use the contingency allowance only as directed by Engineer for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.

B. Contractor's related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs

include delivery, installation, insurance, equipment rental, and similar costs. Contractor’s overhead and profit are part of Contract Sum.

C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and exclude overhead and profit margins.

D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 1: Contingency Allowance: Include a contingency allowance of $10,000.00 for use according to Owner's written instructions.

END OF SECTION 012100

SECTION 012300

ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.

C. Execute accepted alternates under the same conditions as other work of the Contract.

D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. One: Exterior Painting.

1. Base Bid: Exterior painting only in areas of block in-fill to match adjacent color.
2. Alternate: Paint entire building exterior for those areas currently painted.

END OF SECTION 012300

SECTION 012500

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

A. Engineer will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.

1.3 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

1. Proposal Requests issued by Engineer are not instructions either to stop work in progress or to execute the proposed change.
2. Within time specified in Proposal Request or 10 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
c. Include costs of labor and supervision directly attributable to the change.
d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
e. Quotation Form: Use forms acceptable to Engineer.

B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Engineer.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Division 1 Section "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
7. Proposal Request Form: Use form acceptable to Engineer.

1.4 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Engineer will issue a Change Order for signatures of Owner and Contractor.

1.5 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Engineer may issue a Construction Change Directive. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order or Allowance Expenditure.

1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

SECTION 012900

PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

B. Related Sections:
1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
2. Division 01 Section "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.
3. Division 01 Section "Submittal Procedures" for administrative requirements governing the preparation and submittal of the submittal schedule.

1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.

1. Correlate line items in the schedule of values with other required administrative forms and schedules, including the following:

a. Application for Payment forms with continuation sheets.
b. Submittal schedule.
c. Items required to be indicated as separate activities in Contractor's construction schedule.

2. Submit the schedule of values to Engineer at earliest possible date but no later than fourteen days before the date scheduled for submittal of initial Applications for Payment.

B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the schedule of values:

    a. Project name and location.
    b. Name of Engineer.
    c. Engineer's project number.
    d. Contractor's name and address.
    e. Date of submittal.

2. Arrange the schedule of values in tabular form with separate columns to indicate the following for each item listed:

    a. Related Specification Section or Division.
    b. Description of the Work.
    c. Name of subcontractor.
    d. Name of manufacturer or fabricator.
    e. Name of supplier.
    f. Change Orders (numbers) that affect value.
    g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.

        1) Labor.
        2) Materials.
        3) Equipment.

3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of Contract Sum.

    a. Include separate line items under Contractor and principal subcontracts for project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.

4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.

    a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.

6. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.

7. Purchase Contracts: Provide a separate line item in the schedule of values for each purchase contract. Show line-item value of purchase contract. Indicate owner payments or deposits, if any, and balance to be paid by Contractor.
8. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

    a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.

9. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by Engineer and paid for by Owner.

1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Payment Application Times: Progress payments shall be submitted to Engineer by the fifth of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.

C. Application for Payment Forms: Use included form for Applications for Payment. Contractor shall provide schedule of values using from acceptable to Owner.

D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Engineer will return incomplete applications without action.

1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.

E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.

1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.

2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
3. Provide summary documentation for stored materials indicating the following:

    a. Materials previously stored and included in previous Applications for Payment.
    b. Work completed for this Application utilizing previously stored materials.
    c. Additional materials stored with this Application.
    d. Total materials remaining stored, including materials with this Application.

F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Engineer by a method ensuring receipt. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.

1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
2. When an application shows completion of an item, submit conditional final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.

H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of values.
3. Contractor's construction schedule (preliminary if not final).
4. Products list (preliminary if not final).
5. Submittal schedule (preliminary if not final).
6. List of Contractor's staff assignments.
7. List of Contractor's principal consultants.
8. Copies of building permits.
9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
10. Initial progress report.
11. Report of preconstruction conference.
12. Certificates of insurance and insurance policies.
13. Performance and payment bonds.
14. Data needed to acquire Owner's insurance.

I. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

J. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.
2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
4. "Contractor's Affidavit of Payment of Debts and Claims."
5. "Contractor's Affidavit of Release of Liens."
6. "Consent of Surety to Final Payment."
7. Evidence that claims have been settled.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

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SECTION 013100

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. Coordination Drawings.
2. Administrative and supervisory personnel.
3. Project meetings.
4. Requests for Interpretation (RFIs).

B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.

C. Related Sections include the following:
1. Division 01 Section "Construction Progress Documentation" for preparing and submitting Contractor's Construction Schedule.
2. Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
3. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITIONS

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.4 COORDINATION

A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.
4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Contractor's Construction Schedule.
2. Preparation of the Schedule of Values.
3. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Progress meetings.
6. Preinstallation conferences.
7. Project closeout activities.
8. Startup and adjustment of systems.
9. Project closeout activities.

D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.

1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

1.5 SUBMITTALS

A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.

1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:

a. Indicate functional and spatial relationships of components of Engineerural, structural, civil, mechanical, and electrical systems.
b. Indicate required installation sequences.
c. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Engineer for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

2. Sheet Size: At least 8-1/2 by 11 inches but no larger than 24 by 36 inches.
3. Number of Copies: Submit four opaque copies of each submittal. Engineer will return three copies.

4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.

B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including mobile and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.6 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

1. Include special personnel required for coordination of operations with other contractors.

1.7 PROJECT MEETINGS

A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Engineer of scheduled meeting dates and times.
2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Engineer, within [three] days of the meeting.

B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Engineer, but no later than 15 days after

execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.

1. Attendees: Authorized representatives of Owner, Engineer, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Discuss items of significance that could affect progress, including the following:

    a. Tentative construction schedule.
    b. Phasing.
    c. Critical work sequencing and long-lead items.
    d. Designation of key personnel and their duties.
    e. Procedures for processing field decisions and Change Orders.
    f. Procedures for RFIs.
    g. Procedures for testing and inspecting.
    h. Procedures for processing Applications for Payment.
    i. Distribution of the Contract Documents.
    j. Submittal procedures.
    k. Preparation of Record Documents.
    l. Use of the premises and existing building.
    m. Work restrictions.
    n. Owner's occupancy requirements.
    o. Responsibility for temporary facilities and controls.
    p. Construction waste management and recycling.
    q. Parking availability.
    r. Office, work, and storage areas.
    s. Equipment deliveries and priorities.
    t. First aid.
    u. Security.
    v. Progress cleaning.
    w. Working hours.

3. Minutes: Record and distribute meeting minutes.

C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Engineer of scheduled meeting dates.
2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

    a. The Contract Documents.
    b. Options.
    c. Related RFIs.
    d. Related Change Orders.

e. Purchases.
f. Deliveries.
g. Submittals.
h. Review of mockups.
i. Possible conflicts.
j. Compatibility problems.
k. Time schedules.
l. Weather limitations.
m. Manufacturer's written recommendations.
n. Warranty requirements.
o. Compatibility of materials.
p. Acceptability of substrates.
q. Temporary facilities and controls.
r. Space and access limitations.
s. Regulations of authorities having jurisdiction.
t. Testing and inspecting requirements.
u. Installation procedures.
v. Coordination with other work.
w. Required performance results.
x. Protection of adjacent work.
y. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

D. Progress Meetings: Conduct progress meetings at biweekly intervals. Coordinate dates of meetings with preparation of payment requests.

1. Attendees: In addition to representatives of Owner, and Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

1) Review schedule for next period.

b. Review present and future needs of each entity present, including the following:

1) Interface requirements.
2) Sequence of operations.
3) Status of submittals.
4) Deliveries.
5) Off-site fabrication.
6) Access.
7) Site utilization.
8) Temporary facilities and controls.
9) Work hours.
10) Hazards and risks.
11) Progress cleaning.
12) Quality and work standards.
13) Status of correction of deficient items.
14) Field observations.
15) RFIs.
16) Status of proposal requests.
17) Pending changes.
18) Status of Change Orders.
19) Pending claims and disputes.
20) Documentation of information for payment requests.

3. Minutes: Record the meeting minutes.
4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.

a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

E. Coordination Meetings: Conduct Project coordination meetings at regular intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.

1. Attendees: In addition to representatives of Owner, and Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions

are required to ensure that current and subsequent activities will be completed within the Contract Time.

b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.

c. Review present and future needs of each contractor present, including the following:

1) Interface requirements.
2) Sequence of operations.
3) Status of submittals.
4) Deliveries.
5) Off-site fabrication.
6) Access.
7) Site utilization.
8) Temporary facilities and controls.
9) Work hours.
10) Hazards and risks.
11) Progress cleaning.
12) Quality and work standards.
13) Change Orders.

3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

1.8 REQUESTS FOR INTERPRETATION (RFIs)

A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.

1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:

1. Project name.
2. Date.
3. Name of Contractor.
4. Name of Engineer.
5. RFI number, numbered sequentially.
6. Specification Section number and title and related paragraphs, as appropriate.
7. Drawing number and detail references, as appropriate.
8. Field dimensions and conditions, as appropriate.
9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.

10. Contractor's signature.
11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.

    a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.

C. Hard-Copy RFIs.

1. Identify each page of attachments with the RFI number and sequential page number.

D. Software-Generated RFIs: Software-generated form with substantially the same content as indicated above.

1. Attachments shall be electronic files in Adobe Acrobat PDF format.

E. Engineer's Action: Engineer will review each RFI, determine action required, and return it. Allow seven working days for Engineer's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.

1. The following RFIs will be returned without action:

    a. Requests for approval of submittals.
    b. Requests for approval of substitutions.
    c. Requests for coordination information already indicated in the Contract Documents.
    d. Requests for adjustments in the Contract Time or the Contract Sum.
    e. Requests for interpretation of Engineer's actions on submittals.
    f. Incomplete RFIs or RFIs with numerous errors.

2. Engineer's action may include a request for additional information, in which case Engineer's time for response will start again.
3. Engineer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."

    a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Engineer in writing within 10 days of receipt of the RFI response.

F. On receipt of Engineer's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Engineer within seven days if Contractor disagrees with response.

G. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log bi-weekly. Include the following:

1. Project name.
2. Name and address of Contractor.

3. Name and address of Engineer.
4. RFI number including RFIs that were dropped and not submitted.
5. RFI description.
6. Date the RFI was submitted.
7. Date Engineer's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

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SECTION 013200

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

1. Preliminary Construction Schedule.
2. Contractor's Construction Schedule.
3. Submittals Schedule.
4. Daily construction reports.
5. Material location reports.
6. Field condition reports.
7. Special reports.

B. Related Sections include the following:
1. Division 01 Section "Payment Procedures" for submitting the Schedule of Values.
2. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes.
3. Division 01 Section "Submittal Procedures" for submitting schedules and reports.
4. Division 01 Section "Quality Requirements" for submitting a schedule of tests and inspections.

1.3 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.

1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
2. Predecessor Activity: An activity that precedes another activity in the network.
3. Successor Activity: An activity that follows another activity in the network.

B. Cost Loading: The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum, unless otherwise approved by Engineer.

C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

D. Event: The starting or ending point of an activity.

E. Float: The measure of leeway in starting and completing an activity.

1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

F. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.

G. Major Area: A story of construction, a separate building, or a similar significant construction element.

H. Milestone: A key or critical point in time for reference or measurement.

I. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.4 SUBMITTALS

A. Qualification Data: For scheduling consultant.

B. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:

1. Scheduled date for first submittal.
2. Specification Section number and title.
3. Submittal category (action or informational).
4. Name of subcontractor.
5. Description of the Work covered.
6. Scheduled date for Engineer's final release or approval.

C. Preliminary Construction Schedule: Submit two opaque copies.

1. Approval of cost-loaded preliminary construction schedule will not constitute approval of Schedule of Values for cost-loaded activities.

D. Preliminary Network Diagram: two opaque copies, large enough to show entire network for entire construction period. Show logic ties for activities.

E. Contractor's Construction Schedule: Submit two opaque copies of initial schedule, large enough to show entire schedule for entire construction period.

1. Submit an electronic copy of schedule, using software indicated, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.

F. Daily Construction Reports: Submit two copies at monthly intervals.

G. Material Location Reports: Submit two copies at monthly intervals.

H. Field Condition Reports: Submit two copies at time of discovery of differing conditions.

I. Special Reports: Submit two copies at time of unusual event.

1.5 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.

1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
2. Initial Submittal: Submit concurrently with preliminary bar-chart schedule. Include submittals required during the first 60 days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.

a. At Contractor's option, show submittals on the Preliminary Construction Schedule, instead of tabulating them separately.

3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

A. Procedures: Comply with procedures contained in AGC's "Construction Planning & Scheduling."

B. Time Frame: Extend schedule from date established for commencement of the Work to date of Substantial Completion.

1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:

1. Activity Duration: Define activities so no activity is longer than 21 days, unless specifically allowed by Engineer.
2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.

3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
4. Startup and Testing Time: Include not less than 14 days for startup and testing.
5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Engineer's administrative procedures necessary for certification of Substantial Completion.

D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.

1. Phasing: Arrange list of activities on schedule by phase.
2. Work under More Than One Contract: Include a separate activity for each contract.
3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
4. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
5. Work Restrictions: Show the effect of the following items on the schedule:

a. Coordination with existing construction.
b. Limitations of continued occupancies.

c. Uninterruptible services.
d. Partial occupancy before Substantial Completion.
e. Use of premises restrictions.
f. Provisions for future construction.
g. Seasonal variations.
h. Environmental control.

6. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:

a. Subcontract awards.
b. Submittals.
c. Purchases.
d. Mockups.
e. Fabrication.
f. Sample testing.
g. Deliveries.
h. Installation.
i. Tests and inspections.
j. Adjusting.
k. Curing.
l. Startup and placement into final use and operation.

7. Area Separations: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:

a. Structural completion.
b. Permanent space enclosure.
c. Completion of mechanical installation.
d. Completion of electrical installation.
e. Substantial Completion.

E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.

1. <Insert additional milestones not indicated elsewhere.>
2. Cost Correlation: At the head of schedule, provide a cost correlation line, indicating planned

F. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

2.3 PRELIMINARY CONSTRUCTION SCHEDULE

A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule within seven days of date established for commencement of the Work.

B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first 60 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for commencement of the Work. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.

B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

1. For construction activities that require 3 months or longer to complete, indicate an estimated completion percentage in 10 percent increments within time bar.

2.5 REPORTS

A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:

1. List of subcontractors at Project site.
2. List of separate contractors at Project site.
3. Approximate count of personnel at Project site.
4. Equipment at Project site.
5. Material deliveries.
6. High and low temperatures and general weather conditions.
7. Accidents.
8. Meetings and significant decisions.
9. Unusual events (refer to special reports).
10. Stoppages, delays, shortages, and losses.
11. Meter readings and similar recordings.
12. Emergency procedures.
13. Orders and requests of authorities having jurisdiction.
14. Change Orders received and implemented.
15. Construction Change Directives received and implemented.
16. Services connected and disconnected.
17. Equipment or system tests and startups.
18. Partial Completions and occupancies.
19. Substantial Completions authorized.

B. Material Location Reports: At weekly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.

C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.6 SPECIAL REPORTS

A. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.

B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
3. As the Work progresses, indicate Actual Completion percentage for each activity.

B. Distribution: Distribute copies of approved schedule to Engineer, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

1. Post copies in Project meeting rooms and temporary field offices.
2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

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SECTION 013000

SUBMITTALS

PART 1 - GENERAL

1.1 WORK INCLUDED

A. Submit documentation as required by the Contract Documents and as reasonably requested by the Owner and Engineer to:
   1. Record the products incorporated into the Project for the Owner.
   2. Provide information for operation and maintenance of the Project.
   3. Provide information for the administration of the Contract.
   4. Allow the Engineer to advise the Owner if products proposed for the project by the Contractor conform, in general, with the design concepts of the Contract Documents.

B. Contractor's responsibility for full compliance with the Contract Documents is not relieved by the Engineer's review of submittals. Contract modifications may only be approved by Change Order or Field Order.

1.2 CONTRACTOR'S RESPONSIBILITIES

A. Review all submittals prior to submission.

B. Determine and verify:
   1. Field measurements.
   2. Field construction requirements.
   3. Location of all existing structures, utilities and equipment related to the submittals.
   4. Submittals are complete for their intended purpose.
   5. Conflicts between the submittals related to the various subcontractors and suppliers have been resolved.
   6. Quantities and dimensions shown on the submittals.

C. Submit information per the procedures described in this section and the detailed specifications.

D. Furnish the following submittals:
   1. As specified in the attached Submittal Schedule.
   2. Schedules, data and other documentation as described in detail in this section or referenced in the General Conditions.
   3. Submittals as required in the detailed specifications.
   4. Submittals not required will be returned without Engineer's review.

E. Submit a schedule indicating the date submittals will be sent to the Engineer and proposed dates that the product will be incorporated into the project. Make submittals promptly in accordance with the schedule so as to cause no delay in the project.
   1. Submittals shall be sent to Engineer allowing a reasonable time for delivery, review and marking submittals. Time for review is to include time for resubmission if necessary and to allow adequate time for the ordering, fabrication, and delivery of the product.

2. Schedule submittal to provide all information for interrelated work at one time. No review will be performed on submittals requiring coordination with other submittals. Engineer will return submittals for resubmission as a complete package.

F. Installation of any products prior to the approval of shop drawings is done at the Contractor's risk. Products not meeting the requirements of Contract Documents are defective and may be rejected at the Owner's option.

G. Payment will not be made for products for which submittals are required until the submittals have been received. Payment will not be made for products for which shop drawings or samples are required until these are approved by the Engineer.

1.3 QUALITY ASSURANCE

A. Submit legible, accurate, complete documents presented in a clear, easily understood manner. Submittals not meeting these criteria will be returned without review.

B. Demonstrate that the proposed products are in full and complete compliance with the design criteria and requirements of the Contract Documents including drawings and specifications as modified by Addenda, Field Orders, and Change Orders.

C. Furnish and install products that fully comply with the information included in the submittal.

D. Review and approve submittals prior to submitting them to the Engineer for review. Submittals will not be accepted from subcontractors, suppliers, or anyone other than the Contractor.

1.4 SUBMITTAL PROCEDURES

A. Deliver submittals to the Engineer.

B. Assign a number to the documents originated to allow tracking of the submittal during the review process.
1. Assign a number consisting of a prefix, a sequence number, and a letter suffix. Prefixes shall be as follows:

Prefix	Description	Originator
CO	Change Order	Contractor
CMR	Contractor’s Modification Request	Contractor
CTR	Certified Test Report	Contractor
EIR	Equipment Installation Report	Contractor
FO	Field Order	Engineer
NBC	Notification by Contractor	Contractor
O&M	Operation & Maintenance Manuals	Contractor

PCM	Proposed Contract Modification	Engineer
PR	Payment Request	Contractor
PP	Project Photographs	Contractor
RD	Record Data	Contractor
RFI	Request for Information	Contractor
SAM	Sample	Contractor
SD	Shop Drawing	Contractor
SCH	Schedule of Progress	Contractor

2. Issue sequence numbers in chronological order for each type of submittal.
3. Issue numbers for re-submittals that have the same number as the original submittal followed by an alphabetical suffix indicating the number of times the same submittal has been sent to the Engineer for processing. For example: SD-025-A represents a shop drawing that is the twenty-fifth submittal of this type and is the second time this submittal has been sent for review.
4. Clearly note the submittal number on each page or sheet of the submittal.
5. Correct assignment of numbers is essential since different submittal types are processed in different ways.

D. Submit documents with uniform markings and page sizes.
   1. Paper size shall allow for ease of reproduction.
      a. Submit documents on 8-1/2" X 11" paper where practical.
      b. Use 11" X 17" paper for larger drawings and schematics.
      c. Use full size blueline sheets for fabrications and layout drawings. Reproducible drawings may be submitted in lieu of bluelines.
   2. Mark submittals to:
      a. Indicate Contractor's corrections in green.
      b. Highlight items pertinent to the products being furnished in yellow and delete items that are not when the Manufacturer's standard drawings or information sheets are provided.
      c. Cloud items and highlight in yellow where selections by the Engineer or Owner are required.
      d. Mark dimensions with the prefix FD to indicate field verified dimensions on the drawings.
      e. Provide a blank space 8" x 3" for Contractor's and Engineer's stamp.

E. Mark submittals to reference the drawing number and/or section of the specifications, detail designation, schedule or location that corresponds with the data submitted. Other identification may also be required, such as layout drawings or schedules to allow the reviewer to determine where a particular product is to be used.

F. The number of copies of each submittal to be sent by the Contractor and the number of copies of each submittal to be returned are:

Prefix	Description	No. of Copies Sent	No. of Copies Returned
CO	Change Order	2	1
CTR	Certified Test Report	2	0
EIR	Equipment Installation Report	2	0
NBC	Notification by Contractor	2	1
O&M	Preliminary O&M Manuals	2	1
O&M	Final O&M Manuals	4	0
PR	Payment Request	2	1
PP	Project Photographs (including videotapes)	2	0
RD	Record Data	2	0
RFI	Request for Information	2	1
SAM	Sample	2	0
SD	Shop Drawings	5	2
SCH	Schedule of Progress	2	0

1.5 REVIEW PROCEDURES

A. Priority submittals will be reviewed before other submittals for this project which have been received but not reviewed.

1.6 REQUIREMENTS

A. Certifications, Warranties and Service Agreements include documents as specified in the detailed specifications, as shown in the submittal schedule or as follows:
   1. Certified Test Reports (CTR) - A report prepared by an approved testing agency giving results of tests performed on products to indicate their compliance with the specifications. (Refer to Section 01400, QUALITY CONTROL.)
   2. Certification of Local Field Service (CLS) - A certified letter stating that field service is available from a factory or supplier approved service organization located within a 300 mile radius of the project site. List names, addresses, and telephone numbers of approved service organizations on or attach to the certificate.
   3. Extended Warranty (EW) - A guarantee of performance for the product or system beyond the normal one (1) year warranty described in the General Conditions. Issue the warranty certificate in the name of the Project Owner.
   4. Extended Service Agreement (ESA) - A contract to provide maintenance beyond that required to fulfill requirements for warranty repairs, or to perform routine maintenance for a definite period of time beyond the warranty period. Issue the service agreement in the name of the Project Owner.

5. Certification of Adequacy of Design (CAD) - A certified letter from the manufacturer of the equipment stating that they have designed the equipment to be structurally stable and to withstand all imposed loads without deformation, failure, or adverse effects to the performance and operational requirements of the unit. The letter shall state that mechanical and electrical equipment is adequately sized to be fully operational for the conditions specified or normally encountered by the product's intended use.
6. Certification of Applicator/Subcontractor (CSQ) - A certified letter stating that the Applicator or Subcontractor proposed to perform a specified function is duly designated as factory authorized and trained for the application of the specified product.

B. Submit record data to provide information to allow the Owner to adequately identify the products incorporated into the project and allow replacement or repair at some future date.
   1. Provide record data for all products. Record data is not required for items for which shop drawings and/or operations and maintenance manuals are required.
   2. Provide information only on the specified products. Submit a Contractor's Modification Request for approval of deviations or substitutions and obtain approval by Field Order or Change Order prior to submitting Record Data.
   3. Record data will be received by the Engineer, logged, and provided to Owner for his/her record.
      a. Record data may be reviewed to see that the information provided is adequate for the purpose intended. Inadequate drawings may be returned as unacceptable.
      b. Record data is not reviewed for compliance with the Contract Documents. Comments may be returned if deviations from the Contract Documents are noted during the cursory review performed to see that the information is adequate.

1.7 REQUESTS FOR DEVIATION

A. Submit requests for deviation from the Contract Documents for any product that does not fully comply with the specifications.

B. Submit request by Contractor's Modification Request (CMR). Identify the deviations and the reason the change is requested.

C. Deviations that result in a reduction in cost shall also include the amount of the reduction to the Owner.

D. A Change Order or Field Order will be issued by the Engineer for deviations approved by the Owner. Deviations from the Contract Documents may only be approved by Change Order or Field Order.

1.8 SUBMITTALS FOR SUBSTITUTIONS

A. Substitutions are defined as any product that the Contractor proposes to provide for the Project in lieu of the specified product.

B. If the Contractor desires to submit a manufacturer or product which is not specified, the Contractor must submit the following for consideration of approval of the substitution:
   1. Contractor's Modification Request for deviation from the Contract Documents per Paragraph 1.7.
   2. Prove that the product is acceptable as a substitute. It is not the Engineer's responsibility to prove the product is not acceptable as a substitute.

a. Indicate on a point by point basis for each specified feature that the product is acceptable to meet the intent of the Contract Documents requirements.
b. Make a direct comparison with the specified manufacturer's published data sheets and available information. Provide this printed material with the submittal.
c. The decision of the Engineer regarding the acceptability of the proposed substituted product is final.

3. Provide a typewritten certification that, in making the substitution request, the Contractor:
   a. Has determined that the substituted product will perform in substantially the same manner and result in the same ability to meet the specified performance as the specified product.
   b. Will provide the same warranties and/or bonds for the substituted product as specified or as would be provided by the Manufacturer of the specified product.
   c. Will assume all responsibility to coordinate any modifications that may be necessary to incorporate the substituted product into the project and will waive all claims for additional work which may be necessary to incorporate the substituted product into the project which may subsequently become apparent.
   d. Will maintain the same time schedule as for the specified product.

C. Engineering cost for review of substitutions will be paid by the Contractor.

1. Cost for additional review time will be billed to the Owner by the Engineer for the actual hours required for the review and marking of shop drawings by Engineer and in accordance with the following rates:

Principal-in-Charge	**$ 190.00**
Project Manager	**$ 130.00**
Design Engineer	**$ 85.00**
Engineering Technician	**$ 65.00**
Clerk	**$ 55.00**

2. Cost for the additional review shall be paid to the Owner by the Contractor on a monthly basis.

1.9 GUARANTEES

A. Warranties and guarantees shall be submitted as required by the Contract Documents and submitted with the shop drawings or record data.

1.10 RESUBMISSION REQUIREMENTS

A. Make all corrections or changes in the submittals required by the Engineer and resubmit until approved.

B. Need for more than one resubmission or any other delay of obtaining Engineer's review of submittals, will not entitle the Contractor to an extension of Contract Time. All costs associated with such delays shall be at the Contractor's expense.

1.11 ENGINEER'S DUTIES

A. Review the submittals and return with reasonable promptness.

B. Affix stamp, indicate approval, rejection, and the need for re-submittal.

C. Distribute documents.

END OF SECTION 013300

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SECTION 0013300

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. Related Sections include the following:

1. Division 01 Section "Payment Procedures" for submitting Applications for Payment and the Schedule of Values.
2. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes and for submitting Coordination Drawings.
3. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule.
4. Division 01 Section "Quality Requirements" for submitting test and inspection reports.
5. Division 01 Section "Closeout Procedures" for submitting warranties.
6. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
7. Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
8. Division 01 Section "Demonstration and Training" for submitting videotapes of demonstration of equipment and training of Owner's personnel.
9. Divisions 02 through 16 Sections for specific requirements for submittals in those Sections.

1.3 DEFINITIONS

A. Action Submittals: Written and graphic information that requires Engineer's responsive action.

B. Informational Submittals: Written information that does not require Engineer's responsive action. Submittals may be rejected for not complying with requirements.

1.4 SUBMITTAL PROCEDURES

A. General: Electronic copies of CAD Drawings of the Contract Drawings will be provided by Engineer for Contractor's use in preparing submittals.

B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

    a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

C. Submittals Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.

D. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
3. Resubmittal Review: Allow 15 days for review of each resubmittal.

4. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Engineer and to Engineer's consultants, allow 15 days for review of each submittal. Submittal will be returned to Engineer before being returned to Contractor.

E. Identification: Place a permanent label or title block on each submittal for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Include the following information on label for processing and recording action taken:

    a. Project name.
    b. Date.
    c. Name and address of Engineer.
    d. Name and address of Contractor.
    e. Name and address of subcontractor.
    f. Name and address of supplier.
    g. Name of manufacturer.

h. Submittal number or other unique identifier, including revision identifier.

1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 06100.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06100.01.A).

i. Number and title of appropriate Specification Section.
j. Drawing number and detail references, as appropriate.
k. Location(s) where product is to be installed, as appropriate.
l. Other necessary identification.

F. Deviations: Highlight, or otherwise specifically identify deviations from the Contract Documents on submittals.

G. Additional Copies: Unless additional copies are required for final submittal, and unless Engineer observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Engineer.
2. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.

H. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Engineer will return submittals, without review, received from sources other than Contractor.
1. Transmittal Form: Provide locations on form for the following information:

a. Project name.
b. Date.
c. Destination (To:).
d. Source (From:).
e. Names of subcontractor, manufacturer, and supplier.
f. Category and type of submittal.
g. Submittal purpose and description.
h. Specification Section number and title.
i. Drawing number and detail references, as appropriate.
j. Transmittal number.
k. Submittal and transmittal distribution record.
l. Remarks.
m. Signature of transmitter.

2. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Engineer on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same label information as related submittal.

I. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.

1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.

J. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

K. Use for Construction: Use only final submittals.

1.5 CONTRACTOR'S USE OF ENGINEER'S CAD FILES

A. General: At Contractor's written request, copies of Engineer's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:

1. Signed agreement to Consultant’s drawing release form.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

A. General: Prepare and submit Action Submittals required by individual Specification Sections.

1. Submit electronic submittals directly to extranet specifically established for Project.

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:

    a. Manufacturer's written recommendations.
    b. Manufacturer's product specifications.
    c. Manufacturer's installation instructions.
    d. Standard color charts.
    e. Manufacturer's catalog cuts.
    f. Wiring diagrams showing factory-installed wiring.
    g. Printed performance curves.
    h. Operational range diagrams.
    i. Mill reports.
    j. Standard product operation and maintenance manuals.
    k. Compliance with specified referenced standards.
    l. Testing by recognized testing agency.
    m. Application of testing agency labels and seals.
    n. Notation of coordination requirements.

4. Submit Product Data before or concurrent with Samples.
5. Number of Copies: Submit four copies of Product Data, unless otherwise indicated. Engineer will return minimum two copies. Mark up and retain one returned copy as a Project Record Document.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

    a. Dimensions.
    b. Identification of products.
    c. Fabrication and installation drawings.
    d. Roughing-in and setting diagrams.
    e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
    f. Shopwork manufacturing instructions.
    g. Templates and patterns.
    h. Schedules.
    i. Design calculations.
    j. Compliance with specified standards.
    k. Notation of coordination requirements.
    l. Notation of dimensions established by field measurement.
    m. Relationship to adjoining construction clearly indicated.
    n. Seal and signature of professional engineer if specified.
    o. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.

2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 24 by 36 inches.
3. Number of Copies: Submit four opaque (bond) copies of each submittal. Engineer will return one copy.

D. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

1. Type of product. Include unique identifier for each product.
2. Number and name of room or space.
3. Location within room or space.
4. Number of Copies: Submit three copies of product schedule or list, unless otherwise indicated. Engineer will return two copies.

    a. Mark up and retain one returned copy as a Project Record Document.

E. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation" for Construction Manager's action.

F. Submittals Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

G. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."

H. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."

I. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:

1. Name, address, and telephone number of entity performing subcontract or supplying products.
2. Number and title of related Specification Section(s) covered by subcontract.
3. Drawing number and detail references, as appropriate, covered by subcontract.
4. Number of Copies: Submit three copies of subcontractor list, unless otherwise indicated. Engineer will return two copies.

    a. Mark up and retain one returned copy as a Project Record Document.

2.2 INFORMATIONAL SUBMITTALS

A. General: Prepare and submit Informational Submittals required by other Specification Sections.

1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Engineer will not return copies.
2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
3. Test and Inspection Reports: Comply with requirements specified in Division 01 Section "Quality Requirements."

B. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."

C. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of Engineers and owners, and other information specified.

E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.

F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:

1. Name of evaluation organization.
2. Date of evaluation.
3. Time period when report is in effect.
4. Product and manufacturers' names.
5. Description of product.
6. Test procedures and results.
7. Limitations of use.

M. Schedule of Tests and Inspections: Comply with requirements specified in Division 01 Section "Quality Requirements."

N. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

O. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

P. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during

installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

Q. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."

R. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

S. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:

1. Preparation of substrates.
2. Required substrate tolerances.
3. Sequence of installation or erection.
4. Required installation tolerances.
5. Required adjustments.
6. Recommendations for cleaning and protection.

T. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:

1. Name, address, and telephone number of factory-authorized service representative making report.
2. Statement on condition of substrates and their acceptability for installation of product.
3. Statement that products at Project site comply with requirements.
4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
6. Statement whether conditions, products, and installation will affect warranty.
7. Other required items indicated in individual Specification Sections.

U. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.

V. Material Safety Data Sheets (MSDSs): Submit information directly to Owner; do not submit to Engineer.

1. Engineer will not review submittals that include MSDSs and will return the entire submittal for resubmittal.

2.3 DELEGATED DESIGN

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.

B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.

B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ENGINEER'S ACTION

A. General: Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action.

B. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:

C. Informational Submittals: Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.

D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.

E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300

SECTION 014000

QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for quality assurance and quality control.

B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.

1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
3. Requirements for Contractor to provide quality-assurance and -control services required by Engineer, Owner or authorities having jurisdiction are not limited by provisions of this Section.

C. Related Sections include the following:
1. Division 01 Section "Construction Progress Documentation" for developing a schedule of required tests and inspections.
2. Division 01 Section "Cutting and Patching" for repair and restoration of construction disturbed by testing and inspecting activities.
3. Divisions 02 through 16 Sections for specific test and inspection requirements.

1.3 DEFINITIONS

A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.

B. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.

C. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.

D. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

E. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

F. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

G. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.

1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.

H. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Engineer for a decision before proceeding.

B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Engineer for a decision before proceeding.

1.5 SUBMITTALS

A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

B. Schedule of Tests and Inspections: Prepare in tabular form and include the following:

1. Specification Section number and title.
2. Description of test and inspection.
3. Identification of applicable standards.
4. Identification of test and inspection methods.
5. Number of tests and inspections required.
6. Time schedule or time span for tests and inspections.
7. Entity responsible for performing tests and inspections.
8. Requirements for obtaining samples.
9. Unique characteristics of each quality-control service.

C. Reports: Prepare and submit certified written reports that include the following:

1. Date of issue.
2. Project title and number.
3. Name, address, and telephone number of testing agency.
4. Dates and locations of samples and tests or inspections.
5. Names of individuals making tests and inspections.
6. Description of the Work and test and inspection method.
7. Identification of product and Specification Section.
8. Complete test or inspection data.
9. Test and inspection results and an interpretation of test results.
10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on retesting and reinspecting.

D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.

F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.

1. Requirement for specialists shall not supersede building codes and regulations governing the Work.

G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.

1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.

H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

I. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:

1. Contractor responsibilities include the following:

a. Provide test specimens representative of proposed products and construction.
b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.

e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
f. When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on Project.

2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Engineer with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

1.7 QUALITY CONTROL

A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.

1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
2. Payment for these services will be made from testing and inspecting allowances, as authorized by Change Orders.
3. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.

B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.

1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.

a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.

2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."

D. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.

E. Testing Agency Responsibilities: Cooperate with Engineer and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.

1. Notify Engineer and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
6. Do not perform any duties of Contractor.

F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:

1. Access to the Work.
2. Incidental labor and facilities necessary to facilitate tests and inspections.
3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
4. Facilities for storage and field curing of test samples.
5. Delivery of samples to testing agencies.
6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
7. Security and protection for samples and for testing and inspecting equipment at Project site.

G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

H. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Submit schedule within 30 days of date established for commencement of the Work.

1. Distribution: Distribute schedule to Owner, Engineer testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

1.8 SPECIAL TESTS AND INSPECTIONS

A. Special Tests and Inspections: Owner will engage a qualified special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

A. Prepare a record of tests and inspections. Include the following:

1. Date test or inspection was conducted.
2. Description of the Work tested or inspected.
3. Date test or inspection results were transmitted to Engineer.
4. Identification of testing agency or special inspector conducting test or inspection.

B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Engineer's reference during normal working hours.

3.2 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
2. Comply with the Contract Document requirements for Division 01 Section "Cutting and Patching."

B. Protect construction exposed by or for quality-control service activities.

C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

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SECTION 014200

DEFINITIONS AND TERMINOLOGY

PART 1- GENERAL

1.1 SPECIFICATION TERMINOLOGY

A. "Engineer" the Consulting Engineering Firm under contract with the Owner for this particular project, or its designated representative.

B. "Furnish" means to supply, deliver and unload materials and equipment at the project site ready to install.

C. "Install" means the operations at the project site including unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, training and similar operations required to prepare the materials and equipment for use, verify conformance with Contract Documents and prepare for acceptance and operation by the Owner.

D. "Provide" means to furnish and install materials and equipment.

E. "Perform" means to complete the operations necessary to comply with the Contract Documents.

F. "Indicated" means graphic representations, notes, or schedules on drawings, or other requirements in Contract Documents. Words such as "shown", "noted", "scheduled", are used to help locate the reference. No limitation on the location is intended unless specifically noted.

G. "Specified" means written representations in the bid documents or the technical specifications.

H. "Regulation" means laws, statutes, ordinances, and lawful orders issued by authorities having jurisdiction, as well as, rules, conventions, and agreements within the construction industry that control performance of work, whether they are lawfully imposed by authorities having jurisdiction or not.

I. "Installer" means an entity engaged by Contractor, either as an employee, subcontractor, or sub-subcontractor to install materials and/or equipment. Installers are to have successfully completed a minimum of five projects similar in size and scope to this project, have a minimum of five years of experience in the installation of similar materials and equipment, and comply with the requirements of the authority having jurisdiction.

J. "Manufacturer" means an entity engaged by Contractor, as a subcontractor, or sub-subcontractor to furnish materials and/or equipment. Manufacturers are to have a minimum of five years experience in the manufacture of materials and equipment similar in size, capacity and scope to the specified materials and equipment.

K. "Project site" means the space available to perform the work, either exclusively or in conjunction with others performing construction at the project site.

L. "Testing laboratory" means an independent entity engaged to perform specific inspections or tests, either at the project site or elsewhere, and to report and interpret the results of those inspections or tests.

M. "Listed" means equipment is included in a list published by a nationally recognized laboratory which makes periodic inspection of production of such equipment and states that such equipment meets nationally recognized standards or has been tested and found safe for use in a specified manner.

N. "Labeled" means equipment that embodies a valid label, symbol, or other identifying mark of a nationally recognized testing laboratory such as Underwriters Laboratories, Inc. and production is periodically inspected in accordance with nationally recognized standards or tests to determine safe use in a specified manner.

O. "Certified" used in context with materials and equipment means the material and equipment has been tested and found by a nationally recognized testing laboratory to meet specification requirements, or nationally recognized standards if requirements are not specified, and is safe for use in the specified manner. A nationally recognized testing laboratory must periodically inspect production of the equipment and the equipment must bear a label, tag, or other record of certification.

"Certified" used in context with labor performance or ability to install materials and equipment means that the abilities of the proposed installer have been tested by a representative of the specified testing agency authorized to issue certificates of competency and has met the prescribed standards for certification.
"Certified" used in context with test reports, payment requests or other statements of fact means that the statements made on the document are a true statement as attested to by the certifying entity.

1.2 SPECIFICATION SENTENCE STRUCTURE

A. Specifications are written in modified brief style. Requirements apply to all work of the same kind, class, and type even though the word "all" is not stated.

B. Simple imperative sentence structure is used which places a verb as the first word in the sentence. It is understood that the words "furnish", "install", "provide", or similar words include the meaning of the phrase "The Contractor shall." before these words.

C. It is understood that the words "directed", "designated", "requested", "authorized", "approved", "selected", or similar words include the meaning of the phrase "by the Engineer" after these words unless otherwise stated. Use of these words does not extend the Engineer's responsibility for construction supervision or responsibilities beyond those defined in the General Conditions.

D. "At no additional cost to Owner", "With no extra compensation to Contractor", "At Contractor's own expense", or similar words mean that the Contractor will perform or provide specified operation of work without any increase in the Contract Amount. It is understood that the cost for performing all work is included in the amount bid and will be performed at no additional cost to the Owner unless specifically stated otherwise.

1.3 DOCUMENT ORGANIZATION

A. Organization of Contract Documents is not intended to control or to lessen the responsibility of the Contractor when dividing work among subcontractors, or to establish the extent of work to be performed by any trade, subcontractor or vendor. Specification or details do not need to be indicated or specified in each specification or drawing. Items shown in the contract documents are applicable regardless of location in the Contract Documents.

B. Standard paragraph titles and other identifications of subject matter in the specifications are intended to aid in locating and recognizing various requirements of the specifications. Titles do not define, limit, or otherwise restrict specification text.

C. Capitalizing words in the text does not mean that these words convey special or unique meanings or have precedence over other parts of the Contract Documents. Specification text governs over titling and it is understood that the specification is to be interpreted as a whole.

D. Drawings and specifications do not indicate or describe all of the work required to complete the project. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with the Engineer. Provide any work, materials or equipment required for a complete and functional system even if they are not detailed or specified.

1.4 INTERPRETATIONS OF DOCUMENTS

A. Comply with the most stringent requirements where compliance with two (2) or more standards is specified, and they establish different or conflicting requirements for minimum quantities or quality levels, unless Contract Documents indicate otherwise.

1. Quantity or quality level shown or indicated shall be minimum to be provided or performed in every instance.
2. Actual installation may comply exactly with minimum quality indicated, or it may exceed that minimum within reasonable limits.
3. In complying with these requirements, indicated numeric values are minimum or maximum values, as noted, or appropriate for context of requirements.
4. Refer instances of uncertainty to the Engineer for a decision before proceeding.

B. Provide materials and equipment comparable in quality to similar materials and equipment incorporated in the project or as required to meet the minimum requirements of the application if the materials and equipment are shown in the drawings but are not included in the specifications.

1.5 REFERENCE STANDARDS

A. Comply with applicable construction industry standards as if bound or copied directly into the Contract Documents regardless of lack of reference in the Contract Documents. Apply provisions of the Contract Documents where Contract Documents include more stringent requirements than the referenced standards.

1. Standards referenced directly in the Contract Documents take precedence over standards that are not referenced but recognized in the construction industry as applicable.

2. Comply with standards not referenced but recognized in the construction industry as applicable for performance of the work except as otherwise limited by the Contract Documents. The Engineer determines whether code or standard is applicable, or which of several are applicable.

B. Consider a referenced standard to be the latest edition with supplements or amendments when a standard is referred to in an individual specification section but is not listed by title and date.

C. Trade association names and title of general standards are frequently abbreviated. Acronyms or abbreviations used in the Contract Documents mean the recognized name of trade association, standards generating organization, authority having jurisdiction, or other entity applicable in the context of the Contract Documents. Refer to "Encyclopedia of Associations," published by Gale Research Company.

D. Make copies of reference standards available as requested by Engineer or Owner.

1.6 SUBSTITUTIONS AND EQUAL PRODUCTS

Provide materials and equipment manufactured by the entities specifically listed in each technical specification section. Submit a Contractor's Modification Request for substitution of materials and equipment of manufacturers not specifically listed or for materials and equipment that does not strictly comply with the Contract Documents.

Contractor may provide "equal" products manufactured by manufacturers other than those specifically listed in the technical specification section unless it is specifically stated that only the materials and equipment of the specified manufacturers shall be provided. Provide a request for approval of proposed equals for any materials or equipment not specifically listed. Submit a Contractor's Modification Request for substitution of materials and equipment of other manufacturers or for materials and equipment that does not strictly comply with the Contract Documents. A Field Order or Change Order will be issued if the contract modification is approved.

END OF SECTION 014200

SECTION 015000

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.

B. Related Sections include the following:

1. Division 01 Section "Summary" for limitations on utility interruptions and other work restrictions.
2. Division 01 Section "Submittal Procedures" for procedures for submitting copies of implementation and termination schedule and utility reports.
3. Division 01 Section "Execution" for progress cleaning requirements.
4. Divisions 02 through 16 Sections for temporary heat, ventilation, and humidity requirements for products in those Sections.
5. Division 01 Section "Dewatering" for disposal of ground water at Project site.
6. Division 02 Section "Termite Control" for pest control.
7. Division 02 Section "Asphalt Paving" for construction and maintenance of asphalt paving for temporary roads and paved areas.
8. Division 02 Section "Concrete Paving" for construction and maintenance of cement concrete pavement for temporary roads and paved areas.

1.3 DEFINITIONS

A. Permanent Enclosure: As determined by Engineer, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES

A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Engineer, testing agencies, and authorities having jurisdiction.

B. Sewer Service: Pay sewer service use charges for sewer usage by all entities for construction operations.

C. Water Service: For existing construction only, Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

D. Electric Power Service: For existing construction only, Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.5 SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.6 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.7 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Pavement: Comply with Division 02 pavement Sections.

B. Portable Chain-Link Fencing: Minimum 2-inch, 9-gage, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch OD corner and pull posts, with 1-5/8-inch- OD top and bottom rails. Provide concrete bases for supporting posts.

C. Lumber and Plywood: Comply with requirements in Division 06 Section "Rough Carpentry."

D. Gypsum Board: Minimum 1/2 inch thick by 48 inches wide by maximum available lengths; regular-type panels with tapered edges. Comply with ASTM C 36/C 36M.

E. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

F. Paint: Comply with requirements in Division 09 painting Sections.

2.2 TEMPORARY FACILITIES

A. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

1. Store combustible materials apart from building.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

B. HVAC Equipment:
1. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return air grille in system and remove at end of construction.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: connect to existing service.

1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

B. Water Service: In existing building only, use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.

C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

D. Electric Power Service: In existing building only, Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.

E. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.

1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:

1. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines. Comply with NFPA 241.
2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

C. Parking: Provide temporary parking areas for construction personnel.

D. Project Identification and Temporary Signs: Provide Project identification and other signs. Install signs prominently to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.

1. Provide temporary, directional signs for construction personnel and visitors.
2. Maintain and touchup signs so they are legible at all times.
3. Project identification sign shall be 4’x4’x1/2” painted plywood supported by 4’x4’ posts and shall include the following information:
   a. Project name.
   b. Names of County officials. Coordinate with Owner.
   c. Contractor Name.
   d. A/E firm names.

   Submit proposed sign for approval.

E. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 Section "Execution" for progress cleaning requirements.

F. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

1. Comply with work restrictions specified in Division 01 Section "Summary."

B. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.

C. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

D. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.

1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operations side.
2. Construct dustproof partitions with 2 layers of 3-mil polyethylene sheet on each side. Cover floor with 2 layers of 3-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant plywood.
3. Insulate partitions to provide noise protection to occupied areas.
4. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.
5. Protect air-handling equipment.
6. Weather strip openings.
7. Provide walk-off mats at each entrance through temporary partition.

E. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.

1. Prohibit smoking in construction areas.
2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.

3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
3. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures."

END OF SECTION 015000

SECTION 015600

CONSTRUCTION TRAFFIC CONTROL

PART 1 - GENERAL

1.1 GENERAL DESCRIPTION OF WORK

A. This item shall consist of the construction, manipulation, maintenance and removal, if required, of detours of the length and to the lines, grades and typical sections indicated and providing for installing, moving, replacing, maintaining, cleaning and removing upon completion of the work, as required, all detour markers, signs, barricades and other devices used in traffic control and handling at the construction site as indicated or as directed by the Engineer.

B. This item shall also consist of providing installing, moving, replacing, maintaining, cleaning and removing temporary or permanent street closure barricades, signs or other devices required to handle the traffic in conformance with the current edition of the Texas Manual of Uniform traffic Control Devices of Street and Highways and as indicated or directed by the Engineer.

1.2 SUBMITTAL

A. Conform to requirements of Section 013300, SUBMITTALS.

B. Submit proposed traffic routing plan, in accordance with the Texas Manual on Uniform Traffic Control Devices (TxMUTCD), latest edition.

PART 2 - PRODUCTS

2.1 CONSTRUCTION TRAFFIC CONTROL SIGNS

A Construction traffic control signs shall constructed by plywood.

1. Construction traffic control signs used herein shall be fabricated using sheeting conforming to the requirements of the manufacturer.
2. The substrate for construction signs need only be sufficiently durable to last the life of the project and sufficiently rigid to hold the sheeting in a flat plan.

2.2 SIGN SUPPORTS

A. Supports for construction traffic control signs shall be grade #2 fir or yellow pine, pressure treated with pentachlorophenol.

B. Supports shall have a minimum nominal size of 4-inches x 4-inches and conform tot he details shown on the plans.

2.3 PORTABLE SIGN SUPPORT

A. Materials for portable sign supports shall comply with the details shown on the plans. Portable sign

supports other than those shown on the plans shall be submitted to the Project Manager for approval prior to use.

2.4 BARRICADES

A Barricades shall be classified as Type I, Type II or Type III and shall comply with the details shown on the plans and the TMUTCD.

1. Barricade rails shall be fabricated using S4S Grade #2 fir or yellow pine and reflectorized sheeting conforming to the requirements.

2.5 VERTICAL PANELS

A. Materials for vertical panels shall conform to the details shown on the plans. Vertical panels shall be reflectorized with orange and white reflective sheeting or tape in accordance with the requirements.

2.6 ABBREVIATED PAVEMENT MARKINGS FOR CONSTRUCTION

A. The pavement-marking material shall consist of an adhesive-back reflective tape which can get applied to the pavement. Markings shall be of goof appearance, have straight, unbroken edges and have a color that complies with all federal regulations.

1. Color
   (a) The markings, as well as retroreflected light from the markings, shall be white or yellow as indicated.
2. Visibility
   (a) The pavement markings (during daylight hours) shall be distinctively visible of ra minimum of 300 feet unless sigh distance is restricted by geometric roadway features.
   (b) The pavement markings (when illuminated by automobile low beam headlights at night) shall be distinctively visible for a minimum of 160 feet unless sight distance is restricted by geometric features.
   (c) The above day and night visibility requirements shall be met when viewed from an automobile traveling on the roadway.

2.7 CHANNELIZATION DEVICES

A. Barrels

1. Barrels shall be of metal or nonmetal composition approved by the Engineer and of 30 to 55 gallon capacity. Only one size may be used on the project. The barrels shall be reflectorized with orange an white reflective sheeting or tape in accordance with the requirements of TMUTCD. The markings on the barrels shall be horizontal, circumferential, orange wide. There shall be a minimum of 55 alternating orange and white stripes on each barrel. Barrels shall also conform to the details shown on the plans.
2. Type "B" barrels shall be equipped with either Type "A" low intensity or Type "C" steady-burn warning lights complying with the provisions to TMUTCD and the ITE standard for flashing and steady-burn lights. The use warning light shall be as directed by the Engineer.

B. Traffic Cones

1. Traffic cones shall conform to the details shown on the plans.

C. Tubular Traffic Markers

1. Post
   (a) The post shall be of a thermoplastic or pliable elastomer composition meeting the manufacturer's requirements.
   (b) Dimensions:

Outside Diameter	2.23 inches to 4 inches
Wall Thickness	0.125 inch minimum
Length	18 to 36 inches
Color	Orange

2. Base
   (a) The base shall be of thermoplastic or pliable elastomer composition meeting the manufacturer's requirements.
   (b) Dimensions:

Height	1.2 to 2 inches
Outside Diameter	7 to 12 inches
Color	black or same color as post

3. Assembly Units
   (a) Assembly units which are inherent with the particular marker shall be as per manufacturer's recommendations.
4. Adhesives
   (a) Adhesive shall be epoxy type (permanent installation or butyl type (temporary installation) as per manufacturer's recommendations.
5. Reflectorization
   (a) If used at night, tubular traffic markers shall have two 3-inch, circumferential reflective bands, no more than 2-inches from the top with no more than 6-inches separating the bands. Reflective material shall be SIA-250 or higher sheeting conforming to the provisions of this Section. The color of reflective material shall be as shown in the plans.

2.8 SEQUENTIAL ARROW DISPLAYS

A. Sequential arrow displays shall be sequentially lighted and roof or trailer mounted. The minimum panel size shall be 30 inches high and 54-inches wide. The display shall have 22 hooded sealed beam amber lamps rated at a maximum intensity of 8800 candlepower.

B. Light intensity shall be adjustable by dimmer switch. The operating modes shall be as follows:

1. Pass Left. 3 chevrons of 5 lamps each sequence in right to left pattern 40 to 50 times per minute.
2. Pass Right. 3 chevrons of 5 lamps each sequence in left to right pattern 40 to 50 times per minute.
3. Pass Either Side. The two outermost chevrons on each end of the panel pointing like arrowheads and flashing 40 to 50 times per minute with crossing row of lamps burning continuously.

4. Warning. 4 lamps, one at each corner of the panel, flashing 40 to 50 times per minute.

PART 3 - EXECUTION

3.1 CONSTRUCTION TRAFFIC CONTROL SIGNS AND SIGN SUPPORTS

A. Construction traffic control signs and sign supports shall be installed at locations noted on the plans in conformance with the TMUTCD or as directed by the Engineer.

3.2 PORTABLE SIGN SUPPORTS

A. Portable sign supports for traffic control devices for detours shall be furnished by the Contractor, shall be installed at the locations shown on the plans, unless otherwise shown on the plans, and shall remain the property of the Contractor.

B. Unless otherwise specified, portable sign supports shall be of the dimensions shown on the plans.

3.3 BARRICADES

A. Barricades shall be installed in conformity with the details noted on the plans or as directed by the Engineer.

3.4 VERTICAL PANELS

A. Vertical panels shall be installed in conformity with the details noted on the plans or as directed by the Engineer.

3.5 CONSTRUCTION TRAFFIC MARKINGS

3.6 ABBREVIATED PAVEMENT MARKINGS FOR CONSTRUCTION

A. Abbreviated markings meeting all specification requirements shall be in place on all roadways on which traffic is allowed and where suitable standard pavement marking is not in place. The transverse location of the line(s) formed by the markings shall be as determined by the Engineer.

B. Unless otherwise indicated, the abbreviated markings shall be placed as follows:

Condition	Spacing	Length of Stripe
Straight	40 feet approximately	48-inch
Curve greater than 2 degrees	20 feet maximum	48-inch
Curve less than or equal 2 degrees	40 feet maximum	48-inch

C. Pavement markings shall be a minimum of 3 7/8 inches wide. Length and spacings will be in accordance with these specifications.

D. The spacing of stripes may be modified by the Engineer. However the maximum spacing specified above shall not be exceeded in any case.
E. The Contractor will be responsible for maintaining the abbreviated pavement markings until standard pavement markings are in place.

F. Abbreviated pavement markings shall be removed after all permanent markings have been in place.

3.7 CHANNELIZATION DEVICES

A. Type "A" Barrels

1. Type "A" barrels shall be used during daylight hours only and shall not be equipped with warning lights of any type.

B. Type "B" Barrels

1. Type "B" barrels shall be equipped with warning lights. Type "B" barrels shall be used during nighttime hours only, unless otherwise shown on the plans or directed by the Project Manager.
2. The term "daylight hours" refers to those hours between dawn and dusk. The term "nighttime hours" refers to those hours between dusk and dawn.

C. Traffic Cones

1. Traffic cones shall be installed in conformity with the plans and the TMUTCD or as directed by the Engineer.

D. Tubular Traffic Markers

1. The metal, concrete or bituminous surface where the tubular traffic markers are to be placed shall be thoroughly cleaned.
2. Metal and concrete surfaces shall be sandblasted or wire brushed. Bituminous surfaces shall be cleaned in accordance with manufacturer's recommendations.
3. All loose sand, dust and other deleterious debris from cleaned mounting surfaces shall be removed.
4. Tubular traffic markers shall be installed in conformity with details and at locations shown on the plans or as directed by the Engineer and in accordance with the manufacturer's recommendation.
5. In the event that removal of an installation (temporary or permanent) is effected and the metal, concrete, or bituminous surface is damaged the Contractor shall repair and otherwise restore said surface to its original condition at no additional cost to the Owner.
6. All defective post(s), base(s), assembly unit(s), adhesive(s) or reflective sheeting contributing to the detriment of the intended function of the tubular traffic markers shall be replaced by the Contractor at no addition cost to the Owner.
7. Channelization devices shall be and installed in accordance with the details shown on the plans, except that barrels shall be as noted herein.

3.8 SEQUENTIAL ARROW DISPLAY

A. Sequential arrow displays shall be used according to the requirements shown on the plans and shown in TMUTCD.

3.9 CONSTRUCTION DETOURS

A. The detours shall be constructed at the locations and to the lines and grades indicated and it shall be the entire responsibility of the Contractor to provide for the passage of traffic in comfort and safety without creating a dust problem.

3.10 CONSTRUCTION METHODS

A. Prior to commencing construction, suitable "Construction Traffic Control" devices shall be installed to protect the workers and the public.

B. The Contractor shall be responsible for installing all markers, signs and barricades conforming to the Texas Manual on Uniform Traffic Control Devices and/or as indicated. If, in the opinion of the Engineer, additional markers, signs or barricades are needed in the interest of safety, the Contractor will install such as are required or as directed by the Engineer.

END OF SECTION 015600

SECTION 016000

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.

B. Related Sections include the following:
   1. Division 01 Section "Closeout Procedures" for submitting warranties for Contract closeout.
   2. Divisions 02 through 16 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.3 DEFINITIONS

A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

   1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
   2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
   3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.4 SUBMITTALS

A. Product List: Submit a list, in tabular from, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.

1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
2. Form: Tabulate information for each product under the following column headings:

    a. Specification Section number and title.
    b. Generic name used in the Contract Documents.
    c. Proprietary name, model number, and similar designations.
    d. Manufacturer's name and address.
    e. Supplier's name and address.
    f. Installer's name and address.
    g. Projected delivery date or time span of delivery period.
    h. Identification of items that require early submittal approval for scheduled delivery date.

3. Initial Submittal: Within 30 days after date of commencement of the Work, submit 3 copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.

    a. At Contractor's option, initial submittal may be limited to product selections and designations that must be established early in Contract period.

4. Completed List: Within 60 days after date of commencement of the Work, submit 3 copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
5. Engineer's Action: Engineer will respond in writing to Contractor within 15 days of receipt of completed product list. Engineer's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Engineer's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.

B. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form: Use Contractor’s standard form.
2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

a. Statement indicating why specified material or product cannot be provided.
b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
e. Samples, where applicable or requested.
f. List of similar installations for completed projects with project names and addresses and names and addresses of Engineers and owners.
g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
j. Cost information, including a proposal of change, if any, in the Contract Sum.
k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

3. Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Engineer will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

a. Form of Acceptance: Change Order.
b. Use product specified if Engineer cannot make a decision on use of a proposed substitution within time allocated.

C. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Engineer's Action: If necessary, Engineer will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Engineer will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
b. Use product specified if Engineer cannot make a decision on use of a comparable product request within time allocated.

D. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.5 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
2. If a dispute arises between contractors over concurrently selectable but incompatible products, Engineer will determine which products shall be used.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
4. Store cementitious products and materials on elevated platforms.
5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.

8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.7 PRODUCT WARRANTIES

A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
3. Refer to Divisions 02 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.

C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
4. Where products are accompanied by the term "as selected," Engineer will make selection.
5. Where products are accompanied by the term "match sample," sample to be matched is Engineer's.

6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.

B. Product Selection Procedures:

1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
5. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
6. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
7. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
9. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Engineer's sample. Engineer's decision will be final on whether a proposed product matches.

    a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.

10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.

    a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Engineer will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.

b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Engineer will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

A. Timing: Engineer will consider requests for substitution if received within 60 days after commencement of the Work. Requests received after that time may be considered or rejected at discretion of Engineer.

B. Conditions: Engineer will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Engineer will return requests without action, except to record noncompliance with these requirements:

1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Engineer for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
2. Requested substitution does not require extensive revisions to the Contract Documents.
3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
4. Substitution request is fully documented and properly submitted.
5. Requested substitution will not adversely affect Contractor's Construction Schedule.
6. Requested substitution has received necessary approvals of authorities having jurisdiction.
7. Requested substitution is compatible with other portions of the Work.
8. Requested substitution has been coordinated with other portions of the Work.
9. Requested substitution provides specified warranty.
10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

2.3 COMPARABLE PRODUCTS

A. Conditions: Engineer will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Engineer will return requests without action, except to record noncompliance with these requirements:

1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
3. Evidence that proposed product provides specified warranty.

4. List of similar installations for completed projects with project names and addresses and names and addresses of Engineers and owners, if requested.
5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 017300

EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. Field engineering and surveying.
3. Installation of the Work.
4. Cutting and patching.
5. Progress cleaning.
6. Starting and adjusting.
7. Protection of installed construction.
8. Correction of the Work.

B. Related Requirements:

1. Section 011000 "Summary" for limits on use of Project site.
2. Section 013300 "Submittal Procedures" for submitting surveys.
3. Section 017700 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.
4. Section 024119 "Selective Demolition" for demolition and removal of selected portions of the building.

1.3 DEFINITIONS

A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.

B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For land surveyor.

B. Certificates: Submit certificate signed by land surveyor certifying that location and elevation of improvements comply with requirements.

C. Cutting and Patching Plan: Submit plan describing procedures at least 10 days prior to the time cutting and patching will be performed. Include the following information:

1. Extent: Describe reason for and extent of each occurrence of cutting and patching.
2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
3. Products: List products to be used for patching and firms or entities that will perform patching work.
4. Dates: Indicate when cutting and patching will be performed.
5. Utilities and Mechanical and Electrical Systems: List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate length of time permanent services and systems will be disrupted.

    a. Include description of provisions for temporary services and systems during interruption of permanent services and systems.

D. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

E. Certified Surveys: Submit two copies signed by land surveyor.

F. Final Property Survey: Submit 10 copies showing the Work performed and record survey data.

1.5 QUALITY ASSURANCE

A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

B. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.

1. Structural Elements: When cutting and patching structural elements, notify Engineer of locations and details of cutting and await directions from Engineer before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection

2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.

3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety

4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Engineer's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

C. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

D. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Comply with requirements specified in other Sections.

B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Engineer for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.

1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:

1. Description of the Work.
2. List of detrimental conditions, including substrates.
3. List of unacceptable installation tolerances.
4. Recommended corrections.

D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Engineer according to requirements in Section 013100 "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Engineer promptly.

B. General: Engage a land surveyor to lay out the Work using accepted surveying practices.

1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
2. Establish limits on use of Project site.
3. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
4. Inform installers of lines and levels to which they must comply.
5. Check the location, level and plumb, of every major element as the Work progresses.
6. Notify Engineer when deviations from required lines and levels exceed allowable tolerances.
7. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.

C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.

D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Engineer.

3.4 FIELD ENGINEERING

A. Identification: Owner will identify existing benchmarks, control points, and property corners.

B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

1. Do not change or relocate existing benchmarks or control points without prior written approval of Engineer. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Engineer before proceeding.
2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

C. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.

1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

D. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.

E. Final Property Survey: Engage a land surveyor to prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.

1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.
2. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

3.5 INSTALLATION

A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.

F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Engineer.
2. Allow for building movement, including thermal expansion and contraction.
3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 CUTTING AND PATCHING

A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.

B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.

C. Temporary Support: Provide temporary support of work to be cut.

D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 011000 "Summary."

F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.

G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
4. Excavating and Backfilling: Comply with requirements in applicable Sections where required by cutting and patching operations.
5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
6. Proceed with patching after construction operations requiring cutting are complete.

H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.

    a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
    b. Restore damaged pipe covering to its original condition.

3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

    a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.

4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.

5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.

I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.7 PROGRESS CLEANING

A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.

1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

    a. Use containers intended for holding waste materials of type to be stored.

4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.

B. Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls."

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.8 STARTING AND ADJUSTING

A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

B. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.

C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Manufacturer's Field Service: Comply with qualification requirements in Section 014000 "Quality Requirements."

3.9 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

SECTION 017320

SELECTIVE DEMOLITION

PART 1- GENERAL

1.1 DESCRIPTION OF WORK

This specification shall provide for the removal and disposal of old structures or portions of old structures, as noted on the plans, and shall include all excavation and backfilling necessary to complete the removal. The work shall be done in accordance with the provisions of these specifications.

PART 2- PRODUCTS [NOT USED]

PART 3- EXECUTION

3.1 METHOD OF REMOVAL

A. Steel Structures: Steel structures or steel portions of structures shall be dismantled in sections as determined by the Engineer. The sections shall be stored. Rivets and bolts connecting steel railing members, steel beams of beam spans and steel stringers of truss spans shall be removed by butting the heads with a "cold cut" and punching or drilling from the hole, or by such other method as will not injure the members for re-use and will meet the approval of the Engineer. The removal of rivets and bolts from connections of truss members, bracing members, and other similar members in the structure will not be required unless specifically called for on the plans or special provisions and the Contractor shall have the option of dismantling these members by flame-cutting the members immediately adjacent to the connections. Flame-Cutting will not be permitted, however, when plans or special provisions call for the structure unit to be salvaged in such manner as to permit re-erection. In such case, all members shall be carefully matchmarked with paint in accordance with diagram furnished by the Engineer prior to dismantling, and all rivets and bolts shall be removed from the connections in the manner specified in the first portion of this paragraph.

D. Timber Structures:

1. Timber structures or timber portions of structures shall be removed in such manner as to damage the timber for further use as little as possible. All bolts and nails shall be removed from such lumber as deemed salvable by the Engineer.
2. Unless otherwise specified on the plans, timber piles shall be either pulled or cut off at the point not less than 2 feet below ground line, with the choice between these two methods resting with the Contractor, unless otherwise specified.

E. Brick or Stone Structures:

1. Brick or stone structures or stone portions of structures shall be removed by blasting and/or sledging the masonry into sizes not larger than one cubic foot.

2. Portions of such structures below the permanent ground line, which will not in any manner interfere with the proposed construction, may be left in place, but removal shall be carried at least 2 feet below the permanent ground line and neatly squared off.

F. Salvage:

All material such as pipe, timbers, railings, etc., which the Engineer deems as salvageable for reuse, and all structural steel shall be in the property of City unless otherwise specified and delivered to a designated storage area.

All mechanical and electrical lift station material, which the Engineer deems as salvageable for reuse, including pumps and control panels shall be in the property of the City unless otherwise specified and delivered to a designated storage area.

G.

1. The I-beams, stringers, etc., which are specified to be dismantled without damage for reuse, and all steel members when match marked and dismantled for reuse, shall be blocked off the ground in an upright position to protect the members against further damage.

2. Materials, other than structural steel, which are not deemed salvable by the Engineer, shall become the property of the Contractor and shall be removed to suitable disposal sites off of the right-of-way arranged for by the Contractor, or otherwise disposed of in a manner satisfactory to the Engineer.

3. Where temporary structures are necessary for a detour adjacent to the present structure, the Contractor will be permitted to use the material in the old structure for the detour structure, but he shall dismantle and stack or dispose of the material as required above as soon as the new structure is opened for traffic.

H. Backfill:

1. All excavation made in connection with this specification and all openings below the natural ground line caused by the removal of old structures or portions thereof shall be backfilled to the level of the original ground line, unless otherwise provided on the plans.

2. That portion of the backfill which will support any portion of the roadbed or embankment shall be placed in layers of the same depth as those required for placing embankment. Material in each layer shall be wetted uniformly, if required, and shall be compacted to the density required in the adjoining embankment. In places inaccessible to blading and rolling equipment, mechanical or hand tamps or rammers shall be used to obtain the required compaction.

3. That portion of the backfill which will not support any portion of the roadbed or embankment shall be placed as directed by the Engineer in such manner and to such state of compaction as will preclude objectionable amount of settlement.

END OF SECTION 017320

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SECTION 017700

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Inspection procedures.
2. Warranties.
3. Final cleaning.

B. Related Sections include the following:

1. Division 01 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
2. Division 01 Section "Execution" for progress cleaning of Project site.
3. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
4. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
5. Division 01 Section "Demonstration and Training" for requirements for instructing Owner's personnel.
6. Divisions 02 through 16 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.3 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.

1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
2. Advise Owner of pending insurance changeover requirements.
3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.

4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
8. Complete startup testing of systems.
9. Submit test/adjust/balance records.
10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
11. Advise Owner of changeover in heat and other utilities.
12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
13. Complete final cleaning requirements, including touchup painting.
14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

1.4 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:

1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
2. Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report and warranty.
5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training videotapes.

B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order.
2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
3. Include the following information at the top of each page:

    a. Project name.
    b. Date.
    c. Name of Engineer.
    d. Name of Contractor.
    e. Page number.

1.6 WARRANTIES

A. Submittal Time: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

B. Partial Occupancy: Submit properly executed warranties within 14 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.

C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.

1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:

    a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
    d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
    g. Sweep concrete floors broom clean in unoccupied spaces.
    h. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
    i. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials.

Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.

j. Remove labels that are not permanent.

k. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.

    1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.

l. Wipe surfaces of mechanical and electrical equipment[, elevator equipment,] and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.

m. Replace parts subject to unusual operating conditions.

n. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.

o. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.

p. Clean ducts, blowers, and coils if units were operated without filters during construction.

q. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

r. Leave Project clean and ready for occupancy.

C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 017700

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SECTION 017823

OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

1. Operation and maintenance documentation directory.
2. Emergency manuals.
3. Operation manuals for systems, subsystems, and equipment.
4. Product maintenance manuals.
5. Systems and equipment maintenance manuals.

B. Related Requirements:
1. Section 013300 "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.

1.3 DEFINITIONS

A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.

B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 CLOSEOUT SUBMITTALS

A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.

1. Engineer will comment on whether content of operations and maintenance submittals are acceptable.
2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.

B. Format: Submit operations and maintenance manuals in the following format:

1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Engineer.

    a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
    b. Enable inserted reviewer comments on draft submittals.

2. Three paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. Engineer will return two copies.

C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Engineer will comment on whether general scope and content of manual are acceptable.

D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Engineer will return copy with comments.

1. Correct or revise each manual to comply with Engineer's comments. Submit copies of each corrected manual within 15 days of receipt of Engineer's comments and prior to commencing demonstration and training.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:

1. List of documents.
2. List of systems.
3. List of equipment.
4. Table of contents.

B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.

C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.

D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.

E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to

ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

2.2 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

1. Title page.
2. Table of contents.
3. Manual contents.

B. Title Page: Include the following information:

1. Subject matter included in manual.
2. Name and address of Project.
3. Name and address of Owner.
4. Date of submittal.
5. Name and contact information for Contractor.
6. Name and contact information for Construction Manager.
7. Name and contact information for Engineer.
8. Name and contact information for Commissioning Authority.
9. Names and contact information for major consultants to the Engineer that designed the systems contained in the manuals.
10. Cross-reference to related systems in other operation and maintenance manuals.

C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

E. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.

1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so

that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.

F. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.

1. Binders: Heavy-duty, three-ring, vinyl-covered, post-type binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

    a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
    b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.

2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
4. Supplementary Text: Prepared on 8-1/2-by-11-inch (215-by-280-mm) white bond paper.
5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.

    a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
    b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.3 EMERGENCY MANUALS

A. Content: Organize manual into a separate section for each of the following:

1. Type of emergency.
2. Emergency instructions.
3. Emergency procedures.

B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:

1. Fire.
2. Flood.
3. Gas leak.

4. Water leak.
5. Power failure.
6. Water outage.
7. System, subsystem, or equipment failure.
8. Chemical release or spill.

C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.

D. Emergency Procedures: Include the following, as applicable:

1. Instructions on stopping.
2. Shutdown instructions for each type of emergency.
3. Operating instructions for conditions outside normal operating limits.
4. Required sequences for electric or electronic systems.
5. Special operating instructions and procedures.

2.4 OPERATION MANUALS

A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:

1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
2. Performance and design criteria if Contractor has delegated design responsibility.
3. Operating standards.
4. Operating procedures.
5. Operating logs.
6. Wiring diagrams.
7. Control diagrams.
8. Piped system diagrams.
9. Precautions against improper use.
10. License requirements including inspection and renewal dates.

B. Descriptions: Include the following:

1. Product name and model number. Use designations for products indicated on Contract Documents.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.

C. Operating Procedures: Include the following, as applicable:

1. Startup procedures.
2. Equipment or system break-in procedures.
3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.5 PRODUCT MAINTENANCE MANUALS

A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

C. Product Information: Include the following, as applicable:

1. Product name and model number.
2. Manufacturer's name.
3. Color, pattern, and texture.
4. Material and chemical composition.
5. Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and the following:

1. Inspection procedures.
2. Types of cleaning agents to be used and methods of cleaning.
3. List of cleaning agents and methods of cleaning detrimental to product.
4. Schedule for routine cleaning and maintenance.
5. Repair instructions.

E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1. Include procedures to follow and required notifications for warranty claims.

2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.

C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:

1. Standard maintenance instructions and bulletins.
2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
3. Identification and nomenclature of parts and components.
4. List of items recommended to be stocked as spare parts.

D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:

1. Test and inspection instructions.
2. Troubleshooting guide.
3. Precautions against improper maintenance.
4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
5. Aligning, adjusting, and checking instructions.
6. Demonstration and training video recording, if available.

E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.

F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.

H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.

B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.

C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.

1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.

E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.

1. Do not use original project record documents as part of operation and maintenance manuals.
2. Comply with requirements of newly prepared record Drawings in Section 017839 "Project Record Documents."

G. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

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SECTION 017839

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for project record documents, including the following:

1. Record Drawings.
2. Record Product Data.

B. Related Requirements:
1. Section 017300 "Execution" for final property survey.
2. Section 017700 "Closeout Procedures" for general closeout procedures.
3. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.

1.3 CLOSEOUT SUBMITTALS

A. Record Drawings: Comply with the following:

1. Number of Copies: Submit one set of marked-up record prints.
2. Number of Copies: Submit copies of record Drawings as follows:

a. Initial Submittal:

1) Submit one paper-copy set(s) of marked-up record prints.

b. Final Submittal:
1) Submit PDF electronic files of scanned record prints and three set(s) of prints.
2) Print each drawing, whether or not changes and additional information were recorded.

B. Record Product Data: Submit one paper copy of each submittal.

1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.

1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.

    a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    b. Accurately record information in an acceptable drawing technique.
    c. Record data as soon as possible after obtaining it.
    d. Record and check the markup before enclosing concealed installations.
    e. Cross-reference record prints to corresponding archive photographic documentation.

2. Content: Types of items requiring marking include, but are not limited to, the following:

    a. Dimensional changes to Drawings.
    b. Revisions to details shown on Drawings.
    c. Depths of foundations below first floor.
    d. Locations and depths of underground utilities.
    e. Revisions to routing of piping and conduits.
    f. Revisions to electrical circuitry.
    g. Actual equipment locations.
    h. Duct size and routing.
    i. Locations of concealed internal utilities.
    j. Changes made by Change Order or Construction Change Directive.
    k. Changes made following Engineer's written orders.
    l. Details not on the original Contract Drawings.
    m. Field records for variable and concealed conditions.
    n. Record information on the Work that is shown only schematically.

3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
5. Mark important additional information that was either shown schematically or omitted from original Drawings.

6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Engineer. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
   1. Format: Annotated PDF electronic file with comment function enabled.
   2. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
   3. Engineer will furnish Contractor one set of digital data files of the Contract Drawings for use in recording information.

      a. See Section 013300 "Submittal Procedures" for requirements related to use of Engineer's digital data files.
      b. Engineer will provide data file layer information. Record markups in separate layers.

C. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

   1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
   2. Format: Annotated PDF electronic file with comment function enabled.
   3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
   4. Identification: As follows:

      a. Project name.
      b. Date.
      c. Designation "PROJECT RECORD DRAWINGS."
      d. Name of Engineer.
      e. Name of Contractor.

2.2 RECORD PRODUCT DATA

A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.

   1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
   2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
   3. Note related Change Orders, and record Drawings where applicable.

B. Format: Submit record Product Data as paper copy.

1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.

B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Engineer's reference during normal working hours.

END OF SECTION 017839

SECTION 024200

DEMOLITION OF EXISTING CIVIL SITE IMPROVEMENTS

PART 1- GENERAL

1.1 DESCRIPTION OF WORK

A. This specification shall provide for the removal and disposal of old structures or portions of old structures, as noted on the plans, and shall include all excavation and backfilling necessary to complete the removal. The work shall be done in accordance with the provisions of these specifications.

PART 2- EXECUTION

2.1 METHOD OF REMOVAL

A. Culverts or Sewers: Pipe shall be removed by careful excavation of all dirt on top and the sides in such manner that the pipe will not be damaged. Removal of sewer appurtenances shall be included for removal with the pipe. Those pipes which are deemed unsatisfactory for reuse by the Engineer may be removed in any manner the Contractor may select.

B. Concrete Structures: Concrete structures or concrete portions of structures shall be removed by blasting and/or sledging the concrete into sizes not larger than one cubic foot. Portions of the old structure shall be removed to the lines and dimensions shown on the plans, and these materials shall be disposed of as shown on the plans or as directed by the Engineer. Any portion of the existing structure, outside of the limits designated for removal, damaged during the operations of the Contractor shall be restored to its original condition at his entire expense. Explosives shall not be used in the removal of portions of the existing structure unless approved by the Engineer, in writing.

Concrete portions of structures below the permanent ground line, which will not interfere in any manner with the proposed construction, may be left in place, but removal shall be carried at least 2 feet below the permanent ground line and neatly squared off. Reinforcement shall be cut off close to the concrete.

C. Steel Structures: Steel structures or steel portions of structures shall be dismantled in sections as determined by the Engineer. The sections shall be stored. Rivets and bolts connecting steel railing members, steel beams of beam spans and steel stringers of truss spans shall be removed by butting the heads with a "cold cut" and punching or drilling from the hole, or by such other method as will not injure the members for re-use and will meet the approval of the Engineer. The removal of rivets and bolts from connections of truss members, bracing members, and other similar members in the structure will not be required unless specifically called for on the plans or special provisions and the Contractor shall have the option of dismantling these members by flame-cutting the members immediately adjacent to the connections. Flame-Cutting will not be permitted, however, when plans or special provisions call for the structure unit to be salvaged in such manner as to permit re-erection. In such case, all members shall be

carefully matchmarked with paint in accordance with diagram furnished by the Engineer prior to dismantling, and all rivets and bolts shall be removed from the connections in the manner specified in the first portion of this paragraph.

D. Timber Structures:

1. Timber structures or timber portions of structures shall be removed in such manner as to damage the timber for further use as little as possible. All bolts and nails shall be removed from such lumber as deemed salvable by the Engineer.
2. Unless otherwise specified on the plans, timber piles shall be either pulled or cut off at the point not less than 2 feet below ground line, with the choice between these two methods resting with the Contractor, unless otherwise specified.

E. Brick or Stone Structures:

1. Brick or stone structures or stone portions of structures shall be removed by blasting and/or sledging the masonry into sizes not larger than one cubic foot.

2. Portions of such structures below the permanent ground line, which will not in any manner interfere with the proposed construction, may be left in place, but removal shall be carried at least 2 feet below the permanent ground line and neatly squared off.

F. Salvage:

1. All material such as pipe, timbers, railings, etc., which the Engineer deems as salvageable for reuse and all structural steel shall be in the property of City unless otherwise specified and delivered to a designated storage area.

2. All mechanical and electrical lift station material, which the Engineer deems as salvageable for reuse, including pumps and control panels shall be in the property of the City unless otherwise specified and delivered to a designated storage area.

3. The I-beams, stringers, etc., which are specified to be dismantled without damage for reuse, and all steel members when matchmarked and dismantled for reuse, shall be blocked off the ground in an upright position to protect the members against further damage.

4. Materials, other than structural steel, which are not deemed salvable by the Engineer, shall become the property of the Contractor and shall be removed to suitable disposal sites off of the right-of-way arranged for by the Contractor, or otherwise disposed of in a manner satisfactory to the Engineer.

5. Where temporary structures are necessary for a detour adjacent to the present structure, the Contractor will be permitted to use the material in the old structure for the detour structure, but he shall dismantle and stack or dispose of the material as required above as soon as the new structure is opened for traffic.

G. Backfill:

1. All excavation made in connection with this specification and all openings below the natural ground line caused by the removal of old structures or portions thereof shall be backfilled to the level of the original ground line, unless otherwise provided on the plans.

2. That portion of the backfill which will support any portion of the roadbed or embankment shall be placed in layers of the same depth as those required for placing embankment. Material in each layer shall be wetted uniformly, if required, and shall be compacted to the density required in the adjoining embankment. In places inaccessible to blading and rolling equipment, mechanical or hand tamps or rammers shall be used to obtain the required compaction.

3. That portion of the backfill which will not support any portion of the roadbed or embankment shall be placed as directed by the Engineer in such manner and to such state of compaction as will preclude objectionable amount of settlement.

END OF SECTION 024200

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SECTION 03 10 00

CONCRETE FORMS AND ACCESSORIES

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Formwork for cast-in place concrete.
2. Shoring, bracing, and anchorage.
3. Architectural form liners.
4. Form accessories.
5. Form stripping.

B. Related Sections:
1. Section 032000 - Concrete Reinforcement.
2. Section 033000 - Cast-in-Place Concrete.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials.
2. ACI 301 - Specifications for Structural Concrete.
3. ACI 318 - Building Code Requirements for Structural Concrete.
4. ACI 347 - Guide to Formwork for Concrete.

B. American Forest and Paper Association:
1. AF&PA - National Design Specifications for Wood Construction.

C. The Engineered Wood Association:
1. APA/EWA PS 1 - Voluntary Product Standard for Construction and Industrial Plywood.

D. ASTM International:
1. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
2. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.

E. West Coast Lumber Inspection Bureau:
1. WCLIB - Standard Grading Rules for West Coast Lumber.

1.3 DESIGN REQUIREMENTS

A. Design, engineer and construct formwork, shoring and bracing in accordance with ACI 318 to conform to design and applicable code requirements to achieve concrete shape, line and dimension as indicated on Drawings.

1.4 PERFORMANCE REQUIREMENTS

A. Vapor Retarder Permeance: Maximum .03 perms when tested in accordance with ASTM E96, Procedure A.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 347 ACI 301 ACI 318.

B. For wood products furnished for work of this Section, comply with AF&PA.

C. Perform Work in accordance with State Municipality of Highways Public Work's standard.

1.6 COORDINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Coordinate this Section with other sections of work, requiring attachment of components to formwork.

PART 2 PRODUCTS

2.1 WOOD FORM MATERIALS

A. Form Materials: At discretion of Contractor.

2.2 FORMWORK ACCESSORIES

A. Vapor Retarder: Where indicated on Drawings, 10 mil thick polyethylene sheet manufacture by:
   1. Stego Wrap Class A: by Stego Industries LLC (887) 464-7834
   2. Griffolyn by Reef Industries (800) 231-6074
   3. VaporBlock 10 by Raven Industries (800) 635-3456
   4. Perminator Vapor – May by W.R. Meadows (800) 342-5976
   5. Or Equivalent

B. Bituminous Joint Filler: ASTM D1751.

C. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Size, strength and character to maintain formwork in place while placing concrete.

D. Water Stops: Rubber Polyvinyl chloride, minimum 1,750 psi tensile strength, minimum 50 degrees F to plus 175 degrees F working temperature range, inch wide, maximum possible lengths, ribbed profile, preformed corner sections, heat welded jointing.

****** OR ******

E. Waterstop: Flexible strip of bentonite waterproofing compound in coil form for joints in concrete construction.
   1. Colloid Environmental Technologies Company Model.
   2. TC MiraDRi Model.
   3. Paramount Technical Products Model.
   4. Substitutions: Section 016000 - Product Requirements Not Permitted.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Verify lines, levels, and centers before proceeding with formwork. Verify dimensions agree with Drawings.

C. When formwork is placed after reinforcement resulting in insufficient concrete cover over reinforcement before proceeding, request instructions from Architect/Engineer.

3.2 INSTALLATION

A. Earth Forms:
   1. Earth forms are not permitted.

B. Formwork - General:
   1. Provide top form for sloped surfaces steeper than 1.5 horizontal to 1 vertical to hold shape of concrete during placement, unless it can be demonstrated that top forms can be omitted.
   2. Construct forms to correct shape and dimensions, mortar-tight, braced, and of sufficient strength to maintain shape and position under imposed loads from construction operations.
   3. Camber forms where necessary to produce level finished soffits unless otherwise shown on Drawings.
   4. Carefully verify horizontal and vertical positions of forms. Correct misaligned or misplaced forms before placing concrete.
   5. Complete wedging and bracing before placing concrete.

C. Forms for Smooth Finish Concrete:
   1. Use steel, plywood or lined board forms.
   2. Use clean and smooth plywood and form liners, uniform in size, and free from surface and edge damage capable of affecting resulting concrete finish.
   3. Install form lining with close-fitting square joints between separate sheets without springing into place.
   4. Use full size sheets of form lines and plywood wherever possible.
   5. Tape joints to prevent protrusions in concrete.
   6. Use care in forming and stripping wood forms to protect corners and edges.
   7. Level and continue horizontal joints.
   8. Keep wood forms wet until stripped.

D. Erect formwork, shoring, and bracing to achieve design requirements, in accordance with requirements of ACI 301 ACI 318.

E. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.

F. Obtain Architect/Engineer’s approval before framing openings in structural members not indicated on Drawings.

G. Install fillet and chamfer strips on external corners of beams joists columns and.

H. Install void forms in accordance with manufacturer's recommendations.
   1. SureVoid Products, Inc., Englewood, CO (800) 458-5444.

I. Do not reuse wood formwork more than times for concrete surfaces to be exposed to view. Do not patch formwork.

3.3 APPLICATION - FORM RELEASE AGENT

A. Apply form release agent on formwork in accordance with manufacturer's recommendations.

B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.

C. Do not apply form release agent where concrete surfaces are indicated to receive special finishes or applied coverings that are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

D. Reuse and Coating of Forms: Thoroughly clean forms and reapply form coating before each reuse. For exposed work, do not reuse forms with damaged faces or edges. Apply form coating to forms in accordance with manufacturer’s specifications. Do not coat forms for concrete indicated to receive “scored finish”. Apply form coatings before placing reinforcing steel.

3.4 INSTALLATION - INSERTS, EMBEDDED PARTS, AND OPENINGS

A. Install formed openings for items to be embedded in or passing through concrete work.

B. Locate and set in place items required to be cast directly into concrete.

C. Coordinate with Work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.

D. Install accessories straight, level, and plumb. Ensure items are not disturbed during concrete placement.

E. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.

F. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.

G. Form Ties:
   1. Use sufficient strength and sufficient quantity to prevent spreading of forms.
   2. Place ties at least 1 inch away from finished surface of concrete.
   3. Leave inner rods in concrete when forms are stripped.
   4. Space form ties equidistant, symmetrical and aligned vertically and horizontally unless otherwise shown on Drawings.

H. Arrangement: Arrange formwork to allow proper erection sequence and to permit form removal without damage to concrete.

I. Construction Joints:
   1. Install surfaced pouring strip where construction joints intersect exposed surfaces to provide straight line at joints.
   2. Just prior to subsequent concrete placement, remove strip and tighten forms to conceal shrinkage.
   3. Show no overlapping of construction joints. Construct joints to present same appearance as butted plywood joints.
   4. Arrange joints in continuous line straight, true and sharp.

J. Openings for Items Passing Through Concrete:
   1. Frame openings in concrete where indicated on Drawings. Establish exact locations, sizes, and other conditions required for openings and attachment of work specified under other sections.
   2. Coordinate work to avoid cutting and patching of concrete after placement.
   3. Perform cutting and repairing of concrete required as result of failure to provide required openings.

K. Screeds:

1. Set screeds and establish levels for tops of concrete slabs and levels for finish on slabs.
2. Slope slabs to drain where required or as shown on Drawings.
3. Before depositing concrete, remove debris from space to be occupied by concrete and thoroughly wet forms. Remove freestanding water.

L. Screed Supports:
1. For concrete over waterproof membranes and vapor retarder membranes, use cradle, pad or base type screed supports which will not puncture membrane.
2. Staking through membrane is not be permitted.

M. Cleanouts and Access Panels:
1. Provide removable cleanout sections or access panels at bottoms of forms to permit inspection and effective cleaning of loose dirt, debris and waste material.
2. Clean forms and surfaces against which concrete is to be placed. Remove chips, saw dust and other debris. Thoroughly blow out forms with compressed air just before concrete is placed.

3.5 FORM CLEANING

A. Clean forms as erection proceeds, to remove foreign matter within forms.

B. Clean formed cavities of debris prior to placing concrete.

C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.

3.6 FORM REMOVAL

A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads and removal has been approved by Architect/Engineer.

B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.

C. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.

D. Leave forms in place for minimum number of days as specified in ACI 347.

3.7 ERECTION TOLERANCES

A. Construct formwork to maintain tolerances required by ACI 301 ACI 318.

****** OR ******

B. Camber slabs and beams 1/4 inch per 10 feet in accordance with ACI 301 ACI 318.

3.8 FIELD QUALITY CONTROL

A. Section 014000 - Quality Requirements 017000 - Execution Requirements: Field inspecting, testing, adjusting, and balancing.

B. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.

C. Notify Architect/Engineer after placement of reinforcing steel in forms, but prior to placing concrete.

D. Schedule concrete placement to permit formwork inspection before placing concrete.

END OF SECTION

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SECTION 03 20 00

CONCRETE REINFORCEMENT

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Reinforcing bars.
2. Welded wire fabric.
3. Reinforcement accessories.

B. Related Sections:
1. Section 031000 - Concrete Forms and Accessories.
2. Section 033000 - Cast-in-Place Concrete.
3. Section 033500 - Concrete: Reinforcement for concrete floor toppings.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 301 - Specifications for Structural Concrete.
2. ACI 318 - Building Code Requirements for Structural Concrete.
3. ACI 530.1 - Specifications for Masonry Structures.
4. ACI SP-66 - ACI Detailing Manual.

B. ASTM International:
1. ASTM A82 - Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.
2. ASTM A184/A184M - Standard Specification for Fabricated Deformed Steel Bar Mats for Concrete Reinforcement.
3. ASTM A496 - Standard Specification for Steel Wire, Deformed, for Concrete Reinforcement.
4. ASTM A497 - Standard Specification for Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement.
5. ASTM A615/A615M - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
6. ASTM A704/A704M - Standard Specification for Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
7. ASTM A706/A706M - Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement.
8. ASTM A767/A767M - Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement.
9. ASTM A775/A775M - Standard Specification for Epoxy-Coated Reinforcing Steel Bars.
10. ASTM A884/A884M - Standard Specification for Epoxy-Coated Steel Wire and Welded Wire Fabric for Reinforcement.

11. ASTM A934/A934M - Standard Specification for Epoxy-Coated Prefabricated Steel Reinforcing Bars.
12. ASTM A996/A996M - Standard Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement.
13. ASTM D3963/D3963M - Standard Specification for Fabrication and Jobsite Handling of Epoxy-Coated Reinforcing Steel Bars.

C. American Welding Society:
1. AWS D1.4 - Structural Welding Code - Reinforcing Steel.

D. Concrete Reinforcing Steel Institute:
1. CRSI - Manual of Standard Practice.
2. CRSI - Placing Reinforcing Bars.

1.3 SUBMITTALS

A. Section 013300 - Submittal Procedures: Submittal procedures.

B. Shop Drawings: Indicate bar sizes, spacings, locations, and quantities of reinforcing steel and welded wire fabric, bending and cutting schedules, and supporting and spacing devices.

C. Certificates: Submit AWS qualification certificate for welders employed on the Work.

D. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.
1. Submit certified copies of mill test report of reinforcement materials analysis.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with CRSI - Manual of Standard Practice, ACI 301, and ACI 318.

B. Prepare shop drawings in accordance with ACI SP-66.

1.5 QUALIFICATIONS

A. Welders: AWS qualified within previous 12 months.

1.6 COORDINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Coordinate with placement of formwork, formed openings and other Work.

PART 2 PRODUCTS

2.1 REINFORCEMENT

A. Deformed and Plain Reinforcement: ASTM A615/A615M; 60 ksi yield strength, steel bars, unfinished.

2.2 ACCESSORY MATERIALS

A. Tie Wire: Minimum 16 gage annealed.

B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions including load bearing pad on bottom to prevent vapor retarder puncture.

C. Special Chairs, Bolsters, Bar Supports, Spacers Adjacent to Weather Exposed Concrete Surfaces: Plastic tipped steel; size and shape to meet Project conditions.

D. Reinforcing Splicing Devices: Mechanical type; full tension and compression; sized to fit joined reinforcing.

E. Epoxy Coating Patching Material: Type as recommended by coating manufacturer.

2.3 FABRICATION

A. Fabricate concrete reinforcement in accordance with CRSI Manual of Practice, and ACI 318, on and all applicable codes.

B. Form standard hooks for 180 degree bends, 90 degree bend, stirrup and tie hooks, and seismic hooks as indicated on Drawings.

C. Form reinforcement bends with minimum diameters in accordance with ACI 318 and all applicable codes.

D. Fabricate column reinforcement with offset bends at reinforcement splices.

E. Form spiral column reinforcement from minimum 3/8 inch diameter continuous deformed bar or wire.

F. Form ties and stirrups from the following:
   1. For bars No. 10 and Smaller: No. 3 deformed bars.
   2. For bars No. 11 and Larger: No. 4 deformed bars.

G. Weld reinforcement in accordance with AWS D1.4.

H. Galvanized Epoxy-Coated Reinforcement: Clean surfaces, weld and re-protect welded joint in accordance with CRSI.

I. Locate reinforcement splices not indicated on Drawings, at point of minimum stress. Review location of splices with Architect/Engineer.

2.4 SOURCE QUALITY CONTROL

A. Section 014000 - Quality Requirements: Testing, inspection and analysis requirements.

B. Make completed reinforcement available for inspection at manufacturer's factory prior to packaging for shipment. Notify Architect/Engineer at least seven days before inspection is allowed.

C. When fabricator is approved by authority having jurisdiction, submit certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.
1. Specified shop tests are not required for Work performed by approved fabricator.

PART 3 EXECUTION

3.1 PLACEMENT

A. Place, support and secure reinforcement against displacement. Do not deviate from required position beyond specified tolerance.
1. Do not weld crossing reinforcement bars for assembly.

B. Do not displace or damage vapor retarder.

C. Accommodate placement of formed openings.

D. Space reinforcement bars with minimum clear spacing in accordance with ACI 318 of one bar diameter, but not less than 1 inch.
1. Where bars are indicated in multiple layers, place upper bars directly above lower bars.

E. Maintain concrete cover around reinforcement in accordance with ACI 318 applicable code as follows:

Footings and Concrete Formed Against Earth		3 inches
Concrete exposed to earth or weather	No. 6 bars and larger	2 inches
	No. 5 bars and smaller	1-1/2 inches
Supported Slabs, Walls, and Joists	No. 14 bars and larger	1-1/2 inches
	No. 11 bars and smaller	3/4 inches
Beams and Columns		1-1/2 inches

Shell and Folded Plate Members	No. 6 bars and larger	3/4 inches
	No. 5 bars and smaller	1/2 inches

3.2 ERECTION TOLERANCES

A. Section 014000 - Quality Requirements: Tolerances.

B. Install reinforcement within the following tolerances for flexural members, walls, and compression members:

Reinforcement Depth	Depth Tolerance	Concrete Cover Tolerance
Greater than 8 inches	plus or minus 3/8 inch	minus 3/8 inch
Less than 8 inches	plus or minus 1/2 inch	minus 1/2 inch

C. Install reinforcement within the tolerances specified in ACI 530.1 for foundation walls.

3.3 FIELD QUALITY CONTROL

A. Section 014000 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Field inspection and testing will be performed by Owner's testing laboratory in accordance with ACI 318 and IBC 2006.

C. Provide free access to Work and cooperate with appointed firm.

D. Reinforcement Inspection:
1. Placement Acceptance: Specified and ACI 318 material requirements and specified placement tolerances.
2. Welding: Inspect welds in accordance with AWS D1.1.
3. Periodic Placement Inspection: Inspect for correct materials, fabrication, sizes, locations, spacing, concrete cover, and splicing.
4. Weldability Inspection: Inspect for reinforcement weldability when formed from steel other than ASTM A706/A706M.
5. Continuous Weld Inspection: Inspect reinforcement as required by ACI 318.
6. Periodic Weld Inspection: Other welded connections.

3.4 SCHEDULES

A. Reinforcement For Superstructure Framing Members: Deformed bars, unfinished.

B. Reinforcement For Foundation Wall Framing Members and Slab-on-Grade:Deformed bars and wire fabric, galvanized finish.

C. Reinforcement For Parking Structure Framing Members: Deformed bars, epoxy-coated finish.

END OF SECTION

SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 SUMMARY

A. Section includes cast-in-place concrete for the following:
   1. Foundation walls.
   2. Supported slabs.
   3. Slabs on grade.
   4. Control, expansion and contraction joint devices.
   5. Equipment pads.
   6. Light pole base.
   7. Flagpole base.

B. Related Sections:
   1. Section 031000 - Concrete Forms and Accessories: Formwork and accessories. Placement of joint device joint device anchors in formwork.
   2. Section 032000 - Concrete Reinforcement.
   3. Section 033500 - Concrete Finishing.
   4. Section 033900 - Concrete Curing.

1.2 REFERENCES

A. American Concrete Institute:
   1. ACI 301 - Specifications for Structural Concrete.
   2. ACI 305 - Hot Weather Concreting.
   3. ACI 306.1 - Standard Specification for Cold Weather Concreting.
   4. ACI 308.1 - Standard Specification for Curing Concrete.
   5. ACI 318 - Building Code Requirements for Structural Concrete.

B. ASTM International:
   1. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
   2. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
   3. ASTM C33 - Standard Specification for Concrete Aggregates.
   4. ASTM C39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
   5. ASTM C42/C42M - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
   6. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
   7. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic Cement Concrete.
   8. ASTM C150 - Standard Specification for Portland Cement.

9. ASTM C172 - Standard Practice for Sampling Freshly Mixed Concrete.
10. ASTM C173/C173M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
11. ASTM C231 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
12. ASTM C260 - Standard Specification for Air-Entraining Admixtures for Concrete.
13. ASTM C330 - Standard Specification for Lightweight Aggregates for Structural Concrete.
14. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete.
15. ASTM C595 - Standard Specification for Blended Hydraulic Cements.
16. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.
17. ASTM C685/C685M - Standard Specification for Concrete Made By Volumetric Batching and Continuous Mixing.
18. ASTM C845 - Standard Specification for Expansive Hydraulic Cement.
19. ASTM C989 - Standard Specification for Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars.
20. ASTM C1017/C1017M - Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete.
21. ASTM C1064/C1064M - Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete.
22. ASTM C1107 - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
23. ASTM C1116 - Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
24. ASTM C1157 - Standard Performance Specification for Hydraulic Cement.
25. ASTM C1218 - Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.
26. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures.
27. ASTM D994 - Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).
28. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
29. ASTM D1752 - Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
30. ASTM D6690 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
31. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
32. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
33. ASTM E1643 - Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill under Concrete Slabs.

34. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.

1.3 PERFORMANCE REQUIREMENTS

A. Vapor Retarder Permeance: Maximum .03 perm when tested in accordance with ASTM E96.

1.4 SUBMITTALS

A. Section 013300 - Submittal Procedures: Submittal procedures.

B. Product Data: Submit data on joint devices, attachment accessories, admixtures.

C. Design Data:
1. Submit concrete mix design for each concrete strength. Submit separate mix designs when admixtures are required for the following:
a. Hot and cold weather concrete work.
b. Air entrained concrete work.
2. Identify mix ingredients and proportions, including admixtures.

3. Identify chloride content of admixtures and whether or not chloride was added during manufacture.

D. Manufacturer's Installation Instructions: Submit installation procedures and interface required with adjacent Work.

1.5 CLOSEOUT SUBMITTALS

A. Section 017000 - Execution Requirements: Closeout procedures.

B. Project Record Documents: Accurately record actual locations of embedded utilities and components concealed from view in finished construction.

1.6 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 301 and ACI 318.

B. Conform to ACI 305 when concreting during hot weather.

C. Conform to ACI 306.1 when concreting during cold weather.

D. Acquire cement and aggregate from one source for Work.

1.7 COORDINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Coordinate placement of joint devices with erection of concrete formwork and placement of form accessories.

1.8 ENVIRONMENTAL REQUIREMENTS

A. Section 016000 - Product Requirements: Environmental conditions affecting products on site.

B. Maintain concrete temperature after installation at minimum 50 degrees F for minimum 7 days.

1.9 COORDINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Coordinate placement of joint devices with erection of concrete formwork and placement of form accessories.

PART 2 PRODUCTS

2.1 CONCRETE MATERIALS

A. Cement: ASTM C150, Type I - Normal

B. Normal Weight Aggregates: ASTM C33.
1. Coarse Aggregate Maximum Size: 1.5

C. Water: ACI 318; potable, without deleterious amounts of chloride ions.

2.2 ADMIXTURES

A. Air Entrainment: ASTM C260.

B. Fly Ash: ASTM C618 type C or F.

C. Silica Fume: ASTM C1240.

2.3 ACCESSORIES

A. Vapor Retarder: ASTM E1745 Class A; 10 mil thick; type recommended for below grade application. Furnish joint tape recommended by manufacturer.

B. Non-Shrink Grout: ASTM C1107, premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 2,400 psi in 48 hours and 7,000 psi in 28 days.

2.4 JOINT DEVICES AND FILLER MATERIALS

A. Joint Filler; Asphalt impregnated fiberboard or felt, tongue and groove profile.

****** OR ******

B. Joint Filler: ASTM D1752; Closed cell, resiliency of 95 percent if not compressed more than 50 percent of original thickness.

C. Sealant: ASTM C309, Type I approved by Asphalt and Vinyl composition Tile Institute, 30% minimum solids content.

2.5 CONCRETE MIX

A. Select proportions for normal weight concrete in accordance with ACI 301 Method 1

B. Provide concrete for the following criteria:

Material and Property	Measurement
Compressive Strength (7 day)	2100 psi
Compressive Strength (28 day)	3000 psi
Cement Type	ASTM C150
Aggregate Size (maximum)	1.5 inch
Air Content	Do not use air entrainment for concrete mixes.
Slump	5 inches

C. Admixtures: Include admixture types and quantities indicated in concrete mix designs only when approved by Architect/Engineer.
   1. Use accelerating admixtures in cold weather. Use of admixtures will not relax cold weather placement requirements.
   2. Do not use calcium chloride nor admixtures containing calcium chloride.
   3. Use set retarding admixtures during hot weather.

D. Site Mixed Concrete: No site mixed concrete is allowed.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Verify requirements for concrete cover over reinforcement.

C. Verify anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with placing concrete.

3.2 PREPARATION

A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent. Remove laitance, coatings, and unsound materials.

B. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.

C. Remove debris and ice from formwork, reinforcement, and concrete substrates.

D. Remove water from areas receiving concrete before concrete is placed.

3.3 PLACING CONCRETE

A. Place concrete in accordance with ACI 301.

B. Notify testing laboratory and Architect/Engineer minimum 24 hours prior to commencement of operations.

C. Ensure reinforcement, inserts, embedded parts, formed expansion and contraction joints, and are not disturbed during concrete placement.

D. Install vapor retarder under interior slabs on grade in accordance with ASTM E1643. Lap joints minimum 6 inches and seal watertight by adhesive applied between overlapping edges and ends as per manufacturer recommendations.

E. Repair vapor retarder damaged during placement of concrete reinforcing. Repair with vapor retarder material; lap over damaged areas minimum 6 inches and seal watertight.

F. Install construction joint devices in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.

G. Install joint device anchors. Maintain correct position to allow joint cover to be flush with floor finish.

H. Install joint covers in one piece longest practical length, when adjacent construction activity is complete.

I. Deposit concrete at final position. Prevent segregation of mix.

J. Place concrete in continuous operation for each panel or section determined by predetermined joints.

K. Consolidate concrete.

L. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

M. Place concrete continuously between predetermined expansion, control, and construction joints.

N. Do not interrupt successive placement; do not permit cold joints to occur.

O. Saw cut joints within 12 hours after placing. Use 3/16 inch thick blade, cut into 1/4 depth of slab thickness.

P. Screed floors and slabs on grade level, maintaining surface flatness of F_f of 35.

3.4 CONCRETE FINISHING

A. Finish concrete floor surfaces to requirements of Section 03350.

B. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains.

3.5 CURING AND PROTECTION

A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
   1. Protect concrete footings from freezing for minimum 5 days.

B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

C. Cure floor surfaces as specified in Section 03390.

D. Ponding: Maintain 100 percent coverage of water over floor slab areas continuously for 7 days.

E. Spraying: Spray water over floor slab areas and maintain wet for 7 days.

3.6 FIELD QUALITY CONTROL

A. Section 014000 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Field inspection and testing will be performed by Owner's testing laboratory in accordance with ACI 318

C. Provide free access to Work and cooperate with appointed firm.

D. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of Work.

E. Concrete Inspections:
   1. Continuous Placement Inspection: Inspect for proper installation procedures.
   2. Periodic Curing Inspection: Inspect for specified curing temperature and procedures.

F. Strength Test Samples:
   1. Sampling Procedures: ASTM C172.
   2. Cylinder Molding and Curing Procedures: ASTM C31/C31M, cylinder specimens, standard cured field cured.
   3. Sample concrete and make one set of three cylinders for every 150 cu yds or less of each class of concrete placed each day and for every 5,000 sf of surface area for slabs and walls.
   4. When volume of concrete for any class of concrete would provide less than 3 sets of cylinders, take samples from three randomly selected batches, or from every batch when less than 3 batches are used.
   5. Make one additional cylinder during cold weather concreting, and field cure.

G. Field Testing:
   1. Slump Test Method: ASTM C143/C143M.
   2. Air Content Test Method: ASTM C173/C173M.
   3. Temperature Test Method: ASTM C1064/C1064M.
   4. Measure slump and temperature for each compressive strength concrete sample.
   5. Measure air content in air entrained concrete for each compressive strength concrete sample.

H. Cylinder Compressive Strength Testing:
   1. Test Method: ASTM C39.
   2. Test Acceptance: In accordance with ACI 318 .
   3. Test one cylinder at 7 days.
   4. Test two cylinders at 28 days.
   5. Dispose remaining cylinders when testing is not required.

I. Core Compressive Strength Testing:
   1. Sampling and Testing Procedures: ASTM C42/C42M.
   2. Test Acceptance: In accordance with ACI 318.
   3. Drill three cores for each failed strength test from concrete represented by failed strength test.

J. Water Soluble Chloride Ion Concentration Test Method: ASTM C1218; tested at 28 days.
   1. Maximum Concentration: As permitted by applicable code.

K. Maintain records of concrete placement. Record date, location, quantity, air temperature and test samples taken.

3.7 PATCHING

A. Allow Architect/Engineer to inspect concrete surfaces immediately upon removal of forms.

B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Architect/Engineer upon discovery.

C. Patch imperfections as directed by Architect/Engineer

3.8 DEFECTIVE CONCRETE

A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.

B. Repair or replacement of defective concrete will be determined by Architect/Engineer.

C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect/Engineer for each individual area.

3.9 SCHEDULE - CONCRETE TYPES AND FINISHES

A. Foundation Walls: 3,000 psi 28 day concrete, form finish with honeycomb filled surface.

B. Underside of Supported Floors and Structure Exposed to View: 4,000 psi 28 day concrete, sack rubbed finish.

C. Exposed Portico Structure: 4,000 psi 28 day concrete, air entrained, smooth stone rubbed finish.

3.10 SCHEDULE - JOINT FILLERS

A. Basement Floor Slab Perimeter:Joint filler Type A set 1/8 inch below floor slab elevation.

B. Exterior Retaining Wall at Loading Dock: Joint filler Type F recessed 3/8 inch with sealant cover.

END OF SECTION

SECTION 03 35 00

CONCRETE FINISHING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Finishing concrete floors [and floor toppings].
2. Floor surface treatment.

B. Related Sections:
1. Section 033000 - Cast-in-Place Concrete: [Prepared concrete floors ready to receive finish;] [control and formed expansion and contraction joints and joint devices].
2. Section 03360 - Concrete Finishes: Exposed aggregate finish.
3. Section 033900 - Concrete Curing.
4. Section 079513 - Expansion Joint Cover Assemblies.
5. Section 079200 - Joint Sealers.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 301 - Specifications for Structural Concrete.
2. ACI 302.1 - Guide for Concrete Floor and Slab Construction.

B. ASTM International:
1. ASTM E1155 - Standard Test Method for Determining Floor Flatness and of Levelness Using the F-number System.

1.3 SUBMITTALS

A. Section 013300 - Submittal Procedures: Submittal procedures.

B. Product Data: Submit data on concrete hardener, sealer, curing compounds curing papers and slip resistant treatment, compatibilities, and limitations.

1.4 CLOSEOUT SUBMITTALS

A. Section 017000 - Execution Requirements: Closeout procedures.

B. Operation and Maintenance Data: Submit data on maintenance renewal of applied coatings.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 301 and ACI 302.1.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Section 016000 - Product Requirements: Product storage and handling requirements.

B. Deliver materials in manufacturer's packaging including application instructions.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Section 016000 - Product Requirements: Environmental conditions affecting products on site.

1.8 COMPOUNDS - HARDENERS AND SEALERS

A. Chemical Hardener: Magnesium fluorosilicate and zinc fluorosilicate blend

PART 2 EXECUTION

2.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Verify floor surfaces are acceptable to receive the Work of this section.

2.2 FLOOR FINISHING

A. Finish concrete floor surfaces in accordance with ACI 301 and ACI 302.1.

B. Wood float surfaces receiving quarry tile, ceramic tile, and cementitious terrazzo with full bed setting system.

C. Steel trowel surfaces receiving carpeting, resilient flooring, seamless flooring, thin set terrazzo, thin set quarry tile, and thin set ceramic tile.

D. Steel trowel surfaces which are scheduled to be exposed.

2.3 TOLERANCES

A. Section 014000 - Quality Requirements: Tolerances.

B. Measure for F(F) and F(L) tolerances for floors in accordance with ASTM E1155, within 48 hours after slab installation.

C. Finish concrete to achieve the following tolerances:
1. Under Glazed Tile on Setting Bed: F(F) 35 and F(L) 20.

2. Under Resilient Finishes: F(F) 75 and F(L) 50.
3. Exposed to View and Foot Traffic: F(F) 75 and F(L) 40.
4. Correct slab surface when actual F(F) or F(L) number for floor installation measures less than required.

D. Correct defects in defined traffic floor by grinding or removal and replacement of defective Work. Areas requiring corrective Work will be identified. Re-measure corrected areas by same process.

END OF SECTION

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SECTION 03 39 00

CONCRETE CURING

PART 1 GENERAL

1.1 SUMMARY

A. Section includes initial and final curing of horizontal and vertical concrete surfaces.

B. Related Sections:
1. Section 033000 - Cast-In-Place Concrete.
2. Section 033500 - Concrete Finishing.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 301 - Specifications for Structural Concrete.
2. ACI 302.1 - Guide for Concrete Floor and Slab Construction.
3. ACI 308.1 - Standard Specification for Curing Concrete.
4. ACI 318 - Building Code Requirements for Structural Concrete.

B. ASTM International:
1. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete.
2. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
3. ASTM C1315 - Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.
4. ASTM D2103 - Standard Specification for Polyethylene Film and Sheeting.

1.3 SUBMITTALS

A. Section 013300 - Submittal Procedures: Submittal procedures.

B. Product Data: Submit data on curing compounds, mats, paper, film, compatibilities, and limitations.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 301.

PART 2 PRODUCTS

2.1 MATERIALS

A. Membrane Curing Compound Type 1.

B. Membrane Curing Compound: ASTM C1315 Type I.

C. Water: Potable, not detrimental to concrete.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Verify substrate surfaces are ready to be cured.

3.2 INSTALLATION - HORIZONTAL SURFACES

A. Cure concrete in accordance with ACI 308.1.

B. Ponding: Maintain 100 percent coverage of water over floor slab areas, continuously for 4 days.

****** [OR] ******

C. Spraying: Spray water over floor slab areas and maintain wet for 7 days.

****** [OR] ******

D. Absorptive Mat: Spread cotton fabric over floor slab areas. Spray with water until mats are saturated, and maintain in saturated condition for 7 days.

****** [OR] ******

E. Absorptive Mat: Saturate burlap-polyethylene and place burlap-side down over floor slab areas, lapping ends and sides; maintain in place for 7 days.

3.3 PROTECTION OF FINISHED WORK

A. Section 017000 - Execution Requirements: Protecting finished Work.

B. Do not permit traffic over unprotected floor surface.

3.4 SCHEDULES

A. Storage Area Slabs: Absorptive mats, burlap-polyethylene type.

B. Retaining Walls: Membrane curing compound, acrylic type, clear color.

C. Concrete Pavement: Membrane curing compound, opaque color.

D. Other Floor Areas: Membrane curing compound, acrylic type, translucent color.

END OF SECTION

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SECTION 03 60 00

GROUT

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Portland cement grout.
2. Rapid curing epoxy grout.
3. Non-shrink cementitious grout.

B. Related Sections:
1. Section 033000 - Cast-in-Place Concrete.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 301 - Specifications for Structural Concrete.
2. ACI 318 - Building Code Requirements for Structural Concrete.

B. American Society of Testing and Materials:
1. ASTM C33 - Standard Specification for Concrete Aggregates.
2. ASTM C40 - Test Method for Organic Impurities in Fine Aggregates for Concrete.
3. ASTM C150 - Standard Specification for Portland Cement.
4. ASTM C191 - Test Method for Time of Setting of Hydraulic Cement by Vicat Needle.
5. ASTM C307 - Test Method for Tensile Strength of Chemical-Resistant Mortar, Grouts, and Monolithic Surfacings.
6. ASTM C531 - Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings, and Polymer Concretes.
7. ASTM C579 - Test Method for Compressive Strength of Chemical-Resistant Mortars, Grouts, monolithic Surfacings and Polymer Concretes.
8. ASTM C827 - Test Method for Change in Height at Early Ages of Cylindrical Specimens from Cementitious Mixtures.

C. U. S. Army Corps of Engineers Concrete Research Division (CRD):
1. CRD C621 - Non-Shrink Grout.

PART 2 PRODUCTS

2.1 PORTLAND CEMENT GROUT MATERIALS

A. Portland Cement: ASTM C150, Type I and II.

B. Water:
1. Potable; containing no impurities, suspended particles, algae or dissolved natural salts in quantities capable of causing:
a. Corrosion of steel.
b. Volume change increasing shrinkage cracking.
c. Efflorescence.
d. Excess air entraining.

C. Fine Aggregate:
1. Washed natural sand.
2. Gradation in accordance with ASTM C33 and represented by smooth granulometric curve within required limits.
3. Free from injurious amounts of organic impurities as determined by ASTM C40.

D. Mix:
1. Portland cement, sand and water. Do not use ferrous aggregate or staining ingredients in grout mixes.

2.2 RAPID CURING EPOXY GROUT

A. Rapid Curing Epoxy Grout: High strength, three component epoxy grout formulated with thermosetting resins and inert fillers. Rapid-curing, high adhesion, and resistant to ordinary chemicals, acids and alkalies.

Compressive Strength	ASTM C579	12,000 psi at 7 days
Tensile Strength	ASTM C307	2,000 psi minimum
Coefficient of Expansion	ASTM C531	30x10-6 in per degree F
Shrinkage	ASTM C827	None

2.3 NON-SHRINK CEMENTITIOUS GROUT

A. Properties: Certified to maintain initial placement volume or expand after set and meet the following minimum properties when tested in accordance with CRD-C621, for Type D non-shrink grout:

Property	Test	Time	Result
Setting Time	ASTM C191	Initial	2 hours (Approx)
		Final	3 hours (Approx)
Expansion			0.10% - 0.4% Maximum

Compressive Strength	CRD-C621	1 day	4,000 psi
		7 days	7,000 psi
		28 days	10,000 psi to 10,800 psi

2.4 FORMWORK

A. Refer to Section 031000 for formwork requirements.

2.5 CURING

A. Prevent rapid loss of water from grout during first 48 hours by use of approved membrane curing compound or with use of wet burlap method.

PART 3 EXECUTION

3.1 PREPARATION

A. Remove defective concrete, laitance, dirt, oil, grease and other foreign material from concrete surfaces by brushing, hammering, chipping or other similar means until sound, clean concrete surface is achieved.

B. Rough concrete lightly, but not enough to interfere with placement of grout.

C. Remove foreign materials from metal surfaces in contact with grout.

D. Align, level and maintain final positioning of components to be grouted.

E. Saturate concrete surfaces with clean water; remove excess water, leave none standing.

3.2 MIXING

A. Portland Cement Grout:
   1. Use proportions of 2 parts sand and 1 part cement, measured by volume.
   2. Prepare grout with water to obtain consistency to permit placing and packing.
   3. Mix water and grout in two steps; pre-mix using approximately 2/3 of water;after partial mixing, add remaining water to bring mix to desired placement consistency and continue mixing 2 to 3 minutes.
   4. Mix only quantities of grout capable of being placed within 30 minutes after mixing.
   5. Do not add additional water after grout has been mixed.
   6. Capable of developing minimum compressive strength of 2400 psi in 48 hours and 7000 psi in 28 days.

****** [OR] ******

3.3 PLACING GROUT

A. Place grout material quickly and continuously.

B. Do not use pneumatic-pressure or dry-packing methods.

C. Apply grout from one side only to avoid entrapping air.

D. Do not vibrate placed grout mixture, or permit placement when area is being vibrated by nearby equipment.

E. Thoroughly compact final installation and eliminate air pockets.

F. Do not remove leveling shims for at least 48 hours after grout has been placed.

3.4 CURING

A. Immediately after placement, protect grout from premature drying, excessively hot or cold temperatures, and mechanical injury.

B. After grout has attained its initial set, keep damp for minimum of 3 days.

3.5 FIELD QUALITY CONTROL

A. Submit proposed mix design of each class of grout to inspection and testing firm for review prior to commencement of Work.

B. Tests of grout components may be performed to ensure conformance with specified requirements.

END OF SECTION

SECTION 04 05 14

MASONRY MORTAR AND GROUT

PART 1 GENERAL

1.1 SUMMARY

A. Section includes mortar and grout for masonry.

B. Related Sections:
1. Section 042000 - Unit Masonry Assemblies: Installation of mortar and grout.
2. Section 042016 - Reinforced Unit Masonry Assemblies: Installation of mortar and grout.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 530 - Building Code Requirements for Masonry Structures.
2. ACI 530.1 - Specifications for Masonry Structures.

B. ASTM International:
1. ASTM C5 - Standard Specification for Quicklime for Structural Purposes.
2. ASTM C91 - Standard Specification for Masonry Cement.
3. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
4. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic Cement Concrete.
5. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar.
6. ASTM C150 - Standard Specification for Portland Cement.
7. ASTM C199 - Standard Test Method for Pier Test for Refractory Mortars.
8. ASTM C206 - Standard Specification for Finishing Hydrated Lime.
9. ASTM C270 - Standard Specification for Mortar for Unit Masonry.
10. ASTM C387 - Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete.
11. ASTM C404 - Standard Specification for Aggregates for Masonry Grout.
12. ASTM C476 - Standard Specification for Grout for Masonry.
13. ASTM C595 - Standard Specification for Blended Hydraulic Cements.
14. ASTM C780 - Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry.
15. ASTM C1019 - Standard Test Method for Sampling and Testing Grout.
16. ASTM C1142 - Standard Specification for Extended Life Mortar for Unit Masonry.
17. ASTM C1314 - Standard Test Method for Constructing and Testing Masonry Prisms Used to Determine Compliance with Specified Compressive Strength of Masonry.
18. ASTM C1329 - Standard Specification for Mortar Cement.
19. ASTM C1357 - Standard Test Method for Evaluating Masonry Bond Strength.

1.3 SUBMITTALS

A. Section 01330 - Submittal Procedures: Submittal requirements.

B. Design Data: Submit design mix when Property specification of ASTM C270 is to be used, required environmental conditions, and admixture limitations.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 530 and ACI 530.1.

1.5 ENVIRONMENTAL REQUIREMENTS

A. Section 016000 - Product Requirements.

B. Cold Weather Requirements: In accordance with ACI 530.1 when ambient temperature or temperature of masonry units is less than 40 degrees F.

C. Hot Weather Requirements: In accordance with ACI 530.1 when ambient temperature is greater than 100 degrees F or ambient temperature is greater than 90 degrees F with wind velocity greater than 8 mph.

PART 2 PRODUCTS

2.1 COMPONENTS

A. Portland Cement: ASTM C150, Type I

B. Calcium chloride is not permitted.

2.2 MIXES

A. Mortar Mixes:
   1. Extended Life Mortar: ASTM C1142, Type RS

B. Mortar Mixing:
   1. Thoroughly mix mortar ingredients in accordance with ASTM C270 in quantities needed for immediate use.
   2. Achieve uniformly damp sand immediately before mixing process.
   3. Re-temper only within two hours of mixing.

C. Grout Mixes:
   1. Grout for Non-Structural Masonry: 3,000 psi strength at 28 days; 8-11 inches slump; mixed in accordance with ASTM C476 grout.
   2. Grout for Structural Masonry: 3,000 psi strength at 28 days; 8-11 inches slump; mixed in accordance with ASTM C476 grout.

3. Application:
    a. Coarse Grout: For grouting spaces with minimum 4 inches dimension in every direction.
    b. Fine Grout: For grouting other spaces.

D. Grout Mixing:
1. Mix grout in accordance with ASTM C94/C94M, modified to use ingredients complying with ASTM C476.
2. Add admixtures; mix uniformly.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Request inspection of spaces to be grouted.

3.2 INSTALLATION

A. Install mortar and grout in accordance with ACI 530.1 Specifications for Masonry Structures.

3.3 FIELD QUALITY CONTROL

A. Establishing Mortar Mix: In accordance with ASTM C270.

B. Testing Frequency: One set of specified tests for every 5,000 sf of completed wall area.

C. Testing of Mortar Mix: In accordance with ASTM C780 for aggregate ratio and water content, air content, consistency, and compressive strength.

D. Testing of Grout Mix: In accordance with ASTM C1019 for compressive strength, and in accordance with ASTM C143/C143M for slump.

E. Test compressive strength of mortar and masonry to ASTM C1314; test in accordance with masonry unit sections specified.

END OF SECTION

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SECTION 04 20 16

REINFORCED UNIT MASONRY ASSEMBLIES

PART 1 GENERAL

1.1 SUMMARY

A. Section includes concrete masonry units, reinforcement, anchorage, and accessories.

B. Related Sections:
1. Section 040514 - Masonry Mortar and Grout: Mortar and grout.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 530 - Building Code Requirements for Masonry Structures.
2. ACI 530.1 - Specifications for Masonry Structures.

B. ASTM International:
1. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
2. ASTM A240/A240M - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
3. ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength.
4. ASTM A580/A580M - Standard Specification for Stainless Steel Wire.
5. ASTM A615/A615M - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
6. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
7. ASTM A951 - Standard Specification for Masonry Joint Reinforcement.
8. ASTM B370 - Standard Specification for Copper Sheet and Strip for Building Construction.
9. ASTM B695 - Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel.
10. ASTM C27 - Standard Classification of Fireclay and High-Alumina Refractory Brick.
11. ASTM C34 - Standard Specification for Structural Clay Load-Bearing Wall Tile.
12. ASTM C55 - Standard Specification for Concrete Brick.
13. ASTM C56 - Standard Specification for Structural Clay Non-Load-Bearing Tile.
14. ASTM C62 - Standard Specification for Building Brick (Solid Masonry Units Made From Clay or Shale).
15. ASTM C67 - Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile.

16. ASTM C73 - Standard Specification for Calcium Silicate Face Brick (Sand-Lime Brick).
17. ASTM C90 - Standard Specification for Loadbearing Concrete Masonry Units.
18. ASTM C126 - Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units.
19. ASTM C129 - Standard Specification for Nonloadbearing Concrete Masonry Units.
20. ASTM C140 - Standard Test Methods of Sampling and Testing Concrete Masonry Units.
21. ASTM C212 - Standard Specification for Structural Clay Facing Tile.
22. ASTM C216 - Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale).
23. ASTM C315 - Standard Specification for Clay Flue Linings.
24. ASTM C530 - Standard Specification for Structural Clay Non-Loadbearing Screen Tile.
25. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
26. ASTM C652 - Standard Specification for Hollow Brick (Hollow Masonry Units Made From Clay or Shale).
27. ASTM C744 - Standard Specification for Prefaced Concrete and Calcium Silicate Masonry Units.
28. ASTM C1261 - Standard Specification for Firebox Brick for Residential Fireplaces.
29. ASTM C1283 - Standard Practice for Installing Clay Flue Lining.
30. ASTM D226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
31. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
32. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.

C. National Fire Protection Association:
1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials.

D. Underwriters Laboratories Inc.:
1. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

1.3 PERFORMANCE REQUIREMENTS

A. Concrete Masonry Compressive Strength
1. Concrete Masonry Units: 1900 psi minimum net area compressive strength.

1.4 SUBMITTALS

A. Section 013300 - Submittal Procedures: Submittal requirements.

B. Shop Drawings: Indicate bars sizes, spacings, locations, reinforcement quantities, bending and cutting schedules, supporting and spacing devices for reinforcement.

C. Product Data:
   1. Submit data for masonry units and fabricated wire reinforcement.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with ACI 530 and ACI 530.1.

1.6 QUALIFICATIONS

A. Installer: Company specializing in performing Work of this section with minimum three years experience.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Section 016000 - Product Requirements.

B. Cold Weather Requirements: In accordance with ACI 530.1 when ambient temperature or temperature of masonry units is less than 40 degrees F.

C. Hot Weather Requirements: In accordance with ACI 530.1 when ambient temperature is greater than 100 degrees F or ambient temperature is greater than 90 degrees F with wind velocity greater than 8 mph.

PART 2 PRODUCTS

2.1 COMPONENTS

A. Hollow Load Bearing Concrete Masonry Units (CMU): ASTM C90; normal weight.

2.2 ACCESSORIES

A. Single Wythe Joint Reinforcement: ASTM A951; ladder type; 0.148 inch diameter side rods with 0.148 inch diameter cross ties.

B. Reinforcing Steel: ASTM A615/A615M, 60 ksi yield grade, deformed billet bars.

C. Anchor Rods: ASTM A307; Grade C; J-shaped or L-shaped; complete with washers and heavy hex nuts; sized for minimum 15 inch embedment.
   1. Hot-Dipped Galvanizing: ASTM A153/A153M.
   2. Mechanical Galvanizing: ASTM B695; Class 55.

D. Mortar and Grout: As specified in Section 04065.

E. Joint Filler: Closed cell rubber; oversized 50 percent to joint width; self expanding.

2.3 SOURCE QUALITY CONTROL

A. Section 014000 - Quality Requirements: Testing, inspection and analysis requirements.

B. Test brick efflorescence in accordance with ASTM C67. Brick rated greater than "slightly effloresced" is not acceptable.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Verify field conditions are acceptable and are ready to receive work.

C. Verify items provided by other sections of work are properly sized and located.

D. Verify built-in items are in proper location, and ready for roughing into masonry work.

3.2 PREPARATION

A. Direct and coordinate placement of metal anchors supplied to other Sections.

B. Furnish temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent support.

C. Wet clay and shale brick before laying when initial rate of absorption is greater than 30 grams when tested in accordance with ASTM C67.

3.3 INSTALLATION

A. Establish lines, levels, and coursing indicated. Protect from displacement.

B. Maintain masonry courses to uniform dimension. Form bed and head joints of uniform thickness.

C. Coursing of Concrete Masonry Units:
1. Bond: Running.
2. Coursing: One unit and one mortar joint to equal 8 inches.
3. Mortar Joints: Concave.

D. Placing And Bonding:
1. Lay solid masonry units in full bed of mortar, with full head joints.
2. Lay hollow masonry units with face shell bedding on head and bed joints.

3. Buttering corners of joints or excessive furrowing of mortar joints are not permitted.
4. Remove excess mortar as Work progresses.
5. Interlock intersections and external corners.
6. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment is required, remove mortar and replace.
7. Perform job site cutting of masonry units with proper tools to assure straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.
8. Isolate masonry from vertical structural framing members with movement joint .
9. Isolate top of masonry from horizontal structural framing members and slabs or decks.

E. Joint Reinforcement And Anchorage:
1. Install horizontal joint reinforcement 16 inches oc.
2. Place masonry joint reinforcement in first and second horizontal joints above and below openings. Extend minimum 16 inches each side of opening.
3. Place joint reinforcement continuous in first and second joint below top of walls.
4. Lap joint reinforcement ends minimum 6 inches.
5. Support and secure reinforcing bars from displacement. Maintain position within 1/2 inch of dimensioned position.
6. Embed anchors embedded in concrete attached to structural steel members. Embed anchorages in every sixth brick.

F. Lintels:
1. Install precast concrete lintels over openings.
2. Install reinforced unit masonry lintels over openings where steel or precast concrete lintels are not scheduled or indicated.
3. Openings Up To 42 inches Wide: Reinforce openings as indicated on Drawings.
4. Openings From 42 inches Up To 78 inches Wide: Reinforce openings as indicated on Drawings.
5. Openings Over 78 inches: Reinforce openings as indicated on Drawings.
6. Do not splice reinforcing bars.
7. Support and secure reinforcing bars from displacement.
8. Place and consolidate grout fill without displacing reinforcing.
9. Allow masonry lintels to attain specified strength before removing temporary supports.
10. Maintain minimum 8 inches bearing on each side of opening.

G. Grouted Components:
1. Reinforce bond beam with 1, No. 5 bar.
2. Reinforce pilaster with 1, No. 6 bar in each cell.
3. Lap splices bar diameters required by code.
4. Support and secure reinforcing bars from displacement.
5. Place and consolidate grout fill without displacing reinforcing.
6. At bearing locations, fill masonry cores with grout for minimum 12 inches either side of opening.

H. Reinforced Masonry:
1. Lay masonry units with cells vertically aligned and cavities between wythes clear of mortar and unobstructed.
2. Place reinforcing, reinforcement bars, and grout as indicated on Drawings.
3. Splice reinforcement in accordance with Section 03200.
4. Support and secure reinforcement from displacement.
5. Place and consolidate grout fill without displacing reinforcing.
6. Place grout in accordance with ACI 530.1 Specification for Masonry Structures.

I. Control And Expansion Joints:
1. Install control and expansion joints at the following maximum spacings, unless otherwise indicated on Drawings:
   a. Exterior Walls: 20 feet on center and within 10 feet on one side of each interior and exterior corner.
   b. Interior Walls: 30 feet on center.
   c. At changes in wall height.
2. Do not continue horizontal joint reinforcement through control and expansion joints.
3. Install preformed control joint device in continuous lengths. Seal butt and corner joints.
4. Size control joint in accordance with Section 07900 for sealant performance.
5. Form expansion joint by omitting mortar and cutting unit to form open space.

J. Cutting And Fitting:
1. Obtain Architect/Engineer's approval prior to cutting or fitting masonry work not indicated or where appearance or strength of masonry work may be impaired.

3.4 ERECTION TOLERANCES

A. Section 014000 - Quality Requirements: Tolerances.

B. Maximum Variation From Alignment of Pilasters: 1/4 inch.

C. Maximum Variation From Unit to Adjacent Unit: 1/16 inch.

D. Maximum Variation from Plane of Wall: 1/4 inch in 10 ft and 1/2 inch in 20 ft or more.

E. Maximum Variation from Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.

F. Maximum Variation from Level Coursing: 1/8 inch in 3 ft and 1/4 inch in 10 ft; 1/2 inch in 30 ft.

G. Maximum Variation of Joint Thickness: 1/8 inch in 3 ft.

H. Maximum Variation from Cross Sectional Thickness of Walls: 1/4 inch.

I. Maximum Variation for Steel Reinforcement:
   1. Install reinforcement within the tolerances specified in ACI 530.1 for foundation walls.
   2. Plus or minus 1/2 inch when distance from centerline of steel to opposite face of masonry is 8 inches or less.
   3. Plus or minus 1 inch when distance is between 8 and 24 inches.
   4. Plus or minus 1-1/4 inch when distance is greater than 24 inches.
   5. Plus or minus 2 inches from location along face of wall.

3.5 FIELD QUALITY CONTROL

A. Concrete Masonry Units: Test each type in accordance with ASTM C140.

3.6 CLEANING

A. Section 017000 - Execution Requirements: Final cleaning.

B. Remove excess mortar and mortar smears as work progresses.

C. Replace defective mortar. Match adjacent work.

D. Clean soiled surfaces with cleaning solution.

E. Use non-metallic tools in cleaning operations.

3.7 PROTECTION OF FINISHED WORK

A. Section 017000 - Execution Requirements: Requirements for protecting finished Work.

B. Protect exposed external corners subject to damage.

C. Protect base of walls from mud and mortar splatter.

D. Protect masonry and other items built into masonry walls from mortar droppings and staining caused by mortar.

E. Protect tops of masonry work with waterproof coverings secured in place without damaging masonry. Provide coverings where masonry is exposed to weather when work is not in progress.

END OF SECTION

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SECTION 05 12 00

STRUCTURAL STEEL

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Structural shapes.
2. Channels and angles.
3. Hollow structural sections.
4. Structural pipe.
5. Structural plates and bars.
6. Fasteners, connectors, and anchors.
7. Fasteners, connectors, and anchors.
8. Grout.

B. Related Sections:
1. Section 036000 - Grout: Grout for setting base plates.
2. Section 052100 - Steel Joists.
3. Section 053123 - Steel Roof Deck
4. Section 055000 – Metal Fabrications: Steel Fabrications affecting structural steel work.

1.2 REFERENCES

A. American Institute of Steel Construction:
1. AISC Code of Standard Practice for Steel Buildings and Bridges.
2. AISC Load and Resistance Factor Design (LRFD) Specification for Structural Steel Buildings.
3. AISC Load and Resistance Factor Design Specification for Single-Angle Members.
4. AISC Seismic Provisions for Structural Steel Buildings.
5. AISC Specification for Allowable Stress Design of Single-Angle Members.
6. AISC Specification for the Design of Steel Hollow Structural Sections.
7. AISC Specification for Structural Steel Buildings Allowable Stress Design, and Plastic Design.

B. ASTM International:
1. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
2. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
3. ASTM A108 - Standard Specification for Steel Bar, Carbon and Alloy, Cold-Finished.
4. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.

5. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
6. ASTM A193/A193M - Standard Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service.
7. ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength.
8. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
9. ASTM A354 - Standard Specification for Quenched and Tempered Alloy Steel Bolts, Studs, and Other Externally Threaded Fasteners.
10. ASTM A449 - Standard Specification for Quenched and Tempered Steel Bolts and Studs.
11. ASTM A490 - Standard Specification for Structural Bolts, Alloy Steel, Heat Treated, 150 ksi Minimum Tensile Strength.
12. ASTM A500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
13. ASTM A501 - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
14. ASTM A514/A514M - Standard Specification for High-Yield-Strength, Quenched and Tempered Alloy Steel Plate, Suitable for Welding.
15. ASTM A529/A529M - Standard Specification for High-Strength Carbon-Manganese Steel of Structural Quality.
16. ASTM A563 - Standard Specification for Carbon and Alloy Steel Nuts.
17. ASTM A572/A572M - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel.
18. ASTM A588/A588M - Standard Specification for High-Strength Low-Alloy Structural Steel with 50 ksi (345 MPa) Minimum Yield Point to 4-in. (100-mm) Thick.
19. ASTM A618 - Standard Specification for Hot-Formed Welded and Seamless High-Strength Low-Alloy Structural Tubing.
20. ASTM A786/A786M - Standard Specification for Hot-Rolled Carbon, Low-Alloy, High-Strength Low-Alloy, and Alloy Steel Floor Plates.
21. ASTM A847 - Standard Specification for Cold-Formed Welded and Seamless High Strength, Low Alloy Structural Tubing with Improved Atmospheric Corrosion Resistance.
22. ASTM A852/A852M - Standard Specification for Quenched and Tempered Low-Alloy Structural Steel Plate with 70 ksi (485 MPa) Minimum Yield Strength to 4 in. (100 mm) Thick.
23. ASTM A913/A913M - Standard Specification for High-Strength Low-Alloy Steel Shapes of Structural Quality, Produced by Quenching and Self-Tempering Process (QST).
24. ASTM A992/A992M - Standard Specification for Structural Steel Shapes.
25. ASTM B695 - Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel.
26. ASTM E94 - Standard Guide for Radiographic Examination.
27. ASTM E164 - Standard Practice for Ultrasonic Contact Examination of Weldments.

28. ASTM E165 - Standard Test Method for Liquid Penetrant Examination.
29. ASTM E709 - Standard Guide for Magnetic Particle Examination.
30. ASTM F436 - Standard Specification for Hardened Steel Washers.
31. ASTM F959 - Standard Specification for Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners.
32. ASTM F1554 - Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength.
33. ASTM F1852 - Standard Specification for Twist Off Type Tension Control Structural Bolt/Nut/Washer Assemblies, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.

C. American Welding Society:
1. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination.
2. AWS D1.1 - Structural Welding Code - Steel.

D. Research Council on Structural Connections:
1. RCSC - Specification for Structural Joints Using ASTM A325 or A490 Bolts.

E. SSPC: The Society for Protective Coatings:
1. SSPC - Steel Structures Painting Manual.
2. SSPC Paint 15 - Steel Joist Shop Paint.
3. SSPC Paint 20 - Zinc-Rich Primers (Type I - Inorganic and Type II - Organic).
4. SSPC SP 3 - Power Tool Cleaning.
5. SSPC SP 6 - Commercial Blast Cleaning.
6. SSPC SP 10 - Near-White Blast Cleaning.

1.3 SUBMITTALS

A. Section 01330 - Submittal Procedures: Requirements for submittals.

B. Shop Drawings:
1. Indicate profiles, sizes, spacing, and locations of structural members, openings, attachments, and fasteners.
2. Connections.
3. Cambers
4. Indicate welded connections with AWS A2.4 welding symbols. Indicate net weld lengths.

C. Mill Test Reports: Submit indicating structural strength and destructive and non-destructive test analysis.

D. Manufacturer’s Mill Certificate: Certify products meet or exceed specified requirements.

E. Welders Certificates: Certify welders employed on the Work, verifying AWS qualifications within previous 12 months.

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with the following:
   1. AISC Code of Standard Practice for Steel Buildings and Bridges.
   2. AISC Code of Standard Practice for Steel Buildings and Bridges. Section 10.
   3. AISC Seismic Provisions for Structural Steel Buildings.
   4. AISC Specification for Structural Steel Buildings Allowable Stress Design, and Plastic Design.
   5. AISC Load and Resistance Factor Design (LRFD) Specification for Structural Steel Buildings.
   6. AISC Specification for the Design of Steel Hollow Structural Sections.
   7. AISC Specification for Allowable Stress Design of Single-Angle Members.
   8. AISC Load and Resistance Factor Design Specification for Single-Angle Members.
   9. RCSC Specification for Structural Joints Using ASTM A 325 or A 490 Bolts.
   10. ASCE 19.

1.5 COORDINATION

A. Section {013000 - Administrative Requirements}: Requirements for coordination.

PART 2 PRODUCTS

2.1 STRUCTURAL STEEL

A. Structural W-Shapes: ASTM A992/A992M; Grade 50

B. Structural M-Shapes: ASTM A36/A36M; Grade 50

C. Structural T-Shapes: Cut from structural W-shapes.

D. Channels and Angles: ASTM A36/A36M.

E. Round Hollow Structural Sections: ASTM A500, Grade B.

F. Square and Rectangular Hollow Structural Sections: ASTM A500, Grade B.

G. Structural Plates and Bars: ASTM A36/A36M.

2.2 FASTENERS, CONNECTORS, AND ANCHORS

A. Bolts: ASTM A307; Grade A or B.
   1. Finish: Unfinished

B. High Strength Bolts: ASTM A325; Type 1 or ASTM A490; Type 1.

1. Finish: Unfinished

C. Nuts: ASTM A563 heavy hex type.
1. Finish: Unfinished

D. Washers: ASTM F436; Type 1, circular
1. Finish: Unfinished

E. Threaded Rods: ASTM A36/A36M; Grade A.
1. Finish: Unfinished

F. Forged Structural Steel Hardware:
1. Clevises and Turnbuckles: ASTM A108; Grade 1085.
2. Eye Nuts and Eye Bolts: ASTM A108; Grade 1030.
3. Sleeve Nuts: ASTM A108; Grade 1018.
4. Rod Ends, Yoke Ends and Pins, Cotter Pins, and Coupling Nuts: Carbon steel.

2.3 WELDING MATERIALS

A. Welding Materials: AWS D1.1; type required for materials being welded.

2.4 ACCESSORIES

A. Grout: Non-shrink type, pre-mixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing additives, capable of developing minimum compressive strength of 7,000 psi at 28 days

B. Shop and Touch-Up Primer: SSPC Paint 15, Type 1, red oxide.

2.5 FABRICATION

A. Continuously seal joined members by continuous welds. Grind exposed welds smooth.

B. Fabricate connections for bolt, nut, and washer connectors.

C. Develop required camber for members.

2.6 FINISH

A. Prepare structural component surfaces in accordance with SSPC SP 3.

B. Shop prime structural steel members.

C. Galvanizing for Structural Steel Members: ASTM A123/A123M; minimum 1.2 oz/sq ft coating thickness; galvanize after fabrication.

D. Galvanizing for Fasteners, Connectors, and Anchors:
   1. Hot-Dipped Galvanizing: ASTM A153/A153M.
   2. Mechanical Galvanizing: ASTM B695; Class 50 minimum.

2.7 SOURCE QUALITY CONTROL AND TESTS

A. Section 014000 - Quality Requirements: Testing, inspection and analysis requirements.

B. Shop test bolted and welded connections as specified for field quality control tests.

C. When fabricator is approved by authority having jurisdiction, submit certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.
   1. Specified shop tests are not required for Work performed by approved fabricator.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify bearing surfaces are at correct elevation.

C. Verify anchors rods are set in correct locations and arrangements with correct exposure for steel attachment.

3.2 PREPARATION

A. Furnish templates for installation of anchor rods and embedments in concrete and masonry work.

3.3 ERECTION

A. Allow for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in alignment until completion of erection and installation of permanent bracing.

B. Field weld components and shear connectors indicated on Drawings.

C. Field connect members with threaded fasteners; tighten to snug tight for bearing type connections.

D. Do not field cut or alter structural members without approval of Architect/Engineer.

E. After erection, touch up welds and abrasions to match shop finishes.

3.4 GROUT INSTALLATION

A. Grout [under base plates in accordance with Section 036000.

B. Shim bearing plates and equipment supports to proper elevation, snug tighten anchor bolts.

C. Fill void under bearing surface with grout. Install and pack grout to remove air pockets.

D. Moist cure grout.

E. Remove forms after grout is set. Trim grout edges to from smooth surface, splayed 45 degrees.

F. Tighten anchor bolts after grout has cured for a minimum of 3 days.

3.5 ERECTION TOLERANCES

A. Section 014000 - Quality Requirements: Tolerances.

B. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.

C. Maximum Offset From Alignment: 1/4 inch.

3.6 FIELD QUALITY CONTROL

A. Section 014000 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

B. Bolted Connections: Inspect in accordance with AISC specifications.
   1. Visually inspect all bolted connections.
   2. For Direct Tension Indicators, comply with requirements of ASTM F959. Verify that gaps are less than gaps specified in Table 2.

C. Welding: Inspect welds in accordance with AWS D1.1.
   1. Certify welders and conduct inspections and tests as required. Record types and locations of defects found in work. Record work required and performed to correct deficiencies.
   2. Visually inspect all welds.
   3. Ultrasonic Inspection: ASTM E164; perform on all full penetration welds.
   4. Liquid Penetrant Inspection: ASTM E165.

D. Correct defective bolted connections and welds.

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SECTION 081113

HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes hollow-metal work.

B. Related Requirements:

1. Section 087111 "Door Hardware (Descriptive Specification)" for door hardware for hollow-metal doors.

1.3 DEFINITIONS

A. Minimum Thickness: Minimum thickness of base metal without coatings according to NAAMM-HMMA 803 or SDI A250.8.

1.4 COORDINATION

A. Coordinate anchorage installation for hollow-metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

1.5 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.6 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, core descriptions, fire-resistance ratings, temperature-rise ratings, and finishes.

B. Shop Drawings: Include the following:

1. Elevations of each door type.
2. Details of doors, including vertical- and horizontal-edge details and metal thicknesses.
3. Frame details for each frame type, including dimensioned profiles and metal thicknesses.

4. Locations of reinforcement and preparations for hardware.
5. Details of each different wall opening condition.
6. Details of anchorages, joints, field splices, and connections.
7. Details of accessories.
8. Details of moldings, removable stops, and glazing.

C. Schedule: Provide a schedule of hollow-metal work prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings. Coordinate with final Door Hardware Schedule.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver hollow-metal work palletized, packaged, or crated to provide protection during transit and Project-site storage. Do not use nonvented plastic.

B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.

C. Store hollow-metal work vertically under cover at Project site with head up. Place on minimum 4-inch-high wood blocking. Provide minimum 1/4-inch space between each stacked door to permit air circulation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to the following:

1. Amweld International, LLC.
2. Apex Industries, Inc.
3. Ceco Door; ASSA ABLOY.
4. Curries Company; ASSA ABLOY.
5. Fleming Door Products Ltd.; Assa Abloy Group Company.
6. National Custom Hollow Metal Doors & Frames.
7. Republic Doors and Frames.
8. Steelcraft; an Allegion brand.

B. Source Limitations: Obtain hollow-metal work from single source from single manufacturer.

2.2 REGULATORY REQUIREMENTS

A. Fire-Rated Assemblies: Complying with NFPA 80 and listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction for fire-protection ratings and temperature-rise limits indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

1. Smoke- and Draft-Control Assemblies: Provide an assembly with gaskets listed and labeled for smoke and draft control by a qualified testing agency acceptable to authorities having jurisdiction, based on testing according to UL 1784 and installed in compliance with NFPA 105.

2.3 EXTERIOR HOLLOW-METAL DOORS AND FRAMES

A. Construct exterior doors and frames to comply with the standards indicated for materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances, and as specified.

B. Extra-Heavy-Duty Doors and Frames: SDI A250.8, Level 3. At all exterior door locations unless indicated otherwise in the Door and Frame Schedule.

1. Physical Performance: Level A according to SDI A250.4.
2. Doors:

    a. Type: As indicated in the Door and Frame Schedule.
    b. Thickness: 1-3/4 inches.
    c. Face: Metallic-coated steel sheet, minimum thickness of 0.053 inch, with minimum G60 or A60 coating.
    d. Edge Construction: Model 2, Seamless.
    e. Core: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral board, or vertical steel-stiffener core.

        1) Thermal-Rated Doors: Provide doors fabricated with thermal-resistance value (R-value) of not less than 2.1 deg F x h x sq. ft./Btu when tested according to ASTM C 1363.

3. Frames:

    a. Materials: Metallic-coated steel sheet, minimum thickness of 0.067 inch, with minimum G60 or A60 coating.
    b. Construction: Full profile welded.

4. Exposed Finish: Prime.

2.4 FRAME ANCHORS

A. Jamb Anchors:

1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 0.042 inch thick, with corrugated or perforated straps not less than 2 inches wide by 10 inches long.

B. Floor Anchors: Formed from same material as frames, minimum thickness of 0.042 inch and as follows:

1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.

2.5 MATERIALS

A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.

B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.

C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B.

D. Frame Anchors: ASTM A 879/A 879M, Commercial Steel (CS), 04Z coating designation; mill phosphatized.

1. For anchors built into exterior walls, steel sheet complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.

E. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.

F. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow-metal frames of type indicated.

G. Bituminous Coating: Cold-applied asphalt mastic, compounded for 15-mil dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

2.6 FABRICATION

A. Fabricate hollow-metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for metal thickness. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.

B. Hollow-Metal Doors:

1. Steel-Stiffened Door Cores: Provide minimum thickness 0.026 inch, steel vertical stiffeners of same material as face sheets extending full-door height, with vertical webs spaced not more than 6 inches apart. Spot weld to face sheets no more than 5 inches o.c. Fill spaces between stiffeners with glass- or mineral-fiber insulation.
2. Fire Door Cores: As required to provide fire-protection and temperature-rise ratings indicated.
3. Vertical Edges for Single-Acting Doors: Bevel edges 1/8 inch in 2 inches.
4. Top Edge Closures: Close top edges of doors with inverted closures, except provide flush closures at exterior doors of same material as face sheets.
5. Bottom Edge Closures: Close bottom edges of doors where required for attachment of weather stripping with end closures or channels of same material as face sheets.
6. Exterior Doors: Provide weep-hole openings in bottoms of exterior doors to permit moisture to escape. Seal joints in top edges of doors against water penetration.

C. Hollow-Metal Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.

1. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
2. Floor Anchors: Weld anchors to bottoms of jambs with at least four spot welds per anchor; however, for slip-on drywall frames, provide anchor clips or countersunk holes at bottoms of jambs.
3. Jamb Anchors: Provide number and spacing of anchors as follows:

a. Masonry Type: Locate anchors not more than 16 inches from top and bottom of frame. Space anchors not more than 32 inches o.c., to match coursing, and as follows:

1) Two anchors per jamb up to 60 inches high.
2) Three anchors per jamb from 60 to 90 inches high.

b. Stud-Wall Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:

1) Three anchors per jamb up to 60 inches high.
2) Four anchors per jamb from 60 to 90 inches high.

4. Head Anchors: Two anchors per head for frames more than 42 inches wide and mounted in metal-stud partitions.
5. Door Silencers: Except on weather-stripped frames, drill stops to receive door silencers as follows. Keep holes clear during construction.

a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.
b. Double-Door Frames: Drill stop in head jamb to receive two door silencers.

D. Fabricate concealed stiffeners and edge channels from either cold- or hot-rolled steel sheet.

E. Hardware Preparation: Factory prepare hollow-metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to SDI A250.6, the Door Hardware Schedule, and templates.

1. Reinforce doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.
2. Comply with applicable requirements in SDI A250.6 and BHMA A156.115 for preparation of hollow-metal work for hardware.

F. Stops and Moldings: Provide stops and moldings around glazed lites and louvers where indicated. Form corners of stops and moldings with mitered hairline joints.

1. Single Glazed Lites: Provide fixed stops and moldings welded on secure side of hollow-metal work.
2. Multiple Glazed Lites: Provide fixed and removable stops and moldings so that each glazed lite is capable of being removed independently.
3. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
4. Provide loose stops and moldings on inside of hollow-metal work.
5. Coordinate rabbet width between fixed and removable stops with glazing and installation types indicated.

2.7 STEEL FINISHES

A. Prime Finish: Clean, pretreat, and apply manufacturer's standard primer.

1. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with SDI A250.10; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.

B. Drill and tap doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.

3.3 INSTALLATION

A. General: Install hollow-metal work plumb, rigid, properly aligned, and securely fastened in place. Comply with Drawings and manufacturer's written instructions.

B. Hollow-Metal Frames: Install hollow-metal frames for doors and other openings of size and profile indicated. Comply with SDI A250.11 or NAAMM-HMMA 840 as required by standards specified.

1. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.

    a. At fire-rated openings, install frames according to NFPA 80.
    b. Install frames with removable stops located on secure side of opening
    c. Install door silencers in frames before grouting.
    d. Remove temporary braces necessary for installation only after frames have been properly set and secured.
    e. Check plumb, square, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.

2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with postinstalled expansion anchors.
3. Concrete Walls: Fill frames with concrete at the same time concrete tilt-up walls are being cast.
4. Installation Tolerances: Adjust hollow-metal door frames for squareness, alignment, twist, and plumb to the following tolerances:

    a. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
    b. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
    c. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
    d. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.

C. Hollow-Metal Doors: Fit hollow-metal doors accurately in frames, within clearances specified below. Shim as necessary.

1. Non-Fire-Rated Steel Doors:

    a. Between Door and Frame Jambs and Head: 1/8 inch plus or minus 1/32 inch.
    b. Between Edges of Pairs of Doors: 1/8 inch to 1/4 inch plus or minus 1/32 inch.

c. At Bottom of Door: 5/8 inch plus or minus 1/32 inch.
d. Between Door Face and Stop: 1/16 inch to 1/8 inch plus or minus 1/32 inch.

2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
3. Smoke-Control Doors: Install doors and gaskets according to NFPA 105.

3.4 ADJUSTING AND CLEANING

A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow-metal work that is warped, bowed, or otherwise unacceptable.

B. Remove concrete and other materials from hollow-metal work immediately after installation.

C. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.

D. Metallic-Coated Surface Touchup: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

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SECTION 083323

OVERHEAD COILING DOORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Insulated service doors.

B. Related Requirements:

1. Section 055000 "Metal Fabrications" for miscellaneous steel supports.

1.3 ACTION SUBMITTALS

A. Product Data: For each type and size of overhead coiling door and accessory.

1. Include construction details, material descriptions, dimensions of individual components, profiles for slats, and finishes.
2. Include rated capacities, operating characteristics, electrical characteristics, and furnished accessories.

B. Shop Drawings: For each installation and for special components not dimensioned or detailed in manufacturer's product data.

1. Include plans, elevations, sections, and mounting details.
2. Include details of equipment assemblies, and indicate dimensions, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include points of attachment and their corresponding static and dynamic loads imposed on structure.
4. For exterior components, include details of provisions for assembly expansion and contraction and for excluding and draining moisture to the exterior.
5. Include diagrams for power, signal, and control wiring.

C. Samples for Initial Selection: Manufacturer's finish charts showing full range of colors and textures available for units with factory-applied finishes.

1. Include similar Samples of accessories involving color selection.

D. Samples for Verification: For each type of exposed finish on the following components, in manufacturer's standard sizes:

1. Curtain slats.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For overhead coiling doors to include in maintenance manuals.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer for both installation and maintenance of units required for this Project.

PART 2 - PRODUCTS

2.1 MANUFACTURERS, GENERAL

A. Source Limitations: Obtain overhead coiling doors from single source from single manufacturer.

1. Obtain operators and controls from overhead coiling door manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Structural Performance, Exterior Doors: Capable of withstanding the design wind loads.

1. Design Wind Load: As indicated on Drawings.
2. Deflection Limits: Design overhead coiling doors to withstand design wind load without evidencing permanent deformation or disengagement of door components.
3. Operability under Wind Load: Design overhead coiling doors to remain operable under design wind load, acting inward and outward.

2.3 DOOR ASSEMBLY

A. Insulated Service Door: Overhead coiling door formed with curtain of interlocking metal slats.

1. Basis-of-Design Product: Subject to compliance with requirements, provide **"Overhead Door Corporation; Model 610 – Heavy-Duty Coiling Service Doors"** or comparable product by one of the following:

a. ACME Rolling Doors.
b. Alpine Overhead Doors, Inc.
c. Alumatec Pacific Products.
d. Amarr Garage Doors.
e. ASTA Door Corporation.
f. C.H.I. Overhead Doors.
g. City-Gates.
h. Clopay Building Products.
i. Cookson Company.
j. Cornell Iron Works, Inc.
k. Janus International Corporation.

l. Lawrence Roll-Up Doors, Inc.
m. McKeon Rolling Steel Door Company, Inc.
n. Metro Door.
o. QMI Security Solutions.
p. Raynor.
q. Southwestern Rolling Steel Door Co.
r. Wayne-Dalton Corp.

B. Operation Cycles: Door components and operators capable of operating for not less than 20,000. One operation cycle is complete when a door is opened from the closed position to the fully open position and returned to the closed position.

C. Air Infiltration: Maximum rate of 0.08 cfm/sq. ft. at 15 and 25 mph when tested according to ASTM E 283.

D. Curtain R-Value: non-insulated.

E. Door Curtain Material: Galvanized steel.

F. Door Curtain Slats: Curved profile type C-275.

G. Bottom Bar: Two angles, each not less than 1-1/2 by 1-1/2 by 1/8 inch thick; fabricated from hot-dip galvanized steel, stainless steel or aluminum extrusions and finished to match door.

H. Curtain Jamb Guides: Galvanized steel with exposed finish matching curtain slats.

I. Wind Load Design: 23 psf.

J. Hood: Match curtain material and finish.

1. Shape: Round.
2. Mounting: Face of wall.

K. Locking Devices: Equip door with slide bolt for padlock.

L. Door Operator:
1. Manual Operation: Chain type.

M. Door Finish:

1. Baked-Enamel or Powder-Coated Finish: Color as selected by Architect from manufacturer's full range.
2. Interior Curtain-Slat Facing: Match finish of exterior curtain-slat face.

2.4 DOOR CURTAIN MATERIALS AND CONSTRUCTION

A. Door Curtains: Fabricate overhead coiling-door curtain of interlocking metal slats, designed to withstand wind loading indicated, in a continuous length for width of door without splices. Unless otherwise indicated, provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door indicated, and as follows:

1. Steel Door Curtain Slats: Zinc-coated (galvanized), cold-rolled structural steel sheet; complying with ASTM A 653/A 653M, with G90 zinc coating; nominal sheet thickness (coated) of 0.028 inch; and as required.
2. Insulation: Fill slats for insulated doors with manufacturer's standard thermal insulation complying with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, according to ASTM E 84 or UL 723. Enclose insulation completely within slat faces.
3. Metal Interior Curtain-Slat Facing: Match metal of exterior curtain-slat face, with minimum steel thickness of 0.010 inch.

B. Curtain Jamb Guides: Manufacturer's standard angles or channels and angles of same material and finish as curtain slats unless otherwise indicated, with sufficient depth and strength to retain curtain, to allow curtain to operate smoothly, and to withstand loading. Slot bolt holes for guide adjustment. Provide removable stops on guides to prevent overtravel of curtain, and a continuous bar for holding windlocks.

2.5 HOODS

A. General: Form sheet metal hood to entirely enclose coiled curtain and operating mechanism at opening head. Contour to fit end brackets to which hood is attached. Roll and reinforce top and bottom edges for stiffness. Form closed ends for surface-mounted hoods and fascia for any portion of between-jamb mounting that projects beyond wall face. Equip hood with intermediate support brackets as required to prevent sagging.

1. Galvanized Steel: Nominal 0.028-inch- thick, hot-dip galvanized steel sheet with G90 zinc coating, complying with ASTM A 653/A 653M.

2.6 LOCKING DEVICES

A. Slide Bolt: Fabricate with side-locking bolts to engage through slots in tracks for locking by padlock, located on both left and right jamb sides, operable from coil side.

B. Chain Lock Keeper: Suitable for padlock.

2.7 CURTAIN ACCESSORIES

A. Weather seals for Exterior Doors: Equip each exterior door with weather-stripping gaskets fitted to entire exterior perimeter of door for a weather-resistant installation unless otherwise indicated.

1. At door head, use 1/8-inch- thick, replaceable, continuous-sheet baffle secured to inside of hood or field- installed on the header.
2. At door jambs, use replaceable, adjustable, continuous, flexible, 1/8-inch- thick seals of flexible vinyl, rubber, or neoprene.

2.8 COUNTERBALANCING MECHANISM

A. General: Counterbalance doors by means of manufacturer's standard mechanism with an adjustable-tension, steel helical torsion spring mounted around a steel shaft and contained in a spring barrel connected to top of curtain with barrel rings. Use grease-sealed bearings or self-lubricating graphite bearings for rotating members.

B. Counterbalance Barrel: Fabricate spring barrel of manufacturer's standard hot-formed, structural-quality, seamless or welded carbon-steel pipe, of sufficient diameter and wall thickness to support rolled-up curtain without distortion of slats and to limit barrel deflection to not more than 0.03 in./ft. of span under full load.

C. Counterbalance Spring: One or more oil-tempered, heat-treated steel helical torsion springs. Size springs to counterbalance weight of curtain, with uniform adjustment accessible from outside barrel. Secure ends of springs to barrel and shaft with cast-steel barrel plugs.

D. Torsion Rod for Counterbalance Shaft: Fabricate of manufacturer's standard cold-rolled steel, sized to hold fixed spring ends and carry torsional load.

E. Brackets: Manufacturer's standard mounting brackets of either cast iron or cold-rolled steel plate.

2.9 STEEL AND GALVANIZED-STEEL FINISHES

A. Baked-Enamel or Powder-Coat Finish: Manufacturer's standard baked-on finish consisting of prime coat and thermosetting topcoat. Comply with coating manufacturer's written instructions for cleaning, pretreatment, application, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates areas and conditions, with Installer present, for compliance with requirements for substrate construction and other conditions affecting performance of the Work.

B. Examine locations of electrical connections.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install overhead coiling doors and operating equipment complete with necessary hardware, anchors, inserts, hangers, and equipment supports; according to manufacturer's written instructions and as specified.

B. Install overhead coiling doors, hoods, controls, and operators at the mounting locations indicated for each door.

C. Accessibility: Install overhead coiling doors, switches, and controls along accessible routes in compliance with regulatory requirements for accessibility.

D. Power-Operated Doors: Install according to UL 325.

3.3 STARTUP SERVICE

A. Engage a factory-authorized service representative to perform startup service.

1. Perform installation and startup checks according to manufacturer's written instructions.
2. Test and adjust controls and safety devices. Replace damaged and malfunctioning controls and equipment.

3.4 ADJUSTING

A. Adjust hardware and moving parts to function smoothly so that doors operate easily, free of warp, twist, or distortion.

1. Adjust exterior doors and components to be weather-resistant.

B. Lubricate bearings and sliding parts as recommended by manufacturer.

C. Adjust seals to provide tight fit around entire perimeter.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain overhead coiling doors.

END OF SECTION 083323

SECTION 087111

DOOR HARDWARE (DESCRIPTIVE SPECIFICATION)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Mechanical door hardware for the following:

a. Swinging doors.

1.3 COORDINATION

A. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Door Hardware Schedule.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Supplier of products and an employer of workers trained and approved by product manufacturers and of an Architectural Hardware Consultant who is available during the course of the Work to consult Contractor, Architect, and Owner about door hardware and keying.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.

B. Tag each item or package separately with identification coordinated with the final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.

C. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.7 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Three years from date of Substantial Completion unless otherwise indicated below:

a. Manual Closers: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Means of Egress Doors: Latches do not require more than 15 lbf to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.

B. Accessibility Requirements: For door hardware on doors in an accessible route, comply with the DOJ's "2010 ADA Standards for Accessible Design" and “2012 Texas Accessibility Standards.”

2.2 SCHEDULED DOOR HARDWARE

A. Provide products for each door that comply with requirements indicated in Part 2 and door hardware schedule.

1. Door hardware is scheduled in Part 3.

2.3 HINGES

A. Hinges: BHMA A156.1. Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Hager Companies.
b. McKinney Products Company; an ASSA ABLOY Group company.
c. Stanley Commercial Hardware; a division of Stanley Security Solutions.

B. Antifriction-Bearing Hinges:

1. Mounting: Full mortise (butts).
2. Bearing Material: Manufacturer's standard antifriction bearing.
3. Grade: 2 (standard weight).
4. Base and Pin Metal:

a. Exterior Hinges: Stainless steel with stainless steel pin.

5. Pins: Non-rising loose unless otherwise indicated.

6. Tips: Flat button.
7. Corners: Square.

2.4 MECHANICAL LOCKS AND LATCHES

A. Lock Functions: As indicated in door hardware schedule.

B. Lock Throw: Comply with testing requirements for length of bolts required for labeled fire doors, and as follows:

1. Bored Locks: Minimum 1/2-inch latchbolt throw.

C. Lock Backset: 2-3/4 inches unless otherwise indicated.

D. Lock Trim:

1. Description: As indicated on the Door Hardware Schedule.
2. Levers: Cast.
3. Escutcheons (Roses): Wrought.

E. Strikes: Provide manufacturer's standard strike for each lock bolt or latchbolt complying with requirements indicated for applicable lock or latch and with strike box and curved lip extended to protect frame; finished to match lock or latch.

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.

F. Bored Locks: BHMA A156.2; Grade 1; Series 4000.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Corbin Russwin, Inc.; an ASSA ABLOY Group company.
b. SARGENT Manufacturing Company; ASSA ABLOY.
c. Yale Security Inc; an ASSA ABLOY Group company.

2.5 LOCK CYLINDERS

A. Lock Cylinders: Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Corbin Russwin, Inc.; an ASSA ABLOY Group company.
b. SARGENT Manufacturing Company; ASSA ABLOY.
c. Yale Security Inc; an ASSA ABLOY Group company.

B. Standard Lock Cylinders: BHMA A156.5; Grade 1 permanent cores; face finished to match lockset.

1. Core Type: Interchangeable.
2. Number of Pins: Seven.
3. Lock Type: Mortise or rim type as condition dictates.

2.6 KEYING

A. Keying System: Factory registered, complying with guidelines in BHMA A156.28, appendix. Incorporate decisions made in keying conference.

1. Grand Master Key System: Change keys, a master key, and a grand master key operate cylinders.

a. Provide three cylinder change keys and five each of master and grand master keys.

2. Keyed Alike: Key all cylinders to same change key.

B. Keys: Nickel silver.

1. Stamping: Permanently inscribe each key with a visual key control number and include the following notation:

a. Notation: Information to be furnished by Owner.

2.7 OPERATING TRIM

A. Operating Trim: BHMA A156.6; stainless steel unless otherwise indicated.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Hiawatha, Inc; a division of the Activar Construction Products Group.
b. Rockwood Manufacturing Company; an ASSA ABLOY Group company.
c. Trimco.

B. Flat Push Plates: With square corners and beveled edges; secured with exposed screws.

1. Thickness: 0.050 inch.
2. Size: 4 inches wide by 16 inches high.

C. Push-Pull Plates: With square corners, beveled edges, and raised integral lip; secured with exposed screws.

1. Thickness: 0.050 inch.
2. Size: 4 inches wide by 16 inches high.

2.8 SURFACE CLOSERS

A. Surface Closers: BHMA A156.4; rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves and forged-steel main arm. Comply with manufacturer's written instructions for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Corbin Russwin, Inc.; an ASSA ABLOY Group company.
b. DORMA Architectural Hardware; a division of DORMA Group North America.

c. Norton Door Controls; an ASSA ABLOY Group company.

B. Cast-Aluminum Surface Closers: Grade 1; Traditional type with mechanism enclosed in cast-aluminum alloy shell.

1. Mounting: Opposite hinge side (Push side).
2. Type: Parallel arm.
3. Backcheck: Adjustable, effective between 60 and 85 degrees of door opening.

2.9 OVERHEAD STOPS AND HOLDERS

A. Overhead Stops and Holders: BHMA A156.8.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Architectural Builders Hardware Mfg., Inc.
b. Rixson Specialty Door Controls; an ASSA ABLOY Group company.
c. SARGENT Manufacturing Company; ASSA ABLOY.

B. Overhead Concealed Slide Stops: Type 1; Grade 1; release by push and pull of door unless control is set in inactive position; with stop, shock absorber, and adjustable holding pressure; for doors opening 110 degrees.

1. Door Swing Type: Single acting.

2.10 DOOR GASKETING

A. Door Gasketing: BHMA A156.22; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. National Guard Products, Inc.
b. Pemko Manufacturing Co.
c. Zero International, Inc.

B. Door Sweeps: Neoprene gasket material held in place by flat housing or flange; surface mounted to face of door with screws.

1. Housing or Flange Material: Aluminum.

2.11 THRESHOLDS

A. Thresholds: BHMA A156.21; fabricated to full width of opening indicated.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. National Guard Products, Inc.
b. Pemko Manufacturing Co.

c. Rockwood Manufacturing Company; an ASSA ABLOY Group company.

B. Saddle Thresholds:

1. Type: Applied gasketed stop and fluted top.
2. Base Metal: Aluminum.

2.12 METAL PROTECTIVE TRIM UNITS

A. Metal Protective Trim Units: BHMA A156.6; fabricated from 0.050-inch- thick stainless steel; with manufacturer's standard machine or self-tapping screw fasteners.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Hiawatha, Inc; a division of the Activar Construction Products Group.
b. Rockwood Manufacturing Company; an ASSA ABLOY Group company.
c. Trimco.

B. Kick Plates: 8 inches high by door width with allowance for frame stops.

2.13 AUXILIARY DOOR HARDWARE

A. Auxiliary Hardware: BHMA A156.16.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Hager Companies.
b. Rockwood Manufacturing Company; an ASSA ABLOY Group company.
c. Trimco.

B. Silencers for Metal Door Frames: Grade 1; neoprene or rubber; minimum diameter 1/2 inch; fabricated for drilled-in application to frame.

2.14 FABRICATION

A. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rating labels and as otherwise approved by Owner.

1. Manufacturer's identification is permitted on rim of lock cylinders only.

B. Base Metals: Produce door hardware units of base metal indicated, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18.

C. Fasteners: Provide door hardware manufactured to comply with published templates prepared for machine, wood, and sheet metal screws. Provide screws that comply with commercially recognized industry standards for application intended, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware unless otherwise indicated.

1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.
2. Fire-Rated Applications:

    a. Wood or Machine Screws: For the following:

        1) Hinges mortised to doors or frames; use threaded-to-the-head wood screws for wood doors.
        2) Strike plates to frames.
        3) Closers to doors and frames.

    b. Steel Through Bolts: For the following unless door blocking is provided:

        1) Closers to doors and frames.
        2) Surface-mounted exit devices.

3. Spacers or Sex Bolts: For through bolting of hollow-metal doors.
4. Gasketing Fasteners: Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.

2.15 FINISHES

A. Provide finishes complying with BHMA A156.18 as indicated in door hardware schedule.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Steel Doors and Frames: For surface-applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.

3.3 INSTALLATION

A. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.

1. Standard Steel Doors and Frames: ANSI/SDI A250.8.

B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.

1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

C. Hinges: Install types and in quantities indicated in door hardware schedule, but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.

D. Lock Cylinders: Install construction cores to secure building and areas during construction period.

1. Replace construction cores with permanent cores as directed by Owner.

E. Thresholds: Set thresholds for exterior doors and other doors indicated in full bed of sealant complying with requirements specified in Section 079200 "Joint Sealants."

F. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.

G. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

1. Do not notch perimeter gasketing to install other surface-applied hardware.

H. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.

I. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.4 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

3.5 CLEANING AND PROTECTION

A. Clean adjacent surfaces soiled by door hardware installation.

B. Clean operating items as necessary to restore proper function and finish.

C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

3.6 DOOR HARDWARE SCHEDULE

HARDWARE SELECTED BY SUPPLIER

END OF SECTION 087111

SECTION 13 34 19

PRE-ENGINEERED METAL BUILDINGS

PART 1 GENERAL

1.1 SUMMARY

A. Section includes pre-engineered, shop fabricated structural steel building frame.

1.2 REFERENCES

A. American Institute of Steel Construction:
1. AISC S335 - Specification for Structural Steel Buildings Allowable Stress Design, and Plastic Design.
2. AISC S342L - Load and Resistance Factor Design Specification for Structural Steel Buildings.
3. AISC S344L - Metric Load and Resistance Factor Design Specification for Structural Steel Buildings.

B. ASTM International:
1. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
2. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
3. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
4. ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength.
5. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
6. ASTM A490 - Standard Specification for Heat-Treated Steel Structural Bolts, 150 ksi Minimum Tensile Strength.
7. ASTM A500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
8. ASTM A501 - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
9. ASTM A529/A529M - Standard Specification for High-Strength Carbon-Manganese Steel of Structural Quality.
10. ASTM A572/A572M - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel.
11. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
12. ASTM A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
13. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.

14. ASTM C991 - Standard Specification for Flexible Glass Fiber Insulation for Pre-Engineered Metal Buildings.
15. ASTM C1107 - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
16. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
17. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.

C. American Welding Society:
1. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination.
2. AWS D1.1 - Structural Welding Code - Steel.

D. Metal Building Manufacturers Association:
1. MBMA - Low Rise Building Systems Manual.

E. National Fire Protection Association:
1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials.

F. SSPC: The Society for Protective Coatings:
1. SSPC - Steel Structures Painting Manual.
2. SSPC Paint 20 - Zinc-Rich Primers (Type I - Inorganic and Type II - Organic).

G. Underwriters Laboratories Inc.:
1. UL - Building Materials Directory.
2. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

1.3 SYSTEM DESCRIPTION

A. Pre-engineered canopy system.

1.4 DESIGN REQUIREMENTS

A. Provide drainage to exterior for water entering or condensation occurring within wall or roof system.

B. Size and fabricate wall and roof systems free of distortion or defects detrimental to appearance or performance.

1.5 PERFORMANCE REQUIREMENTS

A. Conform to applicable codes for submission of design calculations, reviewed shop and erection drawings, required for acquiring permits.

B. Cooperate with regulatory agency or authority and provide data as requested authority having jurisdiction.

1.6 SUBMITTALS

A. Section 013300 - Submittal Procedures: Submittal procedures.

B. Engineered Shop Drawings: Indicate assembly dimensions, locations of structural members, connections, attachments, openings, cambers, loads, and reactions; roof system dimensions, panel layout, general construction details, anchorages and method of anchorage, method or installation; framing anchor bolt settings, sizes, and locations from datum, and foundation loads; indicate welded connections with AWS A2.4 welding symbols; indicate net weld lengths; provide professional seal and signature of a Professional Engineer with a license in the State of Texas.

C. Erection Drawings: Indicate members by label, assembly sequence, and temporary erection bracing.

PART 2 PRODUCTS

2.1 FABRICATION - FRAMING

A. Fabricate members in accordance with AISC Specification for plate, bar, tube, or rolled structural shapes.

B. Provide framing for door window louver skylight, ventilator openings.

PART 3 EXECUTION

3.1 ERECTION - FRAMING

A. Erect framing in accordance with AISC Specification.

B. Provide for erection and wind loads. Provide temporary bracing to maintain structure plumb and in alignment until completion of erection and installation of permanent bracing.

C. Set column base plates with non-shrink grout to achieve full plate bearing.

D. Do not field cut or alter structural members without approval of Architect/Engineer.

E. After erection, prime welds, abrasions, and surfaces not shop primed.

3.2 ERECTION TOLERANCES

A. Framing Members: 1/4 inch from level;1/8 inch from plumb.

END OF SECTION

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SECTION 133423

PRE-MANUFACTURED BOOTH

PART 1 – GENERAL

1.01 SUMMARY

Provide all labor, equipment and materials to furnish one prefabricated steel guard Attendant Booth.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Electrical service supply and connection.

B. Site/foundation work.

C. Unloading, placement, installation and anchoring.

1.3 SUBMITTALS

A. Upon award of order, manufacturer shall prepare and submit shop drawings for the Pre-fabricated Booth. Drawings shall include elevations, section, floor plan, electric schedule, service entrance locations, and anchor clip detail.

1.4 QUALITY ASSURANCE

A. Structures shall be the product of a manufacturer with a minimum of 20 years-documented experience in the design and fabrication of portable steel building and one approved by TDLR to provide certified (stamped) accessible booths in compliance with TDLR.

B. Prefabricated buildings by manufacturers other than the one approved shall submit sufficient data to enable approval to be given. As a minimum: design drawings and/or calculations, applicable certifications, catalog information, electrical data, and color samples showing equal range of variety.

C. Design loads: Live Loads: Per requirements for the installation location. Unit to be manufactured to be in full compliance with the State of Texas Department of License and Regulation (TDLR) requirements. Manufacturer to be TDLR approved and shall obtain TDLR approval and Insignia prior to shipping the unit to the site.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products of the following manufacturer from the basis for design and quality intended.
1. B.I.G. Enterprises, Inc. South El Monte CA. 800-669-1449. Contact: Dave King.

B. Substitutions:

1. Shall be proposed in accordance with Submittals requirement above a minimum of 10 days prior to Bid Date for review by Engineer. If acceptable, Engineer shall issue notification via addenda no later than three days prior to Bid Date.

2.2 STRUCTURE

A. Prefabricated steel building shall be single unit welded construction. Building to be shipped completely assembled. All welded joints ground smooth. Base Dimensions to be 6’ x 12’”

B. 3" x 3" and 2” x 3” x .083 cold drawn electro-welded structural mechanical steel frames.

2.3 WALLS

A. 16ga. Galvanized steel interior and exterior panels MIG welded between frame and mullions for self-aligning unitized system, creating a structural diaphragm with R-17 insulation.

2.4 BASE AND FLOOR

A. Unit to have no floor, unit to be designed to mount directly to a level flush to grade concrete pad. Booth perimeter base, except at the doors to be 2” x 2” galvanized steel tube frame, door area to have 1\4” stainless steel strap..

2.5 DOORS

A. Unit to have two commercial steel framed doors top hung by eight 2 1\4” rigid steel ball bearing rollers from a steel track with a lower stainless steel guide, stainless steel pull handles welded to the frame, mortise lock and fixed window.

2.6 WINDOWS

A. 16ga. galvanized steel window frame system with flush mounted corners and welded fastening. Unit to have fixed windows on all sides. All windows glazed with 3\4” light gray tinted tempered dual pane insulating glass with Low-E coating.

2.7 ROOF

A. Roof to be designed for exterior use and constructed of internal steel framing with 16-gauge galvanized steel roof deck welded to the framing and covered with a three part membrane with a SRI index of 95 or better. Roof to have a 14” fascia with no overhang. Roof to be designed to drain through minimal scuppers for code compliance.

2.8 COUNTER

A. Booth to have a 24” deep full width font counter and a 14” deep rear counter, both to be minimum 16ga. type 304 stainless steel with # 4 finish and have framing for minimum 250lb. load. Shelves to be mounted at 34” A.F.F.

2.9 ELECTRICAL

A. Load Center shall be 125 Amp 120/208 volt, three phase, 4 wire 24 pole, four duplex outlets and two quadruple outlets mounted under the front shelf and four duplex outlets under the rear shelf, interior LED can lights recessed in the ceiling with single pole wall dimmer switch. In addition to dimmer switch, the unit shall also have two single pole switches for control of canopy lights and site lighting. Air conditioner to be a through the rear wall mounted unit with 14,300 BTU cooling and 5KW electric resistance heating at 208 volts. HVAC to have a painted shroud that is recessed so only 1" protrudes to the outside of the rear wall, exterior grill to be an Architectural louver, A\C to have dedicated outlet. Unit shall also have three empty single gang J-Boxes mounted under the front shelf with 1\2" conduit runs with pull string terminating at the stub up area. Unit shall also have two weather proof J-Boxes at roof with 1/2" conduit runs with pull string stubbed into booth and down into knee space below front shelf for installation of future wireless antenna. Unit shall also have a 12" x 12" hard point in the ceiling for monitor mount by others. Hard point to be minimum 12ga. galvanized steel and shall have a dedicated duplex outlet and J-Box with conduit run. Reference Panel 'LBP' schedule on plans.

WEATHER PROOFING

A. Weather-tight for exterior use. All seams and joints pressure bonderized. All openings fully weather stripped.

PART 3 - EXECUTION

3.1 GENERAL

A. Install prefabricated buildings on flat and level concrete pad in accordance with the manufacturer's recommendations and placement drawings. Position units over utility stub-ups, verify building is level and anchor.

3.2 INSTALLATION

A. Units shall be shipped fully assembled, fully wired, fully glazed and thoroughly painted.

A. Position units over electrical stub-up on level pad. Drill and set expansion type anchor bolts.

B. Connect power and seal around edges where the floor base meets the concrete pad.

END OF SECTION

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SECTION 220100

PLUMBING SUBMITTAL PROCEDURES

PART 1 - GENERAL

RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

SUMMARY

B. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

DEFINITIONS

C. Action Submittals: Written and graphic information and physical samples that require Engineer’s responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."

D. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Division Section as "informational submittals."

E. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.

F. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

ACTION SUBMITTALS

G. Submittal Schedule: Submit a schedule of Division 22 submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Engineer’s and additional time for handling and reviewing submittals required by those corrections.

1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.

2. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.

4. Format: Arrange the following information in a tabular format:

    a. Scheduled date for first submittal.
    b. Specification Section number and title.
    c. Submittal category: Action; informational.
    d. Name of subcontractor.
    e. Description of the Work covered.
    f. Scheduled date for Engineer's final release or approval.
    g. Scheduled date of fabrication.
    h. Scheduled dates for delivery.
    i. Scheduled dates for installation.
    j. Activity or event number.

SUBMITTAL ADMINISTRATIVE REQUIREMENTS

H. Engineer's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Engineer for Contractor's use in preparing submittals.

1. Engineer will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing and Project record drawings.

    a. Engineer makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
    b. Contractor shall execute a data licensing agreement in the form of Halff Associates' Standard form.

I. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
2. Submit all submittal items required for each Specification Section within a Construction Division concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule. *
    - This submittal package shall be comprehensive document by Division and not piecemealed by specification section.
3. Submit action submittals and informational submittals required by the same Specification Section concurrent.
4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination. For example, HVAC Equipment must be submitted and approved prior to approval of Electrical gear.

a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

J. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
3. Resubmittal Review: Allow 10 working days for review of each resubmittal.
4. Sequential Review: Where sequential review of submittals is indicated, allow 15 working days for initial review of each submittal.

K. Paper Submittals: Place a permanent label or title block on each submittal item for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Engineer.
3. Include the following information for processing and recording action taken:

a. Project name.
b. Date.
c. Name of Engineer.
d. Name of Construction Manager, where applicable.
e. Name of Contractor.
f. Name of subcontractor.
g. Name of supplier.
h. Name of manufacturer.
i. Submittal number or other unique identifier, including revision identifier.

1) Submittal number shall use Specification Division Section or number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).

j. Number and title of appropriate Specification.
k. Drawing number and detail references, as appropriate.
l. Location(s) where product is to be installed, as appropriate.
m. Other necessary identification.

4. Additional Paper Copies: Unless additional copies are required for final submittal, initial submittal may serve as final submittal.

a. When paper copies are required, submit one copy of submittal.

5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Engineer will return without review submittals received from sources other than Contractor.
    a. Transmittal Form for Paper Submittals: Provide locations on form for the following information:

        1) Project name.
        2) Date.
        3) Destination (To:).
        4) Source (From:).
        5) Name and address of Engineer.
        6) Name of Construction Manager, where applicable.
        7) Name of Contractor.
        8) Name of firm or entity that prepared submittal.
        9) Names of subcontractor, manufacturer, and supplier.
        10) Category and type of submittal.
        11) Submittal purpose and description.
        12) Specification Section number and title.
        13) Specification paragraph number or drawing designation and generic name for each of multiple items.
        14) Drawing number and detail references, as appropriate.
        15) Indication of full or partial submittal.
        16) Transmittal number, numbered consecutively.
        17) Submittal and transmittal distribution record.
        18) Remarks.
        19) Signature of transmitter.

L. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:

1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item. Alternately, submit package as a comprehensive .pdf document by Division with each Specification Section tabbed.
2. Name file with submittal number or other unique identifier, including revision identifier.

    a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
3. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:

    a. Project name.
    b. Date.
    c. Name and address of Engineer.
    d. Name of Construction Manager, where applicable.
    e. Name of Contractor.
    f. Name of firm or entity that prepared submittal.
    g. Names of subcontractor, manufacturer, and supplier.

h. Category and type of submittal.
i. Submittal purpose and description.
j. Specification Section number and title.
k. Specification paragraph number or drawing designation and generic name for each of multiple items.
l. Drawing number and detail references, as appropriate.
m. Location(s) where product is to be installed, as appropriate.
n. Related physical samples submitted directly.
o. Indication of full or partial submittal.
p. Transmittal number, numbered consecutively.
q. Submittal and transmittal distribution record.
r. Other necessary identification.
s. Remarks.

M. Options: Identify options requiring selection by Engineer.

N. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Engineer on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.

O. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.

1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.
3. Resubmit submittals until they are marked with approval notation from Engineer’s action stamp.

P. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

Q. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Engineer’s action stamp.

PART 2 - PRODUCTS

SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

1. Post electronic submittals as PDF electronic files directly to Project Web site or FTP site specifically established for Project.

a. Engineer will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.

1. Action Submittals: For submittal formats 11 x 17 and larger, submit two paper copies of each submittal unless otherwise indicated in addition to the electronically posted submittal. Engineer will return one copy of paper submittal.
2. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.

    a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
    b. Provide a notarized statement on original paper copy certificates and certifications where indicated.

B. Product Data: Collect information into a single submittal for each construction Division and type of product or equipment.

1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:

    a. Manufacturer's catalog cuts.
    b. Manufacturer's product specifications.
    c. Standard color charts.
    d. Statement of compliance with specified referenced standards.
    e. Testing by recognized testing agency.
    f. Application of testing agency labels and seals.
    g. Notation of coordination requirements.
    h. Availability and delivery time information.

4. For equipment, include the following in addition to the above, as applicable:

    a. Wiring diagrams showing factory-installed wiring.
    b. Printed performance curves.
    c. Operational range diagrams.
    d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.

5. Submit Product Data before or concurrent with Samples.
6. Submit Product Data (8-1/2 x 11 format only) in the following format:

    a. PDF electronic file.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

a. Identification of products.
b. Schedules.
c. Compliance with specified standards.
d. Notation of coordination requirements.
e. Notation of dimensions established by field measurement.
f. Relationship and attachment to adjoining construction clearly indicated.
g. Seal and signature of professional engineer, if specified.

2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 11 x 17 but no larger than 30 by 42 inches.
3. Submit Shop Drawings in the following format:
   a. Two opaque (bond) copies of each submittal. Engineer will return one copy. Engineer will return one copy. Submit also one electronic file for record keeping.

4. BIM File Incorporation: Develop and incorporate Shop Drawing files into Building Information Model established for Project.

   a. Prepare Shop Drawings in the following format: Same digital data software program, version, and operating system as the original Drawings.
   b. Refer to Section 01 31 00 "Project Management and Coordination" for requirements for coordination drawings.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
2. Identification: Attach label on unexposed side of Samples that includes the following:

   a. Generic description of Sample.
   b. Product name and name of manufacturer.
   c. Sample source.
   d. Number and title of applicable Specification Section.
   e. Specification paragraph number and generic name of each item.

3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

   a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
   b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

a. Number of Samples: Submit one full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. "Samples for Verification" Subparagraph below can be used with or without Samples for initial selection. Revise to suit Project.

E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.

F. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

G. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

H. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

I. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

DELEGATED-DESIGN SERVICES

J. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.

K. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

L. BIM File Incorporation: Incorporate delegated-design drawing and data files into Building Information Model established for Project.

1. Prepare delegated-design drawings in the following format: Same digital data software program, version, and operating system as the original Drawings.

PART 3 - EXECUTION

CONTRACTOR'S REVIEW

A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.

B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

ENGINEER'S ACTION

C. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or revisions required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Engineer.

E. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.

F. Submittals not required by the Contract Documents may be returned by the Engineer without action.

END OF SECTION 220100

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SECTION 220523

GENERAL-DUTY VALVES FOR PLUMBING PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:
   1. Bronze ball valves.
   2. Bronze gate valves.

B. Related Sections:
   1. Section 221116 "Domestic Water Piping" for valves applicable only to this piping.

1.3 DEFINITIONS

A. CWP: Cold working pressure.

B. EPDM: Ethylene propylene copolymer rubber.

C. NBR: Acrylonitrile-butadiene, Buna-N, or nitrile rubber.

D. NRS: Nonrising stem.

E. OS&Y: Outside screw and yoke.

F. RS: Rising stem.

G. SWP: Steam working pressure.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of valve indicated.

1.5 QUALITY ASSURANCE

A. Source Limitations for Valves: Obtain each type of valve from single source from single manufacturer.

B. ASME Compliance:
   1. ASME B31.1 for power piping valves.
   2. ASME B31.9 for building services piping valves.

C. NSF Compliance: NSF 61 for valve materials for potable-water service.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Prepare valves for shipping as follows:
   1. Protect internal parts against rust and corrosion.
   2. Protect threads, flange faces, grooves, and weld ends.
   3. Set gate valves closed to prevent rattling.
   4. Set ball valves open to minimize exposure of functional surfaces.
   5. Block check valves in either closed or open position.

B. Use the following precautions during storage:
   1. Maintain valve end protection.
   2. Store valves indoors and maintain at higher than ambient dew point temperature. If outdoor storage is necessary, store valves off the ground in watertight enclosures.

C. Use sling to handle large valves; rig sling to avoid damage to exposed parts. Do not use handwheels or stems as lifting or rigging points.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR VALVES

A. Valve Pressure and Temperature Ratings: Not less than indicated and as required for system pressures and temperatures.

B. Valve Sizes: Same as upstream piping unless otherwise indicated.

C. Valve Actuator Types:
   1. Handwheel: For valves other than quarter-turn types.
   2. Handlever: For quarter-turn valves NPS 6 and smaller.

D. Valves in Insulated Piping: With 2-inch stem extensions and the following features:
   1. Gate Valves: With rising stem.
   2. Ball Valves: With extended operating handle of non-thermal-conductive material, and protective sleeve that allows operation of valve without breaking the vapor seal or disturbing insulation.

E. Valve-End Connections:
   1. Grooved: With grooves according to AWWA C606.
   2. Solder Joint: With sockets according to ASME B16.18.
   3. Threaded: With threads according to ASME B1.20.1.

F. Valve Bypass and Drain Connections: MSS SP-45.

2.2 BRONZE BALL VALVES

A. Two-Piece, Full-Port, Bronze Ball Valves with Bronze Trim:
   1. Description:
      a. Standard: MSS SP-110.
      b. SWP Rating: 150 psig.
      c. CWP Rating: 600 psig.
      d. Body Design: Two piece.
      e. Body Material: Bronze.
      f. Ends: Threaded.
      g. Seats: PTFE or TFE.
      h. Stem: Bronze.
      i. Ball: Chrome-plated brass.
      j. Port: Full.

2.3 BRONZE GATE VALVES

A. Class 125, NRS Bronze Gate Valves:
   1. Description:
      a. Standard: MSS SP-80, Type 1.
      b. CWP Rating: 200 psig.
      c. Body Material: ASTM B 62, bronze with integral seat and screw-in bonnet.
      d. Ends: Threaded or solder joint.
      e. Stem: Bronze.
      f. Disc: Solid wedge; bronze.
      g. Packing: Asbestos free.
      h. Handwheel: Malleable iron, bronze, or aluminum.

B. Class 125, RS Bronze Gate Valves:
   1. Description:
      a. Standard: MSS SP-80, Type 2.
      b. CWP Rating: 200 psig.
      c. Body Material: ASTM B 62, bronze with integral seat and screw-in bonnet.
      d. Ends: Threaded or solder joint.
      e. Stem: Bronze.
      f. Disc: Solid wedge; bronze.
      g. Packing: Asbestos free.
      h. Handwheel: Malleable iron, bronze, or aluminum.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine valve interior for cleanliness, freedom from foreign matter, and corrosion. Remove special packing materials, such as blocks, used to prevent disc movement during shipping and handling.

B. Operate valves in positions from fully open to fully closed. Examine guides and seats made accessible by such operations.

C. Examine threads on valve and mating pipe for form and cleanliness.

D. Examine mating flange faces for conditions that might cause leakage. Check bolting for proper size, length, and material. Verify that gasket is of proper size, that its material composition is suitable for service, and that it is free from defects and damage.

E. Do not attempt to repair defective valves; replace with new valves.

3.2 VALVE INSTALLATION

A. Install valves with unions or flanges at each piece of equipment arranged to allow service, maintenance, and equipment removal without system shutdown.

B. Locate valves for easy access and provide separate support where necessary.

C. Install valves in horizontal piping with stem at or above center of pipe.

D. Install valves in position to allow full stem movement.

3.3 ADJUSTING

A. Adjust or replace valve packing after piping systems have been tested and put into service but before final adjusting and balancing. Replace valves if persistent leaking occurs.

3.4 GENERAL REQUIREMENTS FOR VALVE APPLICATIONS

A. If valve applications are not indicated, use the following:
   1. Shutoff Service: Ball or gate valves.
   2. Throttling Service: Ball valve.

B. If valves with specified SWP classes or CWP ratings are not available, the same types of valves with higher SWP classes or CWP ratings may be substituted.

C. Select valves, except wafer types, with the following end connections:
   1. For Copper Tubing, NPS 2 and Smaller: Threaded ends except where solder-joint valve-end option is indicated in valve schedules below.

2. For Copper Tubing, NPS 2-1/2 to NPS 4: Flanged ends except where threaded valve-end option is indicated in valve schedules below.
3. For Copper Tubing, NPS 5 and Larger: Flanged ends.
4. For Grooved-End Copper Tubing: Valve ends may be grooved.

3.5 DOMESTIC, COLD-WATER VALVE SCHEDULE

A. Pipe NPS 4 and Smaller:
1. Bronze Valves: May be provided with solder-joint ends instead of threaded ends.
2. Ball Valves: Two piece, full port, bronze with bronze trim.
3. Bronze Swing Check Valves: Class 125, bronze disc.
4. Bronze Gate Valves: Class 125, NRS.

END OF SECTION 220523

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SECTION 221116

DOMESTIC WATER PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Under-building-slab and aboveground domestic water pipes, tubes, and fittings inside buildings.
2. Encasement for piping.

1.3 ACTION SUBMITTALS

A. Product Data: For transition fittings and dielectric fittings.

1.4 INFORMATIONAL SUBMITTALS

A. System purging and disinfecting activities report.

B. Field quality-control reports.

1.5 FIELD CONDITIONS

A. Interruption of Existing Water Service: Do not interrupt water service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary water service according to requirements indicated:

1. Notify Architect and/or Engineer no fewer than three days in advance of proposed interruption of water service.
2. Do not interrupt water service without Architect's written permission.

PART 2 - PRODUCTS

2.1 PIPING MATERIALS

A. Comply with requirements in "Piping Schedule" Article for applications of pipe, tube, fitting materials, and joining methods for specific services, service locations, and pipe sizes.

B. Potable-water piping and components shall comply with NSF 14 and NSF 61. Plastic piping components shall be marked with "NSF-pw."

2.2 COPPER TUBE AND FITTINGS

A. Hard Copper Tube: ASTM B 88, Type L water tube, drawn temper.

B. Soft Copper Tube: ASTM B 88, Type K water tube, annealed temper.

C. Cast-Copper, Solder-Joint Fittings: ASME B16.18, pressure fittings.

D. Wrought-Copper, Solder-Joint Fittings: ASME B16.22, wrought-copper pressure fittings.

E. Bronze Flanges: ASME B16.24, Class 150, with solder-joint ends.

F. Copper Unions:

1. MSS SP-123.
2. Cast-copper-alloy, hexagonal-stock body.
3. Ball-and-socket, metal-to-metal seating surfaces.
4. Solder-joint or threaded ends.

G. Copper Pressure-Seal-Joint Fittings:

1. Fittings for NPS 2 and Smaller: Wrought-copper fitting with EPDM-rubber, O-ring seal in each end.
2. Fittings for NPS 2-1/2 to NPS 4: Cast-bronze or wrought-copper fitting with EPDM-rubber, O-ring seal in each end.

H. Copper-Tube, Extruded-Tee Connections:

1. Description: Tee formed in copper tube according to ASTM F 2014.

I. Appurtenances for Grooved-End Copper Tubing:

1. Bronze Fittings for Grooved-End, Copper Tubing: ASTM B 75 copper tube or ASTM B 584 bronze castings.
2. Mechanical Couplings for Grooved-End Copper Tubing:

a. Copper-tube dimensions and design similar to AWWA C606.
b. Ferrous housing sections.
c. EPDM-rubber gaskets suitable for hot and cold water.

d. Bolts and nuts.
e. Minimum Pressure Rating: 300 psig.

2.3 PVC PIPE AND FITTINGS

A. PVC Pipe: ASTM D 1785, Schedule 40.

B. PVC Socket Fittings: ASTM D 2466 for Schedule 40.

C. PVC Schedule 80 Threaded Fittings: ASTM D 2464.

2.4 PIPING JOINING MATERIALS

A. Pipe-Flange Gasket Materials:

1. AWWA C110/A21.10, rubber, flat face, 1/8 inch thick or ASME B16.21, nonmetallic and asbestos free unless otherwise indicated.
2. Full-face or ring type unless otherwise indicated.

B. Solder Filler Metals: ASTM B 32, lead-free alloys.

C. Flux: ASTM B 813, water flushable.

D. Brazing Filler Metals: AWS A5.8/A5.8M, BCuP Series, copper-phosphorus alloys for general-duty brazing unless otherwise indicated.

E. Solvent Cements for Joining PVC Piping: ASTM D 2564. Include primer according to ASTM F 656.

1. PVC solvent cement shall have a VOC content of 510 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
2. Adhesive primer shall have a VOC content of 550 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
3. Solvent cement and adhesive primer shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

F. Plastic, Pipe-Flange Gaskets, Bolts, and Nuts: Type and material recommended by piping system manufacturer unless otherwise indicated.

2.5 ENCASEMENT FOR PIPING

A. Standard: ASTM A 674 or AWWA C105/A21.5.

B. Form: tube.

C. Color: Black or natural.

2.6 TRANSITION FITTINGS

A. General Requirements:

1. Same size as pipes to be joined.
2. Pressure rating at least equal to pipes to be joined.
3. End connections compatible with pipes to be joined.

B. Fitting-Type Transition Couplings: Manufactured piping coupling or specified piping system fitting.

C. Sleeve-Type Transition Coupling: AWWA C219.

D. Plastic-to-Metal Transition Fittings:

1. Description:

a. PVC one-piece fitting with manufacturer's Schedule 80 equivalent dimensions.
b. One end with threaded brass insert and one solvent-cement-socket or threaded end.

2.7 DIELECTRIC FITTINGS

A. General Requirements: Assembly of copper alloy and ferrous materials with separating nonconductive insulating material. Include end connections compatible with pipes to be joined.

B. Dielectric Unions:

1. Standard: ASSE 1079.
2. Pressure Rating: 150 psig.
3. End Connections: Solder-joint copper alloy and threaded ferrous.

C. Dielectric Flanges:

1. Standard: ASSE 1079.
2. Factory-fabricated, bolted, companion-flange assembly.
3. Pressure Rating: 150 psig.
4. End Connections: Solder-joint copper alloy and threaded ferrous; threaded solder-joint copper alloy and threaded ferrous.

D. Dielectric-Flange Insulating Kits:

1. Nonconducting materials for field assembly of companion flanges.
2. Pressure Rating: 150 psig.
3. Gasket: Neoprene or phenolic.
4. Bolt Sleeves: Phenolic or polyethylene.
5. Washers: Phenolic with steel backing washers.

E. Dielectric Nipples:

1. Standard: IAPMO PS 66.
2. Electroplated steel nipple complying with ASTM F 1545.
3. Pressure Rating and Temperature: 300 psig at 225 deg F.
4. End Connections: Male threaded or grooved.
5. Lining: Inert and noncorrosive, propylene.

PART 3 - EXECUTION

3.1 EARTHWORK

A. Comply with requirements in Section 31 20 00 "Earth Moving" for excavating, trenching, and backfilling.

3.2 PIPING INSTALLATION

A. Drawing plans, schematics, and diagrams indicate general location and arrangement of domestic water piping. Indicated locations and arrangements are used to size pipe and calculate friction loss, expansion, and other design considerations. Install piping as indicated unless deviations to layout are approved on coordination drawings.

B. Install copper tubing under building slab according to CDA's "Copper Tube Handbook."

C. Install underground copper tube in PE encasement according to ASTM A 674 or AWWA C105/A21.5.

D. Install shutoff valve and hose-end drain valve inside the building at each domestic water-service entrance.

E. Install shutoff valve immediately upstream of each dielectric fitting.

F. Install domestic water piping level without pitch and plumb.

G. Rough-in domestic water piping for water-meter installation according to utility company's requirements.

H. Install piping concealed from view and protected from physical contact by building occupants unless otherwise indicated and except in equipment rooms and service areas.

I. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.

J. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal, and coordinate with other services occupying that space.

K. Install piping to permit valve servicing.

L. Install nipples, unions, special fittings, and valves with pressure ratings the same as or higher than the system pressure rating used in applications below unless otherwise indicated.

M. Install piping free of sags and bends.

N. Install fittings for changes in direction and branch connections.

O. Install unions in copper tubing at final connection to each piece of equipment, machine, and specialty.

P. Install sleeves for piping penetrations of walls, ceilings, and floors. Comply with requirements for sleeves specified in Section 22 05 17 "Sleeves and Sleeve Seals for Plumbing Piping."

Q. Install sleeve seals for piping penetrations of concrete walls and slabs. Comply with requirements for sleeve seals specified in Section 22 05 17 "Sleeves and Sleeve Seals for Plumbing Piping."

R. Install escutcheons for piping penetrations of walls, ceilings, and floors. Comply with requirements for escutcheons specified in Section 22 05 18 "Escutcheons for Plumbing Piping."

3.3 JOINT CONSTRUCTION

A. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.

B. Remove scale, slag, dirt, and debris from inside and outside of pipes, tubes, and fittings before assembly.

C. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:

1. Apply appropriate tape or thread compound to external pipe threads.
2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged.

D. Brazed Joints for Copper Tubing: Comply with CDA's "Copper Tube Handbook," "Brazed Joints" chapter.

E. Soldered Joints for Copper Tubing: Apply ASTM B 813, water-flushable flux to end of tube. Join copper tube and fittings according to ASTM B 828 or CDA's "Copper Tube Handbook."

F. Pressure-Sealed Joints for Copper Tubing: Join copper tube and pressure-seal fittings with tools recommended by fitting manufacturer.

G. Extruded-Tee Connections: Form tee in copper tube according to ASTM F 2014. Use tool designed for copper tube; drill pilot hole, form collar for outlet, dimple tube to form seating stop, and braze branch tube into collar.

H. Joint Construction for Grooved-End Copper Tubing: Make joints according to AWWA C606. Roll groove ends of tubes. Lubricate and install gasket over ends of tubes or tube and fitting. Install coupling housing sections over gasket with keys seated in tubing grooves. Install and tighten housing bolts.

I. Flanged Joints: Select appropriate asbestos-free, nonmetallic gasket material in size, type, and thickness suitable for domestic water service. Join flanges with gasket and bolts according to ASME B31.9.

J. Joint Construction for Solvent-Cemented Plastic Piping: Clean and dry joining surfaces. Join pipe and fittings according to the following:

1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements. Apply primer.
2. PVC Piping: Join according to ASTM D 2855.

K. Joints for Dissimilar-Material Piping: Make joints using adapters compatible with materials of both piping systems.

3.4 TRANSITION FITTING INSTALLATION

A. Install transition couplings at joints of dissimilar piping.

B. Transition Fittings in Underground Domestic Water Piping:

1. Fittings for NPS 1-1/2 and Smaller: Fitting-type coupling.
2. Fittings for NPS 2 and Larger: Sleeve-type coupling.

C. Transition Fittings in Aboveground Domestic Water Piping NPS 2 and Smaller: Plastic-to-metal transition fittings.

3.5 DIELECTRIC FITTING INSTALLATION

A. Install dielectric fittings in piping at connections of dissimilar metal piping and tubing.

B. Dielectric Fittings for NPS 2 and Smaller: Use dielectric couplings or nipples.

C. Dielectric Fittings for NPS 2-1/2 to NPS 4: Use dielectric flange kits.

D. Dielectric Fittings for NPS 5 and Larger: Use dielectric flange kits.

3.6 HANGER AND SUPPORT INSTALLATION

A. Comply with requirements for pipe hanger, support products, and installation in Section 22 05 29 "Hangers and Supports for Plumbing Piping and Equipment."

1. Vertical Piping: MSS Type 8 or 42, clamps.
2. Individual, Straight, Horizontal Piping Runs:

a. 100 Feet and Less: MSS Type 1, adjustable, steel clevis hangers.
b. Longer Than 100 Feet: MSS Type 43, adjustable roller hangers.
c. Longer Than 100 Feet if Indicated: MSS Type 49, spring cushion rolls.

3. Multiple, Straight, Horizontal Piping Runs 100 Feet or Longer: MSS Type 44, pipe rolls. Support pipe rolls on trapeze.
4. Base of Vertical Piping: MSS Type 52, spring hangers.

B. Support vertical piping and tubing at base and at each floor.

C. Rod diameter may be reduced one size for double-rod hangers, to a minimum of 3/8 inch.

D. Install hangers for copper tubing with the following maximum horizontal spacing and minimum rod diameters:

1. NPS 3/4 and Smaller: 60 inches with 3/8-inch rod.
2. NPS 1 and NPS 1-1/4: 72 inches with 3/8-inch rod.
3. NPS 1-1/2 and NPS 2: 96 inches with 3/8-inch rod.
4. NPS 2-1/2: 108 inches with 1/2-inch rod.
5. NPS 3 to NPS 5: 10 feet with 1/2-inch rod.
6. NPS 6: 10 feet with 5/8-inch rod.

E. Install supports for vertical copper tubing every 10 feet.

F. Support piping and tubing not listed in this article according to MSS SP-69 and manufacturer's written instructions.

3.7 CONNECTIONS

A. Drawings indicate general arrangement of piping, fittings, and specialties.

B. When installing piping adjacent to equipment and machines, allow space for service and maintenance.

C. Connect domestic water piping to exterior water-service piping. Use transition fitting to join dissimilar piping materials.

D. Connect domestic water piping to water-service piping with shutoff valve; extend and connect to the following:

1. Plumbing Fixtures: Cold- and hot-water-supply piping in sizes indicated, but not smaller than that required by plumbing code.
2. Equipment: Cold- and hot-water-supply piping as indicated, but not smaller than equipment connections. Provide shutoff valve and union for each connection. Use flanges instead of unions for NPS 2-1/2 and larger.

3.8 IDENTIFICATION

A. Identify system components. Comply with requirements for identification materials and installation in Section 22 05 53 "Identification for Plumbing Piping and Equipment."

B. Label pressure piping with system operating pressure.

3.9 FIELD QUALITY CONTROL

A. Perform the following tests and inspections:

1. Piping Inspections:

a. Do not enclose, cover, or put piping into operation until it has been inspected and approved by authorities having jurisdiction.
b. During installation, notify authorities having jurisdiction at least one day before inspection must be made. Perform tests specified below in presence of authorities having jurisdiction:

1) Roughing-in Inspection: Arrange for inspection of piping before concealing or closing in after roughing in and before setting fixtures.
2) Final Inspection: Arrange for authorities having jurisdiction to observe tests specified in "Piping Tests" Subparagraph below and to ensure compliance with requirements.

c. Reinspection: If authorities having jurisdiction find that piping will not pass tests or inspections, make required corrections and arrange for reinspection.
d. Reports: Prepare inspection reports and have them signed by authorities having jurisdiction.

2. Piping Tests:

a. Fill domestic water piping. Check components to determine that they are not air bound and that piping is full of water.
b. Test for leaks and defects in new piping and parts of existing piping that have been altered, extended, or repaired. If testing is performed in segments, submit a separate report for each test, complete with diagram of portion of piping tested.
c. Leave new, altered, extended, or replaced domestic water piping uncovered and unconcealed until it has been tested and approved. Expose work that was covered or concealed before it was tested.
d. Cap and subject piping to static water pressure of 50 psig above operating pressure, without exceeding pressure rating of piping system materials. Isolate test source and allow it to stand for four hours. Leaks and loss in test pressure constitute defects that must be repaired.
e. Repair leaks and defects with new materials, and retest piping or portion thereof until satisfactory results are obtained.
f. Prepare reports for tests and for corrective action required.

B. Domestic water piping will be considered defective if it does not pass tests and inspections.

C. Prepare test and inspection reports.

3.10 ADJUSTING

A. Perform the following adjustments before operation:

1. Close drain valves, hydrants, and hose bibbs.
2. Open shutoff valves to fully open position.
3. Open throttling valves to proper setting.
4. Remove plugs used during testing of piping and for temporary sealing of piping during installation.
5. Check plumbing specialties and verify proper settings, adjustments, and operation.

3.11 CLEANING

A. Clean and disinfect potable domestic water piping as follows:

1. Purge new piping and parts of existing piping that have been altered, extended, or repaired before using.
2. Use purging and disinfecting procedures prescribed by authorities having jurisdiction; if methods are not prescribed, use procedures described in either AWWA C651 or AWWA C652 or follow procedures described below:

    a. Flush piping system with clean, potable water until dirty water does not appear at outlets.
    b. Fill and isolate system according to either of the following:

        1) Fill system or part thereof with water/chlorine solution with at least 50 ppm of chlorine. Isolate with valves and allow to stand for 24 hours.
        2) Fill system or part thereof with water/chlorine solution with at least 200 ppm of chlorine. Isolate and allow to stand for three hours.

    c. Flush system with clean, potable water until no chlorine is in water coming from system after the standing time.
    d. Repeat procedures if biological examination shows contamination.
    e. Submit water samples in sterile bottles to authorities having jurisdiction.

B. Clean non-potable domestic water piping as follows:

1. Purge new piping and parts of existing piping that have been altered, extended, or repaired before using.
2. Use purging procedures prescribed by authorities having jurisdiction or; if methods are not prescribed, follow procedures described below:

    a. Flush piping system with clean, potable water until dirty water does not appear at outlets.
    b. Submit water samples in sterile bottles to authorities having jurisdiction. Repeat procedures if biological examination shows contamination.

C. Prepare and submit reports of purging and disinfecting activities. Include copies of water-sample approvals from authorities having jurisdiction.

D. Clean interior of domestic water piping system. Remove dirt and debris as work progresses.

3.12 PIPING SCHEDULE

A. Transition and special fittings with pressure ratings at least equal to piping rating may be used in applications below unless otherwise indicated.

B. Flanges and unions may be used for aboveground piping joints unless otherwise indicated.

C. Fitting Option: Extruded-tee connections and brazed joints may be used on aboveground copper tubing.

D. Under-building-slab, domestic water, building-service piping, NPS 3, shall be one of the following:

1. Soft copper tube, ASTM B 88, Type Kwrought-copper, solder-joint fittings; and brazed joints.
2. PVC, Schedule 40; socket fittings; and solvent-cemented joints.

E. Under-building-slab, domestic water, building-service piping, NPS 4 and larger, shall be one of the following:

1. Soft copper tube, ASTM B 88, Type K; wrought-copper, solder-joint fittings; and brazed joints.
2. PVC, Schedule 40; socket fittings; and solvent-cemented joints.

F. Aboveground domestic water piping, NPS 4 and smaller, shall be the following:

1. Hard copper tube, ASTM B 88, Type L; cast- or wrought-copper, solder-joint fittings; and brazed joints.

G. Aboveground domestic water piping, NPS 5 and larger, shall be the following:

1. Hard copper tube, ASTM B 88, Type L; grooved-joint, copper-tube appurtenances; and grooved joints.

3.13 VALVE SCHEDULE

A. Drawings indicate valve types to be used. Where specific valve types are not indicated, the following requirements apply:

1. Shutoff Duty: Use ball or gate valves for piping NPS 2 and smaller. Use ball or gate valves with flanged ends for piping NPS 2-1/2 and larger.
2. Throttling Duty: Use ball valves for all piping.
3. Hot-Water Circulation Piping, Balancing Duty: Calibrated balancing valves.

4. Drain Duty: Hose-end drain valves.

B. Use check valves to maintain correct direction of domestic water flow to and from equipment.

C. Iron grooved-end valves may be used with grooved-end piping.

END OF SECTION 221116

SECTION 221119

DOMESTIC WATER PIPING SPECIALTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Vacuum breakers.
2. Backflow preventers.
3. Hose bibbs.
4. Wall hydrants.

B. Related Requirements:

1. Section 22 11 16 "Domestic Water Piping" for water meters.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: For domestic water piping specialties.

1. Include diagrams for power, signal, and control wiring.

1.4 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For domestic water piping specialties to include in emergency, operation, and maintenance manuals.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR PIPING SPECIALTIES

A. Potable-water piping and components shall comply with NSF 61.

2.2 PERFORMANCE REQUIREMENTS

A. Minimum Working Pressure for Domestic Water Piping Specialties: 125 psig unless otherwise indicated.

2.3 VACUUM BREAKERS

A. Hose-Connection Vacuum Breakers:

1. Standard: ASSE 1011.
2. Body: Bronze, nonremovable, with manual drain.
3. Outlet Connection: Garden-hose threaded complying with ASME B1.20.7.
4. Finish: Rough bronze.

2.4 BACKFLOW PREVENTERS

A. Hose-Connection Backflow Preventers:

1. Standard: ASSE 1052.
2. Operation: Up to 10-foot head of water back pressure.
3. Inlet Size: NPS 1/2 or NPS 3/4.
4. Outlet Size: Garden-hose thread complying with ASME B1.20.7.
5. Capacity: At least 3-gpm flow.

2.5 HOSE BIBBS

A. Hose Bibbs:

1. Standard: ASME A112.18.1 for sediment faucets.
2. Body Material: Bronze.
3. Seat: Bronze, replaceable.
4. Supply Connections: NPS 1/2 or NPS 3/4 threaded or solder-joint inlet.
5. Outlet Connection: Garden-hose thread complying with ASME B1.20.7.
6. Pressure Rating: 125 psig.
7. Vacuum Breaker: Integral or field-installation, nonremovable, drainable, hose-connection vacuum breaker complying with ASSE 1011.
8. Finish for Equipment Rooms: Rough bronze, or chrome or nickel plated.
9. Finish for Service Areas: Rough bronze.
10. Finish for Finished Rooms: Chrome or nickel plated.

11. Operation for Equipment Rooms: Wheel handle or operating key.
12. Operation for Service Areas: Operating key.
13. Operation for Finished Rooms: Operating key.
14. Include operating key with each operating-key hose bibb.
15. Include wall flange with each chrome- or nickel-plated hose bibb.

2.6 WALL HYDRANTS

A. Nonfreeze Wall Hydrant.

1. Standard: ASME A112.21.3M for concealed-outlet, self-draining wall hydrants.
2. Pressure Rating: 125 psig.
3. Operation: Loose key.
4. Casing and Operating Rod: Of length required to match wall thickness. Include wall clamp.
5. Inlet: NPS 3/4 or NPS 1.
6. Outlet: Concealed, with integral vacuum breaker and garden-hose thread complying with ASME B1.20.7.
7. Box: Deep, flush mounted with cover.
8. Box and Cover Finish: Polished nickel bronze.
9. Outlet: Exposed, with integral vacuum breaker and garden-hose thread complying with ASME B1.20.7.
10. Nozzle and Wall-Plate Finish: Rough bronze.
11. Operating Keys(s): One with each wall hydrant.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install backflow preventers in each water supply to mechanical equipment and systems and to other equipment and water systems that may be sources of contamination. Comply with authorities having jurisdiction.
1. Do not install bypass piping around backflow preventers.

3.2 CONNECTIONS

A. Comply with requirements for ground equipment in Section 26 05 26 "Grounding and Bonding for Electrical Systems."

B. Fire-retardant-treated-wood blocking is specified in Section 26 05 19 "Low-Voltage Electrical Power Conductors and Cables" for electrical connections.

3.3 FIELD QUALITY CONTROL

A. Perform the following tests and inspections:

1. Test each backflow-prevention assembly according to authorities having jurisdiction and the device's reference standard.

B. Domestic water piping specialties will be considered defective if they do not pass tests and inspections.

C. Prepare test and inspection reports.

END OF SECTION 221119

SECTION 233417

HIGH VOLUME LOW SPEED FAN

PART 1 GENERAL

1.1 SUMMARY

A. Provide all labor, equipment, and materials to furnish and install High Volume, Low Speed fans.

1.2 SUBMITTALS

A. Submit under provisions of Section 013000.

B. Product Data: Manufacturer's data sheets on each product to be used shall include:
   1. Preparation instructions and recommendations
   2. Storage and handling requirements and recommendations.
   3. Power and mounting requirements.
   4. Application Drawings: Submit plan, section, elevation and isometric views as necessary to convey the information required to detail all installation conditions for each unit specified.

1.3 REFERENCES

A. Underwriters Laboratories (UL 507).

1.4 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimal results.

1.5 WARRANTY

A. Manufactuere shall repair or replace warranted defective parts as follows:

   1. Lifetime warranty on airfoils and mounting

   2. 50,000-hour warranty on all other components, which include but are not limited to:

      a. Motor
      b. Integrated Drive

c. Controller/Remote

B. At project closeout, provide to Owner or Owner's Representative an executed copy of Manufactuer's standard limited warranty against manufacturing defect, outlining its terms, conditions and exclusions from coverage.

PART 2 PRODUCTS

2.1 APPROVED MANUFACTURERS

A. Basis of Design: MacroAir Technologies, Inc.
B. Substitutions: Big Ass Fans.

2.2 COMMERCIAL / INDUSTRIAL HVLS FANS

A. Performance

The fan shall be listed to applicable UL Standards and requirements by UL.

Model #	Diameter	Horsepower	Hanging Weight	RPM	Power Usage	Forward Displacement**	Reverse Displacement**	Industry Spacing***	Max Affected Area****	Max dBA*****
MA08XL5506	8 ft / 2.44 m	1.05 HP / 0.783 kW	120 lbs / 54.4 Kg	220	0.73 kW	53,000 CFM [1,490 CMM]	29,000 CFM [820 CMM]	60 ft [18.3 m]	4,000 ft^2 [372 m^2]	TBA*
MA10XL5506	10 ft / 3.05 m	1.05 HP / 0.783 kW	128 lbs / 58.2 Kg	170	0.85 kW	84,000 CFM [2,380 CMM]	49,000 CFM [1,400 CMM]	65 ft [19.8 m]	6,600 ft^2 [613 m^2]	TBA*
MA12XL5506	12 ft / 3.66 m	1.05 HP / 0.783 kW	140 lbs / 63.5 Kg	137	0.92 kW	106,000 CFM [3,010 CMM]	76,000 CFM [2,140 CMM]	70 ft [21.3 m]	8,800 ft^2 [818 m^2]	TBA*
MA14XL5506	14 ft / 4.27 m	1.05 HP / 0.783 kW	147 lbs / 66.5 Kg	110	0.89 kW	132,000 CFM [3,730 CFM]	86,000 CFM [2,440 CMM]	80 ft [24.4 m]	11,000 ft^2 [1,022 m^2]	TBA*
MA16X	16 ft /	1.05 HP /	151 lbs /	90	1.07	158,000 CFM	114,000 CFM	90 ft	13,000 ft^2	TBA

L5506	4.88 m	0.783 kW	68.5 Kg		kW	[4,490 CMM]	[3,240 CMM]	[27.4 m]	[1,208 m^2]	*
MA18X L5506	18 ft / 5.49 m	1.05 HP / 0.783 kW	160 lbs / 72.6 Kg	74	0.9 kW	181,000 CFM [5,130 CMM]	127,000 CFM [3,580 CMM]	95 ft [29 m]	15,000 ft^2 [1,394 m^2]	TBA *

*Data will be added when additional testing and/or information is ready

**Calculation based on AMCA 230-99 equation

***Delivers 2.8-4.2 ft/s [0.86-1.27 m/s] of average air speed in the occupied space. This relates to perceived cooling or set point change or 4.9-6.1 F [2.7-4.3 C]. Consult our online AirViz tool for more details

****Delivers 2.7-3.8 ft/s [0.82-1.16 m/s] of average air speed in the occupied space. This relates to a perceived cooling or set point change of 4.8-5.8 F [2.6-3.2 C]. Consult our online AirViz tool for more details.

*****Sound testing taken with the sensor 5 ft above the ground and 20 ft from the center of the fan with the fan running full speed and mounted at 20 ft high.

******Add 70 lbs / 31.8 Kg for a guard

B. Airfoils

The fan shall be equipped with six (6) NASA developed XL airfoils. The airfoils shall consist of anodized 6061 T4 precision extruded aluminum and be of the MacroAir XL design, with fan diameters ranging from 8 to 18 feet in two (2) foot increment. The airfoils shall be connected to six (6) individual aluminum 6005 T6 struts by means of two (2) 5/16-24 x 2-inch grade 5 hex bolts, two (2) 5/16-inch flat washers and two (2) 5/16-inch nylon lock nuts per airfoil.

1. Number of Airfoils: 6
2. Airfoil Material: 6061 T4 Extruded Aluminum.
3. Airfoil Finish: Anodized.
4. Option Airfoil Finish: Custom powder coated colors per Drylac RAL color chart.

C. Motor

The fan shall be equipped with a Transverse Flux brushless DC motor designed for low speed high torque applications. The motor shall be driven sensorlessly to eliminate the possibility of sensor or encoder failure.

1. Motor Type: Sensor-less Transverse Flux brushless DC Motor
2. Continuous Torque: 52 lbf (70 Nm).
3. Pole Count: 96.
4. IP Rating: 66.
5. Insulation Class: K (200 C).
6. Motor Finish and Color: Black Electrophoretic Paint.
7. Motor Housing: AISI 383 (ADC12).
8. Studs: AISI 4137 Grade 9 (JIS SCM435).

D. Integrated Drive

1. Electrical Requirements (Low Voltage)
    a. 104-277 VAC single (1) phase 50/60 Hz. 181-255 VAC three (3) phase 50/60 Hz.
2. Electrical Requirements (High Voltage)
    a. 241-294 VAC one (1) phase 50/60 Hz. 342-636 VAC three (3) phase 50/60Hz.
3. Environment
    a. Operation: -10ºC to 60ºC.
    b. Humidity: 0-95% non-condensing.
    c. Cooling: Centrifugal cooling through blades.
4. Operating Frequency: 20-50 KHz.
5. Firmware Updates: Via RJ45 (Remote) connector.
6. Lockable disconnect switch.
7. Dynamic acceleration and deceleration.
8. Modbus 485 (19.2 8-N-1).
9. Network touch-screen option available with:

a. Live energy consumption monitor.
b. Live fault code monitor.
c. Live fan speed monitor.
d. Impact and solvent resistant.
e. IP65 rated.

E. Mounting

The fan mounting system shall be equipped with hardware, no less than SAE grade 5 for safe installation. The fan shall be equipped with a stress reliving swivel (SRS) mount. The fan mount shall encompass multiple mounting options for I-beam, Purlin and Glulam applications (specified upon order).

1. Standard Mount: SRS I-beam clamp with 3.5' drop.

2. Optional Mounting Hardware: Glulam Mounting Brackets.

3. Mounting Drops: Extensions available in two (2) to ten (10) foot lengths in (1) foot increments (custom sizes available).

4. Mounting and Extension Material: Steel, Aluminum.

5. Mount Finish: Black Anodized.

F. Hub/Motor Housing

The fan shall be equipped with an aluminum motor housing with pressed in steel studs to securely accept six (6) removable, black anodized, 6005 T6 aluminum beam struts. The struts shall be designed with airfoil guides to ensure precision alignment and enable airfoils to be inverted for full CFM output in either reverse or forward operation.

1. Material: T6 Cast Aluminum.

2. Airfoil Strut Material: 6005 T6 Aluminum.

3. Airfoil Strut Finish: Black Anodized.

4. Hardware: Twelve (12) 5/16-24 x 1-3/4 inch Grade-8 pressed in studs.

5. Hardware: Twelve (12) 5/16-inch flat washers (SAE).

6. Hardware: Twelve (12) 5/16-inch nylon lock nuts.

G. Safety System

The fan shall include one-piece airfoil retainer links to prevent airfoil separation from the motor housing and a 3/16" safety cable attached to the lowest point of the fan. Included in the safety system shall be fuses and a disconnect to prevent fire or misuse. Each fan shall be E-stop compatible for fire and building automated systems (BAS).

1. Safety Cable Material: 3/16" x 7 x 19 Braided Steel.
2. Safety Cable Finish: Galvanized.
3. Airfoil Retainer Link Material: 10 Gauge A36 Steel.
4. Airfoil Retainer Link Finish: Black Zinc.

PART 3 EXECUTION

1.1 PREPARATION

A. Check accuracy of dimensions indicated for openings to receive fans.

B. Check location and availability of utility services to ensure proper voltage and installation preparation.

C. Coordinate location and installation of the HVLS Fans.

D. Ensure building structural members are sufficient to support the weight and operation of the fan. Consult professional engineer or registered architect as required.

1.2 INSTALLATION

A. Install units per manufacturer's written instructions.

B. Fan airfoil height to be a minimum of 10 feet from the floor in accordance with OSHA guidelines.

C. All safety and support features must be installed. These include any guy wires and safety cables as well as airfoil retainer locking features.

D. Adjust unit as required for proper operation in accordance with manufacturer's installation instructions.

E. Securely anchor units.

F. Ensure that operating parts turn freely prior to initial startup.

G. Repair or replace damaged parts, dents, buckles, abrasions or other damage affecting appearance or serviceability, as acceptable to Architect.

1.3 PROTECTION

A. Protect finished Work until date of Substantial Completion.

B. Touch-up, repair or replace damaged products before Substantial Completion.

1.4 CLEANING

A. Clean Work specification.

B. Clean and inspect fans per manufacturer's instructions.

C. Remove temporary protective cover at date of Substantial Completion.

END OF SECTION

SECTION 260000

BASIC ELECTRICAL MATERIALS AND METHODS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section. All conditions imposed by these documents shall be applicable to all portions of the work under this Division. Certain specific paragraphs of said references may be referred to hereinafter in this Division. These references are intended to point out specific items to the Contractor, but in no way relieve him of the responsibility of reading and complying with all relevant parts of the entire Specification.

B. The Contractor shall examine and coordinate with all Contract Drawings and Specifications, and all Addenda issued. Failure to comply shall not relieve him of responsibility. The omission of details of other portions of the work from this Division shall not be used as a basis for a request for additional compensation.

C. The specific features and details for other portions of the work related to the construction in progress or to the existing building(s) shall be determined by examination at the site.

1.2 SUMMARY

A. The requirements contained in this Section apply to all work performed under Division 26 of these Specifications.

B. The work covered by this Division of the Specifications comprises the furnishing of labor, material, equipment, transportation, tools and services, and performing operations required for, and reasonably incidental to, the installation of the work in accordance with the applicable Contract Documents, and subject to the terms and conditions of the Contract.

C. Refer to other Divisions of the Specifications for related work.

1.3 DEFINITION OF “CONTRACTOR”

A. Where the word “Contractor” is used under any Section of this Division of the Specifications, it shall mean the Contractor engaged to execute the work included under that Section.

1.4 SUBMITTALS

A. Process shop drawings and submittal data to insure that the proposed materials, equipment and devices conform to the requirements of the Contract Documents, and that there are no omissions

or duplications. Provide layouts, fabrication information and data for systems, materials, equipment and devices proposed for the project.

B. Shop drawings shall be drawn on a scale not less than 1/4 inch equals 1 foot showing actual dimensions. Shop drawings shall include, but not be limited to:
   1. Circuit breakers and fuses.
   2. Materials: Conduit, conductors, connectors, supports, etc.
   3. Lighting fixtures, lamps and control systems/devices.
   4. Wiring devices.
   5. Electronic security system.

C. Product Data: For electricity-metering equipment.

D. Shop Drawings: Dimensioned plans and sections or elevation layouts of electricity-metering equipment.

E. Field Test Reports: Indicate and interpret test results for compliance with performance requirements.

1.5 QUALITY ASSURANCE

A. Materials, equipment and devices shall be new and of the quality specified, and shall be free from defects at the time of installation. Materials, equipment and devices damaged in shipment or otherwise damaged or found defective prior to acceptance by the Owner shall not be repaired at the job site, but shall be replaced with new materials, equipment or devices identical with those damaged, unless specifically approved otherwise by the Owner's Representative.

B. Wherever a UL standard has been established for a particular type of material, equipment or device, each item of such material, equipment or device provided on this project shall meet the requirements of the UL standard in every way, and shall be UL listed and labeled.

1.6 COORDINATION

A. Coordinate chases, slots, inserts, sleeves, and openings with general construction work and arrange in building structure during progress of construction to facilitate the electrical installations that follow.

   1. Set inserts and sleeves in poured-in-place concrete, masonry work, and other structural components as they are constructed.

B. Sequence, coordinate, and integrate installing electrical materials and equipment for efficient flow of the Work. Coordinate installing large equipment requiring positioning before closing in the building.

C. Coordinate electrical service connections to components furnished by utility companies.

   1. Coordinate installation and connection of exterior underground and overhead utilities and services, including provision for electricity-metering components.

2. Comply with requirements of authorities having jurisdiction and of utility company providing electrical power and other services.

D. Coordinate location of access panels and doors for electrical items that are concealed by finished surfaces. Access doors and panels are specified in Division 8 Section "Access Doors."

E. Where electrical identification devices are applied to field-finished surfaces, coordinate installation of identification devices with completion of finished surface.

F. Where electrical identification markings and devices will be concealed by acoustical ceilings and similar finishes, coordinate installation of these items before ceiling installation.

1.7 RESPONSIBILITY OF THE CONTRACTOR

A. The Contractor shall be responsible for all work of every description in connection with this Division of the Specifications. The Contractor shall specifically and distinctly assume, and does so assume, all risk for damage or injury from whatever cause to property or person used or employed on or in connection with this work and of all damages or injury to any person or property wherever located, resulting from an action or operation under the Contract in connection with the work, and undertake the responsibility to defend the Owner against all claims on account of any such damage or injury.

B. The Contractor will be held responsible for the satisfactory execution and completion of the work in accordance with the true intent of the Contract Documents. The Contractor shall provide without extra charge all incidental items required as part of the work, even though it may not be specifically indicated. If the Contractor has reason for objecting to the use of any material, equipment, device or method of construction as indicated, he shall make report of such objections to the Owner's Representative, obtain proper approval and adjustment to the Contract, and shall proceed with the work.

1.8 TERMINOLOGY

A. Whenever the words "furnish," "provide," "furnish and install," "provide and install," and similar phrases occur, it is the intent that the materials, equipment and devices described be furnished, installed and connected under this Division, complete for operation, unless specifically noted to the contrary.

B. It is also the intent, unless specifically noted to the contrary, that all materials, equipment and devices described and specified under this Division of the Specifications be similarly furnished, installed and connected under this Division, whether or not a phrase as described in the preceding paragraph has been actually included.

1.9 ORDINANCES, PERMITS AND CODES

A. It shall be the Contractor's duty to perform the work and provide the materials covered by these Specifications in conformance with all ordinances and regulations of all authorities having jurisdiction.

B. All work herein shall conform to all applicable laws, ordinances and regulations of the local utility companies.

C. The Contractor shall obtain and pay for all permit and connection fees as required for the complete installation of the specified systems, equipment, devices and materials.

D. The Contractor shall obtain permits, plan checks, inspections and approvals applicable to the work as required by the regulatory authorities. Fees and costs of any nature whatsoever incidental to these permits, inspections and approvals shall be assumed and paid by the Contractor. The pro-rata costs, if any, for utilities serving this property will be paid for by the Owner and shall not be included as part of this Contract.

E. The work shall be in accordance with, but shall not be limited to, the requirements of:

1. National Fire Protection Association.
2. National Electrical Code.
3. National Safety Code.
4. State of International Building Codes.
5. City of Edinburg Building Codes.

F. Codes and standards referred to are minimum standards. Where the requirements of the Drawings or Specifications exceed those of the codes and regulations, the Drawings and Specifications govern.

1.10 MATERIALS, EQUIPMENT AND DEVICE DESCRIPTION

A. Materials, equipment and devices shall be of the best quality customarily applied in quality commercial practice, and shall be the products of reputable manufacturers. Each major component shall bear a nameplate giving the name and address of the manufacturer, and the catalog number or designation of the component.

B. Materials, equipment and devices furnished under this Division of the Specifications shall be essentially the standard product of the specified manufacturer, or where allowed, an alternate manufacturer. Where two or more units of the same kind or class of a specific item are required, these shall be the products of a single manufacturer; however, the component parts of the item need not be the products of one manufacturer.

C. In describing the various materials, equipment and devices, in general each item will be described singularly, even though there may be a multiplicity of identical items. Also, where the description is only general in nature, exact sizes, duties, space arrangements, horsepower requirements and other data shall be determined by reference to the Contract Documents.

D. Space allocations for materials, equipment and devices have been made on the basis of present and know future requirements and the dimensions of items of equipment or devices of a particular manufacturer whether indicated or not. The Contractor shall verify that all materials, equipment and devices proposed for use on this project are within the constraints of the allocated space.

1.11 REFERENCE STANDARDS

A. Materials, equipment, devices, and workmanship shall comply with applicable local, county, state and national codes, laws and ordinances, utility company regulations and industry standards.

B. In case of differences between building codes, state laws, local ordinances, industry standards, utility company regulations and the Contract Documents, the most stringent shall govern. The Contractor shall promptly notify the Owner's Representative in writing of any such difference. Should the Contractor perform any work that does not comply with local codes, law and ordinances, industry standards or other governing regulations, the work shall be corrected of noncompliance deficiencies with the Contractor bearing all costs.

C. In addition to the aforementioned ordinances, industry standards published by the following organizations shall apply.

1. AABM - American Association of Battery Manufacturers.
2. AIA - American Institute of Engineers.
3. ANSI - American National Standards Institute.
4. ASTM - American Society for Testing and Materials.
5. CBM - Certified Ballast Manufacturers Association.
6. ETL - Electrical Testing Laboratories.
7. FM - Factory Mutual.
8. ICEA - Insulated Cable Engineers Associated.
9. IEEE - Institute of Electrical and Electronic Engineers.
10. IES - Illuminating Engineering Society.
11. IRI - Industrial Risk Insurance.
12. NBS - National Bureau of Standards.
13. NEC - National Electrical Code.
14. NECA - National Electrical Contractors Association.
15. NEMA - National Electrical Manufacturers Association.
16. NESC - National Electrical Safety Code.
17. NETA - National Electrical Testing Association.
18. NFPA - National Fire Protection Association.
19. UL - Underwriters Laboratories.

D. Where the Contract Documents exceed the above requirements, the Contract Documents shall govern. In no case shall work be installed contrary to or below the minimum legal standards.

1.12 DRAWINGS AND SPECIFICATIONS

A. The interrelation of the Drawings (including the schedules) and the Specifications are as follows:

1. The Drawings establish quantities, locations, dimensions and details of materials, equipment and devices. The schedules on the Drawings indicate the capacities, characteristics and components.
2. The Specifications provide written requirements for the quality, standard and nature of the materials, equipment, devices and construction systems.

B. The Drawings and Specifications shall be considered as being compatible; therefore, the work called for by one and not by the other shall be furnished and installed as though called for by both. Resolution of conflicts between Drawings and Specifications shall be as follows:

1. If the Drawings and Specifications disagree in themselves, or with each other, the Contractor's pricing shall be based on furnishing and installing the most expensive combination of quality and quantity of work indicated. In the event of this type of disagreement, the resolution shall be determined by the Engineer/Engineer.
2. The Contractor shall be responsible for bringing any conflicts in the Drawings and the Specifications to the attention of the Engineer/Engineer prior to any work being performed.
3. In general, if there is conflict between the Drawings and Specifications, the Drawings shall govern the Specifications.
4. Where the Specifications do not fully agree with schedules on the Drawings, the schedules shall govern. Actual numerical dimensions indicated on the Drawings govern scale measurements and large-scale details govern small-scale drawings.
5. Materials, equipment and devices called for on the Drawings and not indicated herein, shall be completely provided and installed as though it were fully described herein.
6. Materials, equipment and devices called for herein shall be completely provided and installed, whether or not it is fully detailed, scheduled or indicated on the Drawings.

C. The Contractor shall examine the Drawings and Specifications of the other portions of the work for fixtures and finishes in connection with this work. The Contractor shall carefully examine the Drawings to determine the general construction conditions, and shall familiarize himself with all limitations caused by such conditions.

D. When discrepancies exist between scale and dimension, or between the Drawings of the various portions of the work, they shall be called to the attention of the Engineer/Engineer for further instruction, whose instructions shall be final and binding and work promptly resumed without any additional cost to the Owner.

E. Review the construction details of the building(s) as illustrated on the Drawings of the various portions of the work and be guided thereby. Route conduits and set all boxes as required by the pace of the general construction.

F. The Drawings diagrammatically show the sizes and locations of the various equipment and devices, and the sizes of the major interconnecting wires, without showing exact details as to elevations, offsets, control wiring and other installation requirements. Carefully layout the work at the site to conform to the Engineerural and structural conditions, to avoid obstructions and to permit proper grading of pipe associated with other portions of the work. Determine the exact location of equipment and devices and connections thereto by reference to the submittals and rough-in drawings, and by measurements at the site. Make minor relocations necessitated by the conditions at the site, or directed by the Engineer/Engineer, without additional cost to the Owner.

G. The Drawings and Specifications are intended to describe and illustrate systems which will not interfere with the structure of the building(s), fit into the available spaces, and insure complete and satisfactory operating installations. Prepare installation drawings for all critical areas illustrating the installation of the work in this Division as related to the work of all other

Divisions and correct all interferences with the other portions of the work or with the building structures before the work proceeds.

H. The Drawings do not indicate the existing electrical installations other than to identify modifications or extensions thereto. Visit the site and ascertain the conditions to be met and the work to be accomplished in removing and modifying the existing work, and in installing the new work. Failure to comply with this shall not constitute grounds for any additional payment in connection with removing or modifying any part of the existing installation or installing any new or temporary work under this Division.

1.13 SUBSTITUTIONS

A. Where a single manufacturer is mentioned by trade name or manufacturer's name, unless specifically noted otherwise, it is the only manufacturer that will be accepted.

B. Where multiple manufacturers are listed, none other than those manufacturers will be accepted.

C. It shall be understood that space allocations have been made on the basis of present and known future requirements and the dimensions of items of equipment or devices of a particular manufacturer whether indicated or not. If any item of equipment or device is offered in substitution which differs substantially in dimension or configuration from that indicate don the Drawings or Specifications, provide as part of the submittal 1/4 equals 1 foot scaled drawing showing that the substitute can be installed in the space available without interfering with other portions of the work or with access for operations and maintenance in the completed project.

D. Where substitute equipment or devices requiring different arrangement or connections from that indicated is accepted by the Engineer/Engineer, install the equipment or devices to operate properly and in harmony with the intent of the Contract Documents, making all incidental changes in piping, ductwork or wiring resulting from the equipment or device selection without any additional cost to the Owner. The Contractor shall pay all additional costs incurred by other portions of the work in connection with the substituted equipment or device.

E. The Engineer/Engineer reserves the right to call for samples of any item of material, equipment or device offered in substitution, together with a sample of the specific item when, in their opinion, the quality of the item and/or the appearance is involved, and it is deemed that an evaluation of the item may be better made by visual inspection.

F. When any request for a substitution of material, equipment or device is submitted and rejected, the item named in the Contract Documents shall be furnished. Repetitive submittal of substitutions for the same item will not be considered.

1.14 INSTALLATION DRAWINGS

A. Prepare installation drawings for coordinating the work of this Division with the work of other Divisions, to illustrate its concealment in finished spaces, to avoid obstructions, and to demonstrate the adaptability of any item of material, equipment or device in the space upon which the Contract Documents are based.

B. Use these drawings in the field for the actual installation of this work. Provide three (3) copies, not for approval, to the Engineer/Engineer for his information, review and record.

1.15 WORKMANSHIP AND INSTALLATION

A. In no case shall the Contractor provide a class of material, equipment, device or workmanship less than that required by the Contract Documents or applicable codes, regulations, ordinances or standards. All modifications which may be required by a local authority having legal jurisdiction over all or any part of the work shall be made by the Contractor without any additional charge. In all cases where such authority requires deviations from the requirements of the Drawings or Specifications, the Contractor shall report it to the Owner's Representative and shall secure his approval before the work is started.

B. The work shall be performed by properly licensed technicians skilled in their respective trades. All materials, equipment and devices shall be installed in accordance with the recommendations of the manufacturer and in the best standard practice to bring about results of a first class condition.

C. The NECA "Standards of Installation" as published by the National Electrical Contractors Association shall be considered a part of these Specifications, except as specifically modified by other provisions contained in these Specifications.

1.16 WARRANTY

A. All materials, equipment, devices and workmanship shall be warranted for a period of one year from the date of acceptance by the Engineer/Engineer for beneficial use by the Owner, except that where specific equipment is noted to have extended warranties. The warranty shall be in accordance with AIA Document A201. The Contractor shall be responsible for the registration of these warranties so that the Owner can make all proper claims should future need develop.

B. The Contractor shall furnish to the Engineer/Engineer for transmittal to the Owner, the name, address and telephone number of those persons responsible for service on systems and equipment covered by the warranty.

1.17 OPERATION PRIOR TO ACCEPTANCE

A. When any equipment is operable, and it is to the advantage of the Contractor to operate the equipment, the Contractor may do so provided that he properly supervises the operation, and retains full responsibility for the equipment operated. Regardless of whether or not the equipment has or has not been operated, the Contractor shall clean the equipment properly, make required adjustments and complete punch list items before final acceptance by the Owner.

1.18 INSTRUCTION OF OWNER'S PERSONNEL

A. Provide the services of competent engineers and/or technicians acceptable to the Engineer/Engineer to instruct other representatives of the Owner in the complete and detailed

operation of each item of equipment or device of all the various electrical systems. These instructions shall be provided for whatever periods may be necessary to accomplish the desired results. Upon completion of these instructions, the Contractor shall obtain a letter of release, acknowledged by the Owner or his authorized representative, stating the dates on which the various kinds of instruction were given, and the personnel to whom the instructions were given.

B. The Contractor shall be fully responsible for proper maintenance of equipment and systems until the instructions have been given to the Owner's personnel and the letter of release acknowledged.

C. In providing the instructions to the Owner's personnel, the written operating and maintenance manuals shall be followed in all instances, and the Owner's personnel shall be familiarized with such manuals. Operating and maintenance manuals used for instructions shall include wiring diagrams, manufacturer's operating and maintenance instructions, parts lists (with sources identified), and other data as appropriate for each system.

1.19 SCHEDULE AND SEQUENCE OF WORK

A. The Contractor shall meet and cooperate with the Owner and Engineer/Engineer to schedule and sequence this work so as to insure meeting scheduled completion dates and avoid delaying other portions of the work. Work requiring special sequencing shall be at no additional cost to the Owner and shall have no impact on the schedule.

1.20 INSPECTIONS AND CERTIFICATIONS

A. Obtain timely inspections of the installation by the regulatory authorities. Remedy any deficiencies to the satisfaction of the inspecting official.

B. Upon final completion of the work, obtain certificates of acceptance from the regulatory authorities. Deliver the certificates to the Engineer/Engineer for transmission to the Owner.

1.21 EQUIPMENT INSTALLATION

A. Install equipment and devices in a manner to permit access to all surfaces or components, requiring such access, without the need to disassemble other unrelated parts of the work.

B. Equipment specified to be factory assembled and tested prior to shipment shall not be dissembled at the job site and reassembled at its final location. Apparatus not so specified may be disassembled and reassembled in the proper location.

C. Furnish all scaffolding, rigging and hoisting required for the installation of all the work.

D. Large equipment assemblies and components which will be installed in the building, and which are too large to permit access through doorways, stairways or shafts, shall be brought to the site and placed in the appropriate spaces before the enclosing structure is complete.

1.22 EQUIPMENT FOUNDATIONS

A. Where indicated on the Drawings, provide foundations for electrical equipment. This shall consist of concrete housekeeping pads constructed in accordance with the details on the Drawings, these Specifications, manufacturer's recommendations and Division 3.

B. All pads shall be 4" high and extend a maximum 2" beyond that actual equipment size. Coordinate the proper size of the pad with the equipment furnished. Furnish all anchor bolts and other accessories required for casting the concrete pad. After the equipment is set on the pad, the equipment shall be fully grouted to the pad and all void spaces shall be filled with a non-shrinking grout.

1.23 SLEEVES

A. Each conduit, regardless of material, which passes through a concrete slab, masonry wall, or roof or portion of the building structure shall be free from the structure and shall pass through a sleeve.

B. All sleeves shall be constructed from electrical-metallic tubing or equivalent weight galvanized steel tubing and shall be flush on both sides of the surface penetrated, unless noted otherwise. All sleeves penetrating the roof areas shall extend a minimum 10 inches above the roof with approved weatherproof counterflashing attached to the conduit above the roof. The sleeves shall be sized to allow free passage of the conduit to be inserted.

C. Sleeves passing through walls or floors on or below grade or in moist areas shall be constructed of galvanized rigid steel and shall be designed with a suitable flange in the center to form a waterproof passage. After the conduit has been installed in the sleeves, the void space around the conduit shall be caulked with jute twine and filled with an asphalt-base compound to insure a waterproof penetration.

1.24 ESCUTCHEONS

A. In each finished space, provided a chromium plated, sectional escutcheon on each conduit, or hanger rod penetrating a wall, floor or ceiling.

B. Size escutcheons and collars to fit snugly around conduit and rods.

C. Where required, provide escutcheons with set screws so that they fit snugly against the finished surface.

1.25 ACCESS PANELS

A. Provide wall and ceiling access panels for unrestricted access to all concealed electrical equipment items and devices installed behind furrings, chases or non-removable suspended ceilings.

B. Access panels shall be UL listed and labeled as required to suit the fire rating of the surface in which installed, with mounting straps, concealed hinges, screwdriver locks, 180 degree open door design, 16 gauge steel construction and door and frame finished in prime coat finish.

Panels shall be 12-inch by 12-inch minimum size, but shall be larger as the access requirement of the concealed electrical equipment item or device increases.

PART 2 - PRODUCTS

2.1 SUPPORTING DEVICES

A. Acceptable Manufacturers:

1. Unistrut Corp.
2. B-Line Systems, Inc.
3. Midland Ross-Kindorf.

B. Materials:

1. Suspension hangers for individual runs shall be zinc plated formed steel type.
2. Malleable iron one hold pipe straps shall be used for vertical runs.
3. Beam clamps shall be used for bar joists and beams.
4. Anti-vibration hangers shall be combination type having a double deflection neoprene element in series with a steel coil spring; double deflection of 0.30”; steel coil spring shall be selected from a 1” static deflection series with a minimum additional travel to solid of 1/2"; spring diameters shall be large enough to permit 15 degree angular misalignment of the rod connecting the hanger to the ceiling support without rubbing the hanger box.
5. Light fixture hangers: Refer to Section 16511.
6. Corrosive Areas: PVC; at factory apply a minimum of 10-mil-thick PVC coating, bonded to metal, inside and outside.

C. Approved hangers and stiff leg supports shall be installed in quantity and size as required to carry the weight of raceway and contents and shall be arranged to prevent vibration transmission to the buildings and allow for raceway movement.

D. Hangers shall be supported by means of uncoated solid steel rods which are threaded to allow vertical adjustments. Lock nuts shall be provided in sufficient number and location to lock all rod adjustments permanently at the adjusted height. Two lock nuts shall be used unless the nut tightens against a threaded socket. Minimum rod diameters shall be as follows:

Nominal Conduit Size	Rod Diameter
1/2" through 2”	1/4"
2-1/2” through 3”	3/8”
4” and 5”	1/2"

E. Hanger spacing shall be as required for proper and adequate support raceway, but in no case shall be less than one hanger per 8’-0” of raceway length, except that conduit less than 1” diameter shall be supported at least every 6’-0”.

F. Where numerous conduits are run parallel to one another, they may be supported from a trapeze type hanger arrangement with strut bottom.

G. Anti-vibration type hangers shall be provided for equipment as required to minimize vibration and/or as directed by the Engineer/Engineer.

H. Support of hangers shall be by means of sufficient quantities of individual after set steel expansion shields, or beam clamps attached to structural steel.

I. Stiff-legs shall be furnished and installed in cases where support from overhead structure is not possible.

J. Ceiling mounted lighting fixtures shall be supported from the building structure at two opposite corners. The Contractor shall provide fixture hangers to properly interface with the ceiling system.

K. Furnish and install complete any additional structural support steel, brackets, fasteners, etc., as required to adequately support all raceway and equipment.

L. Support of hangers from concrete slabs shall be by means of sufficient quantity of "U" brackets attached with after set expansion shields and bolts.

M. Support of hangers from concrete tees shall be by means of sufficient quantity of angle iron brackets attached with after set expansion shields and bolts.

2.2 ELECTRICAL IDENTIFICATION

A. Provide electrical identification for the following:

1. Contactors, disconnect switches, circuit breakers and other electrical equipment with nameplate identifying the item of equipment and the equipment serving the same.
2. Raceways, junction boxes and pull boxes.
3. Wiring devices.
4. Wiring.
5. Three-phase motor rotation.

B. Acceptable Manufacturers:

1. Brady.
2. Panduit.
3. Thomas & Betts.
4. Seton.

C. Nameplates shall be black engraved surface on white core for normal power circuits and red engraved surface on white core for emergency power circuits.

D. Provide for each switchgear, switchboard, distribution panelboard, branch circuit panelboard, transformer, motor control center and any other similar equipment furnished under this Division identification as to its given name, voltage and origination of service.

E. Provide for each motor starter enclosure, circuit breaker enclosure, disconnect switch and any other similar equipment furnished under this Division identification as to the specific load that it serves and the origination of service.

F. Provide for each feeder protective device in each switchboard, switchgear, distribution panelboard, motor control center and any other similar equipment furnished under this Division identification as to the specific load that it serves.

G. Provide for each motor controller in a motor control center identification as to the specific load that it serves.

H. Nameplates shall be laminated, white core, plastic with beveled edges, minimum 1/16 inch thick. Lettering shall be machine-engraved, not less than 1/4" high, cut through the black or red surface to the white core.

I. Raceways shall be identified with voltage rating using pre-printed, self-adhesive labels with black lettering on orange background.

J. Identification shall be with a black permanent marking pen on the top of 4” x 4” junction box covers or on the back of an outlet box cover plate identifying the branch circuits and systems within the conduit. Pull boxes shall be provided with a nameplate stating voltage and system served.

K. On the backside of wiring device wall plates identify with a black permanent marking pen the panelboard and branch circuit number the device is served from.

L. Wire markers for identification of wiring shall be self-adhesive type having letters and numerals indicating serving equipment and feeder or branch circuit number.

M. Rotation tags shall be brass or aluminum securely attached to equipment.

N. Surfaces to receive labels or nameplates shall be carefully prepared in accordance with the manufacturer’s instructions and recommendations.

O. Nameplates shall be properly attached to identify switchgear, switchboards, panelboards, feeder circuit breakers, disconnect switches, pull boxes and other similar equipment furnished under this Division.

P. Raceway identification shall be provided at a minimum of every 50’, at each end if less than 50’, and a minimum of once per room or space through which it passes.

Q. Wire markers shall be applied to each conductor or cable within switchgear, switchboards, panelboards, motor control centers, motor starter enclosures, circuit breaker enclosures, disconnect switches, cabinets, junction boxes, pull boxes and other similar equipment identifying the serving equipment and feeder or branch circuit from which the conductors originate.

2.3 SITE ELECTRICAL

A. The site electrical work shall include, but not be limited to, the furnishing and installation of necessary materials and making arrangements for the connection of electrical and telephone utilities and for underground conduit.

B. All site electrical work shall be in accordance with latest National Electrical Code (NEC), Article 300, and service installation standards of the serving utility company(s).

C. The location of the electrical service entrance shall be coordinated with the electric utility company and with all other trades. Provide materials and equipment required to connect the electrical service.

D. Provide materials in accordance with other sections of these Specifications.

E. The location of the telephone service entrance shall be coordinated with the telephone utility company and with all other trades. Provide materials and equipment required to connect the telephone service.

F. The location of all underground electrical work such as service for parking lot lighting, site lighting, site security, etc. shall be coordinated with all other trades.

G. Underground installation of more than one conduit shall be in a "ductbank" arrangement. All conduits shall be laid so joints are staggered.

H. Pour a red colored concrete envelope minimum 3" thick over electrical and telephone service conduit.

I. Where specifically indicated on the Drawings, a full concrete enclosed ductbank with reinforcing rods shall be installed.

J. Perform excavation, shoring, backfilling and concrete work in connection with electrical work in accordance with other Divisions of the Specifications.

K. All underground conduit shall be sloped away from the building to negate water entering the building through the conduit system.

L. Provide underground warning tape 6" to 12" below finished surface along entire length of underground conduit or ductbank. Provide a separate length of tape every 24" in width of ductbank. Interface installation of underground warning tape with backfilling.

M. The locations, elevations and voltage of electrical lines and the location of the telephone lines included within the area of this work are indicated on the Drawings or in the Specifications in accordance with information received by the Owner.

N. The Contractor shall examine the site and shall verify, to his own satisfaction, the location and elevation of all utilities and shall adequately inform himself as to their relation to the work.

O. The work associated with existing utility lines to be abandoned or removed, shown within the scope of this project, will be arranged by the Owner with the respective utility.

P. Existing utility lines not indicated but encountered during construction shall be protected, relocated or capped as directed by the Owner's Representative. All precautions shall be exercised to prevent damage to existing lines not shown, but should work become necessary, it must be authorized prior to execution except in an emergency situation.

Q. Before beginning excavations of any nature whatsoever, the Contractor shall make an attempt to locate all underground utilities of every nature occurring within the bounds of the area to be excavated. The Contractor shall then proceed with caution in his excavation work so that no utility shall be damaged with a resultant loss of service.

R. Should damage result to any utility through the Contractor's negligence or failure to comply with the above directive, he shall be liable for such damage and for all expense incurred in the expeditious repair or replacement of such damaged utilities.

S. Repair of damaged utilities shall be to a condition equal to or better than the adjacent undamaged portion of such utility and to the complete satisfaction of the Owner.

PART 3 - EXECUTION

3.1 EXCAVATION, TRENCHING AND BACKFILLING

A. All excavating, trenching and backfilling shall generally be performed in accordance with the procedures and using the materials as described in Division 2. Provide all excavation required in connection with the installation of the work under this Division. After the work has been installed, tested and approved, backfill all excavations with suitable material.

B. Bottoms of trenches shall be cut to grade. Should rock be encountered, same shall be excavated to a depth of six (6) inches below bottom of conduit and space shall be filled and tamped as specified hereinafter. Should it be required to lay conduit on fill, fill shall first be compacted.

C. All conduit shall be installed promptly after excavation has been done so as to keep excavations open as short a time as possible.

D. Trenches shall be excavated to the required depths. Depth of cover shall be as required by the NEC or as indicated on Drawings. Keep banks of trenches as nearly vertical as possible, and provide adequate shoring where required.

E. When excavation is below the shale or subgrade level, backfill with granular fill or approved backfill material from the site to a depth of 12 inches above top of conduit, but in no case less than 1'-0" below the subgrade surface. The remainder of backfill to the shale or subgrade surface shall be an impervious material and shall be compacted at not less than 95 percent of the maximum dry density as defined by ASTM D-698. At all times, the top of the subgrade shall be kept in such condition that it will drain readily and effectively. Backfill above the subsurface shall be granular fill or approved select backfill from site.

F. Beyond building walls or above the shale or subgrade level, backfill with sand or granular fill to a depth of 12 inches above top of conduit and remainder of trench filled with approved select backfill material from the site.

G. Bottoms of trenches shall be tamped hard and graded to secure the maximum fall. Where rock is excavated below the bottom of the conduit, and before laying the conduit, fill the space between the bottom of the conduit and the rock surface with sand, thoroughly tamped.

H. Trenches dug in fill shall have the conduit supported down to load-bearing soil. After conduits have been inspected and approved by the Owner's Representative, trenches shall be filled with approved backfill material which shall be firmly compacted, flooded if necessary and thoroughly tamped. Do not backfill with any fill containing rocks, frozen earth or debris.

I. Include the cutting of all sidewalks, streets and other pavements and repairing the opening sin them to return the surface to approximately its original condition.

3.2 CUTTING AND PATCHING

A. Cut all openings required to install the work or to repair any defective work. This cutting shall be performed under the Engineer's/Engineer's direction and due diligence exercised to avoid cutting openings larger than required or in the wrong locations.

B. No cutting or drilling of any sort will be permitted in the webs of prestressed, precast concrete structural elements. Use core drills or power driven saws to cut openings in the flanges of other such structural elements; the use of reciprocating drills will not be permitted. The cutting of structural members without first having received written permission from the Engineer/Engineer is prohibited.

C. Where openings are cut in fire-rated walls or floors, seal the annular space between the work installed and the fire-rated construction. Sealant, as applied, shall be fire rated to maintain the fire rating of the construction penetrated. Sealant shall be re-enterable (before fire) to alter penetrations. Apply in strict accordance with manufacturer's instructions.

3.3 SEALING OF PENETRATIONS

A. All penetrations in horizontal or vertical fire-rated construction shall be sealed using approved fire-rated sealing materials equivalent to the following:

1. Foam: Dow Corning 3-6548 RTV silicone foam, liquid component Part 4 (black) and liquid component Part B (off-white).
2. Sealant: Dow Corning 96-081 RTV silicone adhesive sealant.
3. Damming Materials: Mineral fiberboard, mineral fiber matting, mineral fiber putty, plywood or particle board, as selected by applicator.

B. Preparation: Remove combustible materials and loose impediments from penetration opening and involved surfaces. Remove free liquid and oil from penetration surfaces.

C. Installation: In accordance with manufacturer's instructions, install damming materials and sealant to cover and seal penetration openings; inject foam mixtures into openings.

3.4 PROTECTION OF APPARATUS

A. At all times take every precaution to properly protect apparatus from damage due to dust, dirt, water, etc. or from damage due to physical forces. Include the erection of temporary shelters as required, to adequately protect any apparatus stored at the site, the cribbing of any apparatus directly above the construction, and the covering of apparatus in the incomplete building with tarpaulins or other protective covering. Failure on the part of the Contractor to comply with the above to the entire satisfaction of the Engineer/Engineer will be sufficient cause for the rejection of the pieces of apparatus in question.

B. Responsibility for the protection of apparatus extend also to existing apparatus involved in this Division of the work, whether such apparatus is designated to be used temporarily and later removed, or is to be reused as a part of the permanent installation. Erect temporary sheltering structures, provide temporary bracing and supports, or cover equipment as required or directed to afford proper protection for that equipment.

C. The Contractor shall protect this work and the work of all other Contractors from damage by his work or workmen and shall make good any damage thus caused. He shall also be responsible for the proper protection of his equipment, machinery, materials and accessories delivered and installed on the job.

3.5 INSTALLATION AND CONNECTION OF OTHER DIVISION'S EQUIPMENT

A. Verify the electrical requirements of all equipment furnished under other Divisions, separate contracts, or by the Owner. Install conduit, power wiring, control wiring, devices, etc. as require for complete operation of all equipment.

3.6 OPTION TO RELOCATE OUTLETS AND RELATED DEVICES

A. The location of power, data and telephone outlets, wall switches and other related devices may be relocated at the Owner's option, at no additional cost to the Owner, to a point within 10 feet of their present location provided the Contractor is notified prior to installation.

3.7 COOPERATION AND CLEAN-UP

A. It shall be the responsibility of the Contractor to cooperate fully to keep the job site in a clean and safe condition. Upon the completion of the job, the Contractor shall immediately remove all of his tools, equipment, surplus materials and debris.

B. After the installation is complete, and before the equipment is energized, clean the interior and exterior of all equipment thoroughly. Clean equipment, removing all debris, rubbish and foreign materials. Each component shall be cleaned and all dust and other foreign material removed. Components shall be cleaned of oxidation. The inside and outside of all switchgear shall also be wiped clean with a lemon-oil rag after other cleaning is complete.

C. Any portion of the work requiring touch-up finishing shall be so finished to equal the specified finish on the product.

3.8 RECORD DRAWINGS AND DOCUMENTATION FOR OWNER

A. The Contractor shall obtain at his own expense a complete set of blueline prints, or Xerox copies on which to keep an accurate record of the installation of all materials, equipment and devices covered by the Contract. The record drawings shall indicate the location of all equipment and devices, and the routing of all systems. All piping and conduit buried in concrete slabs, walls and below grade shall be located by dimension; both horizontally and by vertical elevation, unless a surface mounted device in each space indicates the exact location. Obtain one complete reproducible set of the original drawings on which to neatly, legibly and accurately transfer all project related notations and deliver these drawings to the Engineer/Engineer at job completion before final payment and delivery to the Owner. The above data, with the exception of the record drawings, shall be delivered prior to final acceptance.

B. The Contractor shall accumulate in duplicate during the job progress, the following data prepared in indexed 3-ring looseleaf, hard-back binders sized for 8-1/2 inch by 11 inch sheets. No binder shall exceed 3-1/2 inches thick. This data shall be turned over to the Engineer/Engineer for review and subsequent delivery to the Owner prior to final acceptance.

1. Warranties, guarantees and manufacturer's directions on material, equipment and devices covered by the Contract.
2. Approved lighting fixture brochures, wiring diagrams and control diagrams.
3. Copies of approved submittals and shop drawings.
4. Operating instructions for major apparatus and recommended maintenance procedures.
5. Copies of all other data and/or drawings required during construction.
6. Repair parts list of major apparatus, including name, address and telephone number of local supplier or representative.
7. Tag charts and diagrams hereinbefore specified.

3.9 FINAL OBSERVATION

A. The purpose of the final observation is to determine whether the Contractor has completed the construction in accordance with the Contract Documents and that in the Owner Representative's opinion the installation is satisfactory for final acceptance by the Owner.

B. It shall be the responsibility of the Contractor to assure that the installation is ready for final acceptance prior to calling upon the Engineer/Engineer to make a final observation.

END OF SECTION 260000

SECTION 260100

ELECTRICAL SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.3 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require Engineer’s responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."

B. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Division Section as "informational submittals."

C. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.

D. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.4 ACTION SUBMITTALS

A. Submittal Schedule: Submit a schedule of Division 26/28 submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Engineer’s and additional time for handling and reviewing submittals required by those corrections.

1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
2. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.

4. Format: Arrange the following information in a tabular format:

    a. Scheduled date for first submittal.
    b. Specification Section number and title.
    c. Submittal category: Action; informational.
    d. Name of subcontractor.
    e. Description of the Work covered.
    f. Scheduled date for Engineer's final release or approval.
    g. Scheduled date of fabrication.
    h. Scheduled dates for delivery.
    i. Scheduled dates for installation.
    j. Activity or event number.

1.5 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. Engineer's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Engineer for Contractor's use in preparing submittals.

1. Engineer will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing and Project record drawings.

    a. Engineer makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
    b. Contractor shall execute a data licensing agreement in the form of Halff Associates' Standard form.

B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
2. **Submit all submittal items required for each Specification Section within a Construction Division concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule. ***
    - **This submittal package shall be comprehensive document by Division and not piecemealed by specification section.**
3. Submit action submittals and informational submittals required by the same Specification Section concurrent.
4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for

coordination. For example, HVAC Equipment must be submitted and approved prior to approval of Electrical gear.

a. Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
3. Resubmittal Review: Allow 10 working days for review of each resubmittal.
4. Sequential Review: Where sequential review of submittals is indicated, allow 15 working days for initial review of each submittal.

D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by Engineer.
3. Include the following information for processing and recording action taken:

a. Project name.
b. Date.
c. Name of Engineer.
d. Name of Construction Manager, where applicable.
e. Name of Contractor.
f. Name of subcontractor.
g. Name of supplier.
h. Name of manufacturer.
i. Submittal number or other unique identifier, including revision identifier.

1) Submittal number shall use Specification Division Section or number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).

j. Number and title of appropriate Specification.
k. Drawing number and detail references, as appropriate.
l. Location(s) where product is to be installed, as appropriate.
m. Other necessary identification.

4. Additional Paper Copies: Unless additional copies are required for final submittal, initial submittal may serve as final submittal.

a. When paper copies are required, submit one copy of submittal.

5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Engineer will return without review submittals received from sources other than Contractor.
   a. Transmittal Form for Paper Submittals: Provide locations on form for the following information:

      1) Project name.
      2) Date.
      3) Destination (To:).
      4) Source (From:).
      5) Name and address of Engineer.
      6) Name of Construction Manager, where applicable.
      7) Name of Contractor.
      8) Name of firm or entity that prepared submittal.
      9) Names of subcontractor, manufacturer, and supplier.
      10) Category and type of submittal.
      11) Submittal purpose and description.
      12) Specification Section number and title.
      13) Specification paragraph number or drawing designation and generic name for each of multiple items.
      14) Drawing number and detail references, as appropriate.
      15) Indication of full or partial submittal.
      16) Transmittal number, numbered consecutively.
      17) Submittal and transmittal distribution record.
      18) Remarks.
      19) Signature of transmitter.

E. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:

1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item. Alternately, submit package as a comprehensive .pdf document by Division with each Specification Section tabbed.
2. Name file with submittal number or other unique identifier, including revision identifier.

   a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
3. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner**,** containing the following information:

   a. Project name.
   b. Date.
   c. Name and address of Engineer.
   d. Name of Construction Manager, where applicable.

e. Name of Contractor.
f. Name of firm or entity that prepared submittal.
g. Names of subcontractor, manufacturer, and supplier.
h. Category and type of submittal.
i. Submittal purpose and description.
j. Specification Section number and title.
k. Specification paragraph number or drawing designation and generic name for each of multiple items.
l. Drawing number and detail references, as appropriate.
m. Location(s) where product is to be installed, as appropriate.
n. Related physical samples submitted directly.
o. Indication of full or partial submittal.
p. Transmittal number, numbered consecutively.
q. Submittal and transmittal distribution record.
r. Other necessary identification.
s. Remarks.

F. Options: Identify options requiring selection by Engineer.

G. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Engineer on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.

H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.

1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.
3. Resubmit submittals until they are marked with approval notation from Engineer’s action stamp.

I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

J. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Engineer’s action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

1. Post electronic submittals as PDF electronic files directly to Project Web site or FTP site specifically established for Project.

    a. Engineer will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.

1. Action Submittals: For submittal formats 11 x 17 and larger, submit two paper copies of each submittal unless otherwise indicated in addition to the electronically posted submittal. Engineer will return one copy of paper submittal.
2. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.

    a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
    b. Provide a notarized statement on original paper copy certificates and certifications where indicated.

B. Product Data: Collect information into a single submittal for each construction Division and type of product or equipment.

1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:

    a. Manufacturer's catalog cuts.
    b. Manufacturer's product specifications.
    c. Standard color charts.
    d. Statement of compliance with specified referenced standards.
    e. Testing by recognized testing agency.
    f. Application of testing agency labels and seals.
    g. Notation of coordination requirements.
    h. Availability and delivery time information.

4. For equipment, include the following in addition to the above, as applicable:

    a. Wiring diagrams showing factory-installed wiring.
    b. Printed performance curves.
    c. Operational range diagrams.
    d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.

5. Submit Product Data before or concurrent with Samples.
6. Submit Product Data (8-1/2 x 11 format only) in the following format:

    a. PDF electronic file.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

    a. Identification of products.
    b. Schedules.
    c. Compliance with specified standards.
    d. Notation of coordination requirements.
    e. Notation of dimensions established by field measurement.
    f. Relationship and attachment to adjoining construction clearly indicated.
    g. Seal and signature of professional engineer, if specified.

2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 11 x 17 but no larger than 30 by 42 inches.
3. Submit Shop Drawings in the following format:
    a. Two opaque (bond) copies of each submittal. Engineer will return one copy. Engineer will return one copy. Submit also one electronic file for record keeping.

4. BIM File Incorporation: Develop and incorporate Shop Drawing files into Building Information Model established for Project.

    a. Prepare Shop Drawings in the following format: Same digital data software program, version, and operating system as the original Drawings.
    b. Refer to Section 013100 "Project Management and Coordination" for requirements for coordination drawings.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
2. Identification: Attach label on unexposed side of Samples that includes the following:

    a. Generic description of Sample.
    b. Product name and name of manufacturer.
    c. Sample source.
    d. Number and title of applicable Specification Section.
    e. Specification paragraph number and generic name of each item.

3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.

a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

a. Number of Samples: Submit one full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. "Samples for Verification" Subparagraph below can be used with or without Samples for initial selection. Revise to suit Project.

E. LEED Submittals: Comply with requirements specified in Section 018113.13 "Sustainable Design Requirements - LEED for New Construction and Major Renovations," Section 018113.16 "Sustainable Design Requirements - LEED for Commercial Interiors," Section 018113.19 "Sustainable Design Requirements - LEED for Core and Shell Development," and Section 018113.23 "Sustainable Design Requirements - LEED for Schools."

F. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.

G. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

H. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

I. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

J. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

2.2 DELEGATED-DESIGN SERVICES

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Engineer.

B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

C. BIM File Incorporation: Incorporate delegated-design drawing and data files into Building Information Model established for Project.

1. Prepare delegated-design drawings in the following format: Same digital data software program, version, and operating system as the original Drawings.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.

B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ENGINEER'S ACTION

A. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or revisions required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

B. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Engineer.

C. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.

D. Submittals not required by the Contract Documents may be returned by the Engineer without action.

END OF SECTION 260100

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SECTION 260519

LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Building wires and cables rated 600 V and less.
2. Connectors, splices, and terminations rated 600 V and less.

1.3 DEFINITIONS

A. EPDM: Ethylene-propylene-diene terpolymer rubber.

B. NBR: Acrylonitrile-butadiene rubber.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

1.5 INFORMATIONAL SUBMITTALS

A. Field quality-control test reports.

1.6 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Alcan Products Corporation; Alcan Cable Division.
2. American Insulated Wire Corp.; a Leviton Company.
3. General Cable Corporation.
4. Senator Wire & Cable Company.
5. Southwire Company.
6. Encore.

C. Copper Conductors: Comply with NEMA WC 70.

D. Conductor Insulation: Comply with NEMA WC 70 for Types THW THHN-THWN and SO.

2.2 CONNECTORS AND SPLICES

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. AFC Cable Systems, Inc.
2. Hubbell Power Systems, Inc.
3. O-Z/Gedney; EGS Electrical Group LLC.
4. 3M; Electrical Products Division.
5. Tyco Electronics Corp.

C. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

A. Feeders: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

A. Service Entrance: Type THHN-THWN, single conductors in raceway.

B. Exposed Feeders: Type THHN-THWN, single conductors in raceway.

C. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN-THWN, single conductors in raceway.

D. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.

E. Feeders Installed below Raised Flooring: Type THHN-THWN, single conductors in raceway.

F. Exposed Branch Circuits, Including in Crawlspaces: Type THHN-THWN, single conductors in raceway.

G. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway.

H. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.

I. Branch Circuits Installed below Raised Flooring: Type THHN-THWN, single conductors in raceway.

J. Class 1 Control Circuits: Type THHN-THWN, in raceway.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

A. Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated.

B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.

C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.

D. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

E. Support cables according to Section 260529 "Hangers and Supports for Electrical Systems."

F. Identify and color-code conductors and cables according to Section 260553 "Identification for Electrical Systems."

3.4 CONNECTIONS

A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.

C. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches of slack.

3.5 SLEEVE AND SLEEVE-SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies. Comply with requirements in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

3.6 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly according to Section 078413 "Penetration Firestopping."

3.7 FIELD QUALITY CONTROL

A. Torque test conductor connections and terminations to manufacturer's recommended values.

END OF SECTION 260519

SECTION 260526

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes: Grounding systems and equipment.

1.3 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with UL 467 for grounding and bonding materials and equipment.

PART 2 - PRODUCTS

2.1 CONDUCTORS

A. Insulated Conductors: [Copper] [or] [tinned-copper] wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.

B. Bare Copper Conductors:

1. Solid Conductors: ASTM B 3.
2. Stranded Conductors: ASTM B 8.
3. Tinned Conductors: ASTM B 33.
4. Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch (6 mm) in diameter.
5. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
6. Bonding Jumper: Copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.
7. Tinned Bonding Jumper: Tinned-copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.

2.2 CONNECTORS

A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.

B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy, pressure type with at least two bolts.

1. Pipe Connectors: Clamp type, sized for pipe.

2.3 GROUNDING ELECTRODES

A. Ground Rods: Copper-clad steel, 3/4 inch by 10 feet (19 mm by 3 m) in diameter.

PART 3 - EXECUTION

3.1 APPLICATIONS

A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger unless otherwise indicated.

B. Underground Grounding Conductors: Install bare tinned-copper conductor, No. 2/0 AWG minimum.

1. Bury at least 24 inches (600 mm) below grade.
2. Duct-Bank Grounding Conductor: Bury 12 inches (300 mm) above duct bank when indicated as part of duct-bank installation.

C. Isolated Grounding Conductors: Green-colored insulation with continuous yellow stripe. On feeders with isolated ground, identify grounding conductor where visible to normal inspection, with alternating bands of green and yellow tape, with at least three bands of green and two bands of yellow.

D. Grounding Bus: Install in electrical and telephone equipment rooms, in rooms housing service equipment, and elsewhere as indicated.

1. Install bus on insulated spacers 2 inches (50 mm) minimum from wall, 6 inches (150 mm) above finished floor unless otherwise indicated.
2. Where indicated on both sides of doorways, route bus up to top of door frame, across top of doorway, and down to specified height above floor; connect to horizontal bus.

E. Conductor Terminations and Connections:

1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
2. Underground Connections: Welded connectors except at test wells and as otherwise indicated.

3. Connections to Ground Rods at Test Wells: Bolted connectors.
4. Connections to Structural Steel: Welded connectors.

3.2 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:

1. Feeders and branch circuits.
2. Lighting circuits.
3. Receptacle circuits.
4. Single-phase motor and appliance branch circuits.
5. Three-phase motor and appliance branch circuits.
6. Flexible raceway runs.
7. Armored and metal-clad cable runs.

3.3 INSTALLATION

A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

B. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.

1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.
3. Use exothermic-welded connectors for outdoor locations; if a disconnect-type connection is required, use a bolted clamp.

3.4 LABELING

A. Comply with requirements in Division 26 Section "Identification for Electrical Systems" Article for instruction signs. The label or its text shall be green.

B. Install labels at the telecommunications bonding conductor and grounding equalizer[and at the grounding electrode conductor where exposed].

1. Label Text: "If this connector or cable is loose or if it must be removed for any reason, notify the facility manager."

3.5 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.

END OF SECTION 260526

SECTION 260529

HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Hangers and supports for electrical equipment and systems.
2. Construction requirements for concrete bases.

1.3 DEFINITIONS

A. EMT: Electrical metallic tubing.

B. RMC: Rigid metal conduit.

1.4 PERFORMANCE REQUIREMENTS

A. Design supports for multiple raceways capable of supporting combined weight of supported systems and its contents.

B. Design equipment supports capable of supporting combined operating weight of supported equipment and connected systems and components.

C. Rated Strength: Adequate in tension, shear, and pullout force to resist maximum loads calculated or imposed for this Project, with a minimum structural safety factor of five times the applied force.

1.5 SUBMITTALS

A. Product Data: For the following:

1. Steel slotted support systems.

B. Shop Drawings: Show fabrication and installation details and include calculations for the following:

1. Trapeze hangers. Include Product Data for components.
2. Steel slotted channel systems. Include Product Data for components.
3. Equipment supports.

1.6 QUALITY ASSURANCE

A. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Allied Tube & Conduit.
b. Cooper B-Line, Inc.; a division of Cooper Industries.
c. ERICO International Corporation.
d. GS Metals Corp.
e. Thomas & Betts Corporation.
f. Unistrut; Tyco International, Ltd.

2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
3. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-4.
4. Channel Dimensions: Selected for applicable load criteria.

B. Raceway and Cable Supports: As described in NECA 1 and NECA 101.

C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.

D. Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug or plugs for non-armored electrical conductors or cables in riser conduits. Plugs shall have number, size, and shape of conductor gripping pieces as required to suit individual conductors or cables supported. Body shall be malleable iron.

E. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M, steel plates, shapes, and bars; black and galvanized.

F. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:

1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.

    a. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    b. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

        1) Hilti Inc.
        2) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.

2. Mechanical-Expansion Anchors: Insert-wedge-type, steel, for use in hardened portland cement concrete with tension, shear, and pullout capacities appropriate for supported loads and building materials in which used.

    a. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    b. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

        1) Cooper B-Line, Inc.; a division of Cooper Industries.
        2) Hilti Inc.
        3) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.

3. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
6. Toggle Bolts: All-steel springhead type.
7. Hanger Rods: Threaded steel.

2.2 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

A. Description: Welded or bolted, structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.

PART 3 - EXECUTION

3.1 APPLICATION

A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems except if requirements in this Section are stricter.

B. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMT, IMC, and RMC as required by NFPA 70. Minimum rod size shall be 1/4 inch (6 mm) in diameter.

C. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted or other support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.

1. Secure raceways and cables to these supports with single-bolt conduit clamps using spring friction action for retention in support channel.

D. Spring-steel clamps designed for supporting single conduits without bolts may be used for 1-1/2-inch (38-mm) and smaller raceways serving branch circuits and communication systems above suspended ceilings and for fastening raceways to trapeze supports.

3.2 SUPPORT INSTALLATION

A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this Article.

B. Raceway Support Methods: In addition to methods described in NECA 1, EMT, IMC, and RMC may be supported by openings through structure members, as permitted in NFPA 70.

C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb (90 kg).

D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:

1. To Wood: Fasten with lag screws or through bolts.
2. To New Concrete: Bolt to concrete inserts.
3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
4. To Existing Concrete: Expansion anchor fasteners or threaded through wall.
5. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches (100 mm) thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches (100 mm) thick.
6. To Steel: Beam clamps complying with MSS SP-69.
7. To Light Steel: Sheet metal screws.
8. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate.

E. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.

3.3 INSTALLATION OF FABRICATED METAL SUPPORTS

A. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.

B. Field Welding: Comply with AWS D1.1/D1.1M.

3.4 CONCRETE BASES

A. Construct concrete bases of dimensions indicated but not less than 4 inches (100 mm) larger in both directions than supported unit, and so anchors will be a minimum of 10 bolt diameters from edge of the base.

B. Use 3000-psi, 28-day compressive-strength concrete. Concrete materials, reinforcement, and placement requirements are specified in Division 03 Section "Cast-in-Place Concrete."

C. Anchor equipment to concrete base.

1. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
2. Install anchor bolts to elevations required for proper attachment to supported equipment.
3. Install anchor bolts according to anchor-bolt manufacturer's written instructions.

3.5 PAINTING

A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting.

1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils (0.05 mm).

B. Touchup: Comply with requirements in Division 09 for cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint on miscellaneous metal.

C. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

END OF SECTION 260529

SECTION 260533

RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.

B. Related Sections include the following:

1. Division 26 Section "Underground Ducts and Raceways for Electrical Systems" for exterior ductbanks, manholes, and underground utility construction.

1.3 DEFINITIONS

A. EMT: Electrical metallic tubing.

B. EPDM: Ethylene-propylene-diene terpolymer rubber.

C. FMC: Flexible metal conduit.

D. LFMC: Liquidtight flexible metal conduit.

E. NBR: Acrylonitrile-butadiene rubber.

F. RNC: Rigid nonmetallic conduit.

1.4 SUBMITTALS

A. Product Data: For surface raceways, wireways and fittings, floor boxes, hinged-cover enclosures, and cabinets.

B. Shop Drawings: For the following raceway components. Include plans, elevations, sections, details, and attachments to other work.

1. Custom enclosures and cabinets.
2. For handholes and boxes for underground wiring, including the following:

a. Conduit entry provisions, including locations and conduit sizes.
b. Frame and cover design.
c. Grounding details.
d. Dimensioned locations of cable rack inserts, and pulling-in and lifting irons.
e. Joint details.

C. Coordination Drawings: Conduit routing plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:

1. Structural members in the paths of conduit groups with common supports.
2. HVAC and plumbing items and Engineerural features in the paths of conduit groups with common supports.

1.5 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 METAL CONDUIT AND TUBING

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. AFC Cable Systems, Inc.
2. Alflex Inc.
3. Allied Tube & Conduit; a Tyco International Ltd. Co.
4. Anamet Electrical, Inc.; Anaconda Metal Hose.
5. Electri-Flex Co.
6. Manhattan/CDT/Cole-Flex.
7. Maverick Tube Corporation.
8. O-Z Gedney; a unit of General Signal.
9. Wheatland Tube Company.

C. Rigid Steel Conduit: ANSI C80.1.

D. EMT: ANSI C80.3.

E. FMC: Zinc-coated steel

F. LFMC: Flexible steel conduit with PVC jacket.

G. Fittings for Conduit (Including all Types and Flexible and Liquidtight), EMT: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed.
   1. Fittings for EMT: Steel -screw or compression type.

H. Joint Compound for Rigid Steel Conduit or IMC: Listed for use in cable connector assemblies, and compounded for use to lubricate and protect threaded raceway joints from corrosion and enhance their conductivity.

2.2 BOXES, ENCLOSURES, AND CABINETS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

   1. Cooper Crouse-Hinds; Div. of Cooper Industries, Inc.
   2. EGS/Appleton Electric.
   3. Erickson Electrical Equipment Company.
   4. Hoffman.
   5. Hubbell Incorporated; Killark Electric Manufacturing Co. Division.
   6. O-Z/Gedney; a unit of General Signal.
   7. RACO; a Hubbell Company.
   8. Robroy Industries, Inc.; Enclosure Division.
   9. Scott Fetzer Co.; Adalet Division.
   10. Spring City Electrical Manufacturing Company.
   11. Thomas & Betts Corporation.
   12. Walker Systems, Inc.; Wiremold Company (The).
   13. Woodhead, Daniel Company; Woodhead Industries, Inc. Subsidiary.

B. Sheet Metal Outlet and Device Boxes: NEMA OS 1.

C. Cast-Metal Outlet and Device Boxes: NEMA FB 1, ferrous alloy, Type FD, with gasketed cover.

D. Nonmetallic Outlet and Device Boxes: NEMA OS 2.

E. Metal Floor Boxes: Cast or sheet metal, fully adjustable, rectangular. (As indicated on drawings)

F. Nonmetallic Floor Boxes: Nonadjustable, round.

G. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.

H. Cast-Metal Access, Pull, and Junction Boxes: NEMA FB 1, galvanized, cast iron with gasketed cover.

I. Hinged-Cover Enclosures: NEMA 250, Type 1, with continuous-hinge cover with flush latch, unless otherwise indicated.

1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
2. Nonmetallic Enclosures: Plastic or fiberglass.

J. Cabinets:

1. NEMA 250, Type 1, galvanized-steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel.
2. Hinged door in front cover with flush latch and concealed hinge.
3. Key latch to match panelboards.
4. Metal barriers to separate wiring of different systems and voltage.
5. Accessory feet where required for freestanding equipment.

2.3 SLEEVES FOR RACEWAYS

A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.

B. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.

C. Sleeves for Rectangular Openings: Galvanized sheet steel with minimum 0.052- or 0.138-inch (1.3- or 3.5-mm) thickness as indicated and of length to suit application.

D. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 07 Section "Penetration Firestopping."

2.4 SLEEVE SEALS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Advance Products & Systems, Inc.
2. Calpico, Inc.
3. Metraflex Co.
4. Pipeline Seal and Insulator, Inc.

B. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and cable.

1. Sealing Elements: EPDM interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.
2. Pressure Plates: Carbon steel Include two for each sealing element.
3. Connecting Bolts and Nuts: Carbon steel with corrosion-resistant coating of length required to secure pressure plates to sealing elements. Include one for each sealing element.

PART 3 - EXECUTION

3.1 RACEWAY APPLICATION

A. Comply with the following indoor applications, unless otherwise indicated:

1. Exposed, Not Subject to Physical Damage: EMT.
2. Exposed, Not Subject to Severe Physical Damage: EMT.
3. Exposed and Subject to Severe Physical Damage: Rigid steel conduit. Includes raceways in the following locations:

    a. Loading dock.
    b. Corridors used for traffic of mechanized carts, forklifts, and pallet-handling units.
    c. Mechanical rooms.

4. Concealed in Ceilings and Interior Walls and Partitions: EMT.
5. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC, except use LFMC in damp or wet locations.
6. Damp or Wet Locations: Rigid steel conduit.
7. Raceways for Optical Fiber or Communications Cable in Spaces Used for Environmental Air: EMT or cable tray. All conduits shall have plastic bushing at the ends.
8. Raceways for Optical Fiber or Communications Cable Risers in Vertical Shafts: EMT
9. Raceways for Concealed General Purpose Distribution of Optical Fiber or Communications Cable EMT.
10. Boxes and Enclosures: NEMA 250, Type 1, except use NEMA 250, Type 4, stainless steel in damp or wet locations. HUBS to match conduit.

B. Minimum Raceway Size: 1/2-inch.

C. Raceway Fittings: Compatible with raceways and suitable for use and location.

1. Rigid Steel Conduit: Use threaded rigid steel conduit fittings, unless otherwise indicated.
2. PVC Externally Coated, Rigid Steel Conduits: Use only fittings listed for use with that material. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer.

3.2 INSTALLATION

A. Comply with NECA 1 for installation requirements applicable to products specified in Part 2 except where requirements on Drawings or in this Article are stricter.

B. Keep raceways at least 6 inches (150 mm) away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.

C. Complete raceway installation before starting conductor installation. Use conduit caps to protect installed conduit against entrance of dirt and moisture before area is dryed in and cable or wire are not immediately installed. Tape covering of conduit ends is not acceptable.

D. Support raceways as specified in Division 26 Section "Hangers and Supports for Electrical Systems."

E. Arrange stub-ups so curved portions of bends are not visible above the finished slab.

F. Install no more than the equivalent of three 90-degree bends in any conduit run except for communications conduits, for which fewer bends are allowed.

G. Conceal conduit and EMT within finished walls, ceilings, and floors, unless otherwise indicated.

H. Raceways Embedded in Slabs:

1. Run conduit larger than 1-inch (27-mm) trade size, parallel or at right angles to main reinforcement. Where at right angles to reinforcement, place conduit close to slab support.
2. Arrange raceways to cross building expansion joints at right angles with expansion fittings.
3. Change from Type EPC-40-PVC to rigid steel conduit, before rising above the floor.
4. Elbows larger than 1/2" or on runs longer than 50' shall be rigid steel.
5. Tape all GRC with 2" overlapping tape where underground or where in contact with concrete.

I. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.

J. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors, including conductors smaller than No. 4 AWG.

K. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb (90-kg) tensile strength. Leave at least 12 inches (300 mm) of slack at each end of pull wire.

L. Install raceway sealing fittings at suitable, approved, and accessible locations and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install raceway sealing fittings at the following points:

1. Where conduits pass from warm to cold locations, such as boundaries of refrigerated spaces.
2. Where otherwise required by NFPA 70.

M. Flexible Conduit Connections: Use maximum of 72 inches (1830 mm) of flexible conduit for recessed and semirecessed lighting fixtures, equipment subject to vibration, noise transmission, or movement; and for transformers and motors.

1. Use LFMC in damp or wet locations subject to severe physical damage.
2. Use LFMC in damp or wet locations not subject to severe physical damage.

N. Recessed Boxes in Masonry Walls: Saw-cut opening for box in center of cell of masonry block, and install box flush with surface of wall.

O. Set metal floor boxes level and flush with finished floor surface.

P. Set nonmetallic floor boxes level. Trim after installation to fit flush with finished floor surface.

3.3 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 07 Section "Penetration Firestopping."

B. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.

C. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.

D. Rectangular Sleeve Minimum Metal Thickness:

1. For sleeve cross-section rectangle perimeter less than 50 inches (1270 mm) and no side greater than 16 inches (400 mm), thickness shall be 0.052 inch (1.3 mm).
2. For sleeve cross-section rectangle perimeter equal to, or greater than, 50 inches (1270 mm) and 1 or more sides equal to, or greater than, 16 inches (400 mm), thickness shall be 0.138 inch (3.5 mm).

E. Fire-Rated Assemblies: Install sleeves for penetrations of fire-rated floor and wall assemblies unless openings compatible with firestop system used are fabricated during construction of floor or wall.

F. Cut sleeves to length for mounting flush with both surfaces of walls.

G. Extend sleeves installed in floors 2 inches (50 mm) above finished floor level.

H. Size pipe sleeves to provide 1/4-inch (6.4-mm) annular clear space between sleeve and raceway unless sleeve seal is to be installed.

I. Seal space outside of sleeves with grout for penetrations of concrete and masonry.

J. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and raceway, using joint sealant appropriate for size, depth, and location of joint. Refer to Division 07 Section "Joint Sealants" for materials and installation.

K. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at raceway penetrations. Install sleeves and seal with firestop materials. Comply with Division 07 Section "Penetration Firestopping."

L. Roof-Penetration Sleeves: Seal penetration of individual raceways with flexible, boot-type flashing units applied in coordination with roofing work.

M. Aboveground, Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch (25-mm) annular clear space between pipe and sleeve for installing mechanical sleeve seals.

N. Underground, Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch (25-mm) annular clear space between raceway and sleeve for installing mechanical sleeve seals.

END OF SECTION 260533

SECTION 260543 - UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Direct-buried conduit, ducts, and duct accessories.
2. Handholes and boxes.

1.3 DEFINITIONS

A. Trafficways: Locations where vehicular or pedestrian traffic is a normal course of events.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include duct-bank materials, including separators and miscellaneous components.
2. Include ducts and conduits and their accessories, including elbows, end bells, bends, fittings, and solvent cement.
3. Include accessories for handholes, boxes.
4. Include warning tape.
5. Include warning planks.

B. Shop Drawings:

1. Factory-Fabricated Handholes and Boxes Other Than Precast Concrete:

a. Include dimensioned plans, sections, and elevations, and fabrication and installation details.
b. Include duct entry provisions, including locations and duct sizes.
c. Include cover design.
d. Include grounding details.
e. Include dimensioned locations of cable rack inserts, and pulling-in and lifting irons.

1.5 INFORMATIONAL SUBMITTALS

A. Product Certificates: For concrete and steel used in precast concrete handholes, as required by ASTM C 858.

B. Qualification Data: For professional engineer and testing agency responsible for testing nonconcrete handholes and boxes.

C. Source quality-control reports.

D. Field quality-control reports.

1.6 MAINTENANCE MATERIALS SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

B. Furnish cable-support stanchions, arms, insulators, and associated fasteners in quantities equal to 5 percent of quantity of each item installed.

1.7 QUALITY ASSURANCE

A. Testing Agency Qualifications: Qualified according to ASTM E 329 for testing indicated.

1.8 FIELD CONDITIONS

A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions, and then only after arranging to provide temporary electrical service according to requirements indicated:

1. Notify Owner no fewer than two days in advance of proposed interruption of electrical service.
2. Do not proceed with interruption of electrical service without Construction Manager's Owner's written permission.

B. Ground Water: Assume ground-water level is at grade level unless a lower water table is noted on Drawings.

C. Ground Water: Assume ground-water level is 36 inches (900 mm) below ground surface unless a higher water table is noted on Drawings.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR DUCTS AND RACEWAYS

A. Comply with ANSI C2.

2.2 CONDUIT

A. Rigid Steel Conduit: Galvanized. Comply with ANSI C80.1.

B. RNC: NEMA TC 2, Type EPC-40-PVC, UL 651, with matching fittings by same manufacturer as the conduit, complying with NEMA TC 3 and UL 514B.

2.3 NONMETALLIC DUCTS AND DUCT ACCESSORIES

A. Underground Plastic Utilities Duct: NEMA TC 2, UL 651, ASTM F 512, Type EPC-40, with matching fittings complying with NEMA TC 3 by same manufacturer as the duct.

B. Solvents and Adhesives: As recommended by conduit manufacturer.

C. Duct Accessories:

1. Duct Separators: Factory-fabricated rigid PVC interlocking spacers, sized for type and size of ducts with which used, and selected to provide minimum duct spacing indicated while supporting ducts during concreting or backfilling.
2. Warning Tape: Underground-line warning tape specified in Section 260553 "Identification for Electrical Systems."
3. Concrete Warning Planks: Nominal 12 by 24 by 3 inches (300 by 600 by 75 mm) in size, manufactured from 6000-psi (41-MPa) concrete.

    a. Color: Red dye added to concrete during batching.
    b. Mark each plank with "ELECTRIC" in 2-inch- (50-mm-) high, 3/8-inch- (10-mm-) deep letters.

2.4 PRECAST CONCRETE HANDHOLES AND BOXES

A. Comply with ASTM C 858 for design and manufacturing processes.

B. Description: Factory-fabricated, reinforced-concrete, monolithically poured walls and bottom unless open-bottom enclosures are indicated. Frame and cover shall form top of enclosure and shall have load rating consistent with that of handhole or box.

1. Frame and Cover: Weatherproof cast-iron frame, with cast-iron cover with recessed cover hook eyes and tamper-resistant, captive, cover-securing bolts.
2. Frame and Cover: Weatherproof steel frame, with steel cover with recessed cover hook eyes and tamper-resistant, captive, cover-securing bolts.
3. Frame and Cover: Weatherproof steel frame, with hinged steel access door assembly with tamper-resistant, captive, cover-securing bolts.

    a. Cover Hinges: Concealed, with hold-open ratchet assembly.
    b. Cover Handle: Recessed.

4. Frame and Cover: Weatherproof aluminum frame with hinged aluminum access door assembly with tamper-resistant, captive, cover-securing bolts.

a. Cover Hinges: Concealed, with hold-open ratchet assembly.
b. Cover Handle: Recessed.

5. Cover Finish: Nonskid finish shall have a minimum coefficient of friction of 0.50.
6. Cover Legend: Molded lettering, "ELECTRIC."
7. Configuration: Units shall be designed for flush burial and have open bottom unless otherwise indicated.
8. Extensions and Slabs: Designed to mate with bottom of enclosure. Same material as enclosure.

    a. Extension shall provide increased depth of 12 inches (300 mm).
    b. Slab: Same dimensions as bottom of enclosure, and arranged to provide closure.

9. Joint Sealant: Asphaltic-butyl material with adhesion, cohesion, flexibility, and durability properties necessary to withstand maximum hydrostatic pressures at the installation location with the ground-water level at grade.
10. Windows: Precast openings in walls, arranged to match dimensions and elevations of approaching ducts and duct banks, plus an additional 12 inches (300 mm) vertically and horizontally to accommodate alignment variations.

    a. Windows shall be located no less than 6 inches (150 mm) from interior surfaces of walls, floors, or frames and covers of handholes, but close enough to corners to facilitate racking of cables on walls.
    b. Window opening shall have cast-in-place, welded-wire fabric reinforcement for field cutting and bending to tie in to concrete envelopes of duct banks.
    c. Window openings shall be framed with at least two additional No. 3 steel reinforcing bars in concrete around each opening.

11. Duct Entrances in Handhole Walls: Cast end-bell or duct-terminating fitting in wall for each entering duct.

    a. Type and size shall match fittings to duct or conduit to be terminated.
    b. Fittings shall align with elevations of approaching ducts and be located near interior corners of handholes to facilitate racking of cable.

12. Handholes 12 inches wide by 24 inches long and larger shall have inserts for cable racks and pulling-in irons installed before concrete is poured.

2.5 HANDHOLES AND BOXES OTHER THAN PRECAST CONCRETE

A. General Requirements for Handholes and Boxes: Comply with SCTE 77. Comply with tier requirements in "Underground Enclosure Application" Article.

1. Color: Gray.
2. Configuration: Units shall be designed for flush burial and have open bottom unless otherwise indicated.
3. Cover: Weatherproof, secured by tamper-resistant locking devices and having structural load rating consistent with enclosure.
4. Cover Finish: Nonskid finish shall have a minimum coefficient of friction of 0.50.

5. Cover Legend: Molded lettering, "ELECTRIC.".
6. Direct-Buried Wiring Entrance Provisions: Knockouts equipped with insulated bushings or end-bell fittings, selected to suit box material, sized for wiring indicated, and arranged for secure, fixed installation in enclosure wall.
7. Duct Entrance Provisions: Duct-terminating fittings shall mate with entering ducts for secure, fixed installation in enclosure wall.
8. Handholes 12 inches wide by 24 inches long and larger shall have factory-installed inserts for cable racks and pulling-in irons.

B. Polymer Concrete Handholes and Boxes with Polymer Concrete Cover: Molded of sand and aggregate, bound together with a polymer resin, and reinforced with steel or fiberglass or a combination of the two.

1. Old castle.

2.6 CAST-IN-PLACE MANHOLES

A. Description: Underground utility structures, constructed in place, complete with accessories, hardware, and features. Include concrete knockout panels for conduit entrance and sleeve for ground rod.

B. Materials: Comply with ASTM C 858 and with Section 033000 "Cast-in-Place Concrete."

C. Structural Design Loading: As specified in "Underground Enclosure Application" Article.

2.7 SOURCE QUALITY CONTROL

A. Test and inspect precast concrete utility structures according to ASTM C 1037.

B. Nonconcrete Handhole and Pull-Box Prototype Test: Test prototypes of manholes and boxes for compliance with SCTE 77. Strength tests shall be for specified tier ratings of products supplied.

1. Tests of materials shall be performed by an independent testing agency.
2. Strength tests of complete boxes and covers shall be by either an independent testing agency or manufacturer. A qualified registered professional engineer shall certify tests by manufacturer.
3. Testing machine pressure gages shall have current calibration certification, complying with ISO 9000 and ISO 10012, and traceable to NIST standards.

PART 3 - EXECUTION

3.1 PREPARATION

A. Coordinate layout and installation of ducts, manholes, handholes, and boxes with final arrangement of other utilities, site grading, and surface features as determined in the field.

Notify Architect if there is a conflict between areas of excavation and existing structures or archaeological sites to remain.

B. Coordinate elevations of ducts and duct-bank entrances into manholes, handholes, and boxes with final locations and profiles of ducts and duct banks, as determined by coordination with other utilities, underground obstructions, and surface features. Revise locations and elevations as required to suit field conditions and to ensure that duct runs drain to manholes and handholes, and as approved by Architect.

C. Clear and grub vegetation to be removed, and protect vegetation to remain according to Section 311000 "Site Clearing." Remove and stockpile topsoil for reapplication according to Section 311000 "Site Clearing."

3.2 UNDERGROUND DUCT APPLICATION

A. Ducts for Electrical Cables More than 600 V: RNC, NEMA Type EPC-40-PVC, in concrete-encased duct bank unless otherwise indicated.

B. Ducts for Electrical Feeders 600 V and Less: RNC, NEMA Type EPC-40-PVC, in concrete-encased duct bank unless otherwise indicated.

C. Ducts for Electrical Feeders 600 V and Less: RNC, NEMA Type EPC-40-PVC, in direct-buried duct bank unless otherwise indicated.

D. Ducts for Electrical Branch Circuits: RNC, NEMA Type EPC-40-PVC, in direct-buried duct bank unless otherwise indicated.

E. Underground Ducts Crossing Paved Paths, Walks, and Driveways, Roadways and Railroads: RNC, NEMA Type EPC-40-PVC, encased in reinforced concrete.

3.3 UNDERGROUND ENCLOSURE APPLICATION

A. Handholes and Boxes for 600 V and Less:

1. Units in Roadways and Other Deliberate Traffic Paths: Precast concrete. AASHTO HB 17, H-20 structural load rating.
2. Units in Driveway, Parking Lot, and Off-Roadway Locations, Subject to Occasional, Nondeliberate Loading by Heavy Vehicles: Polymer concrete, SCTE 77, structural load rating.
3. Units in Sidewalk and Similar Applications with a Safety Factor for Nondeliberate Loading by Vehicles: Polymer concrete units, SCTE 77, Tier 8 structural load rating.
4. Units Subject to Light-Duty Pedestrian Traffic Only: High-density plastic, structurally tested according to SCTE 77 with 3000-lbf (13 345-N) vertical loading.
5. Cover design load shall not exceed the design load of the handhole or box.

3.4 EARTHWORK

A. Excavation and Backfill: Comply with Section 312000 "Earth Moving," but do not use heavy-duty, hydraulic-operated, compaction equipment.

B. Restore surface features at areas disturbed by excavation, and re-establish original grades unless otherwise indicated. Replace removed sod immediately after backfilling is completed.

C. Restore areas disturbed by trenching, storing of dirt, cable laying, and other work. Restore vegetation and include necessary topsoiling, fertilizing, liming, seeding, sodding, sprigging, and mulching. Comply with Section 329200 "Turf and Grasses" and Section 329300 "Plants."

D. Cut and patch existing pavement in the path of underground ducts and utility structures according to the "Cutting and Patching" Article in Section 017300 "Execution."

3.5 DUCT INSTALLATION

A. Install ducts according to NEMA TCB 2.

B. Slope: Pitch ducts a minimum slope of 1:300 down toward manholes and handholes and away from buildings and equipment. Slope ducts from a high point in runs between two manholes, to drain in both directions.

C. Curves and Bends: Use 5-degree angle couplings for small changes in direction. Use manufactured long sweep bends with a minimum radius of 48 inches (1200 mm), both horizontally and vertically, at other locations unless otherwise indicated.

D. Joints: Use solvent-cemented joints in ducts and fittings and make watertight according to manufacturer's written instructions. Stagger couplings so those of adjacent ducts do not lie in same plane.

E. Installation Adjacent to High-Temperature Steam Lines: Where duct banks are installed parallel to underground steam lines, perform calculations showing the duct bank will not be subject to environmental temperatures above 40 deg C. Where environmental temperatures are calculated to rise above 40 deg C, and anywhere the duct bank crosses above an underground steam line, install insulation blankets listed for direct burial to isolate the duct bank from the steam line.

F. Duct Entrances to Manholes and Concrete and Polymer Concrete Handholes: Use end bells, spaced approximately 10 inches (250 mm) o.c. for 5-inch (125-mm) ducts, and vary proportionately for other duct sizes.

1. Begin change from regular spacing to end-bell spacing 10 feet (3 m) from the end bell without reducing duct line slope and without forming a trap in the line.
2. Direct-Buried Duct Banks: Install an expansion and deflection fitting in each conduit in the area of disturbed earth adjacent to manhole or handhole. Install an expansion fitting near the center of all straight line direct-buried duct banks with calculated expansion of more than 3/4 inch (19 mm).
3. Grout end bells into structure walls from both sides to provide watertight entrances.

G. Building Wall Penetrations: Make a transition from underground duct to rigid steel conduit at least 10 feet (3 m) outside the building wall, without reducing duct line slope away from the building, and without forming a trap in the line. Use fittings manufactured for duct-to-conduit transition. Install conduit penetrations of building walls as specified in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

H. Sealing: Provide temporary closure at terminations of ducts that have cables pulled. Seal spare ducts at terminations. Use sealing compound and plugs to withstand at least 15-psig (1.03-MPa) hydrostatic pressure.

I. Pulling Cord: Install 100-lbf- (445-N-) test nylon cord in empty ducts.

J. Concrete-Encased Ducts: Support ducts on duct separators.

1. Excavate trench bottom to provide firm and uniform support for duct bank. Prepare trench bottoms as specified in Section 312000 "Earth Moving" for pipes less than 6 inches (150 mm) in nominal diameter.
2. Width: Excavate trench 12 inches (300 mm) wider than duct bank on each side.
3. Width: Excavate trench 3 inches (75 mm) wider than duct bank on each side.
4. Depth: Install top of duct bank at least 24 inches (600 mm) below finished grade in areas not subject to deliberate traffic, and at least 30 inches (750 mm) below finished grade in deliberate traffic paths for vehicles unless otherwise indicated.
5. Support ducts on duct separators coordinated with duct size, duct spacing, and outdoor temperature.
6. Separator Installation: Space separators close enough to prevent sagging and deforming of ducts, with not less than four spacers per 20 feet (6 m) of duct. Secure separators to earth and to ducts to prevent floating during concreting. Stagger separators approximately 6 inches (150 mm) between tiers. Tie entire assembly together using fabric straps; do not use tie wires or reinforcing steel that may form conductive or magnetic loops around ducts or duct groups.
7. Minimum Space between Ducts: 3 inches (75 mm) between ducts and exterior envelope wall, 2 inches (50 mm) between ducts for like services, and 4 inches (100 mm) between power and signal ducts.
8. Elbows: Use manufactured duct elbows for stub-ups at poles and equipment, at building entrances through floor, and at changes of direction in duct run unless otherwise indicated. Extend concrete encasement throughout length of elbow.
9. Elbows: Use manufactured rigid steel conduit elbows for stub-ups at poles and equipment, at building entrances through floor, and at changes of direction in duct run.

    a. Couple steel conduits to ducts with adapters designed for this purpose, and encase coupling with 3 inches (75 mm) of concrete.
    b. Stub-Ups to Equipment: For equipment mounted on outdoor concrete bases, extend steel conduit horizontally a minimum of 60 inches (1500 mm) from edge of base. Install insulated grounding bushings on terminations at equipment.

10. Reinforcement: Reinforce concrete-encased duct banks where they cross disturbed earth and where indicated. Arrange reinforcing rods and ties without forming conductive or magnetic loops around ducts or duct groups.
11. Forms: Use walls of trench to form side walls of duct bank where soil is self-supporting and concrete envelope can be poured without soil inclusions; otherwise, use forms.

12. Concrete Cover: Install a minimum of 3 inches (75 mm) of concrete cover at top and bottom, and a minimum of 2 inches (50 mm) on each side of duct bank.
13. Concreting Sequence: Pour each run of envelope between manholes or other terminations in one continuous operation.

    a. Start at one end and finish at the other, allowing for expansion and contraction of ducts as their temperature changes during and after the pour. Use expansion fittings installed according to manufacturer's written recommendations, or use other specific measures to prevent expansion-contraction damage.
    b. If more than one pour is necessary, terminate each pour in a vertical plane and install 3/4-inch (15-mm) reinforcing-rod dowels extending a minimum of 18 inches (450 mm) into concrete on both sides of joint near corners of envelope.

14. Pouring Concrete: Comply with requirements in "Concrete Placement" Article in Section 033000 "Cast-in-Place Concrete." Place concrete carefully during pours to prevent voids under and between conduits and at exterior surface of envelope. Do not allow a heavy mass of concrete to fall directly onto ducts. Allow concrete to flow to center of bank and rise up in middle, uniformly filling all open spaces. Do not use power-driven agitating equipment unless specifically designed for duct-bank application.

K. Direct-Buried Duct Banks:

1. Excavate trench bottom to provide firm and uniform support for duct bank. Comply with requirements in Section 312000 "Earth Moving" for preparation of trench bottoms for pipes less than 6 inches (150 mm) in nominal diameter.
2. Support ducts on duct separators coordinated with duct size, duct spacing, and outdoor temperature.
3. Space separators close enough to prevent sagging and deforming of ducts, with not less than four spacers per 20 feet (6 m) of duct. Secure separators to earth and to ducts to prevent displacement during backfill and yet permit linear duct movement due to expansion and contraction as temperature changes. Stagger spacers approximately 6 inches (150 mm) between tiers.
4. Depth: Install top of duct bank at least 36 inches (900 mm) below finished grade unless otherwise indicated.
5. Set elevation of bottom of duct bank below frost line.
6. Install ducts with a minimum of 3 inches (75 mm) between ducts for like services and 6 inches (150 mm) between power and signal ducts.
7. Elbows: Install manufactured duct elbows for stub-ups at poles and equipment, at building entrances through floor, and at changes of direction in duct run unless otherwise indicated. Encase elbows for stub-up ducts throughout length of elbow.
8. Install manufactured rigid steel conduit elbows for stub-ups at poles and equipment, at building entrances through floor, and at changes of direction in duct run.

    a. Couple steel conduits to ducts with adapters designed for this purpose, and encase coupling with 3 inches (75 mm) of concrete.
    b. For equipment mounted on outdoor concrete bases, extend steel conduit horizontally a minimum of 60 inches (1500 mm) from edge of equipment pad or foundation. Install insulated grounding bushings on terminations at equipment.

9. After installing first tier of ducts, backfill and compact. Start at tie-in point and work toward end of duct run, leaving ducts at end of run free to move with expansion and contraction as temperature changes during this process. Repeat procedure after placing each tier. After placing last tier, hand place backfill to 4 inches (100 mm) over ducts and hand tamp. Firmly tamp backfill around ducts to provide maximum supporting strength. Use hand tamper only. After placing controlled backfill over final tier, make final duct connections at end of run and complete backfilling with normal compaction. Comply with requirements in Section 312000 "Earth Moving" for installation of backfill materials.

    a. Place minimum 3 inches (75 mm) of sand as a bed for duct bank. Place sand to a minimum of 6 inches (150 mm) above top level of duct bank.
    b. Place minimum 6 inches (150 mm) of engineered fill above concrete encasement of duct bank.

L. Warning Planks: Bury warning planks approximately 12 inches (300 mm) above direct-buried ducts and duct banks, placing them 24 inches (600 mm) o.c. Align planks along the width and along the centerline of duct bank. Provide an additional plank for each 12-inch (300-mm) increment of duct-bank width over a nominal 18 inches (450 mm). Space additional planks 12 inches (300 mm) apart, horizontally.

M. Warning Tape: Bury warning tape approximately 12 inches (300 mm) above all concrete-encased ducts and duct banks. Align tape parallel to and within 3 inches (75 mm) of centerline of duct bank. Provide an additional warning tape for each 12-inch (300-mm) increment of duct-bank width over a nominal 18 inches (450 mm). Space additional tapes 12 inches (300 mm) apart, horizontally.

3.6 INSTALLATION OF CONCRETE MANHOLES, HANDHOLES, AND BOXES

A. Precast Concrete Handhole and Manhole Installation:

1. Comply with ASTM C 891 unless otherwise indicated.
2. Install units level and plumb and with orientation and depth coordinated with connecting ducts, to minimize bends and deflections required for proper entrances.
3. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1-inch (25-mm) sieve to No. 4 (4.75-mm) sieve and compacted to same density as adjacent undisturbed earth.

B. Elevations:
1. Handhole Covers: In paved areas and trafficways, set surface flush with finished grade. Set covers of other handholes 1 inch (25 mm) above finished grade.
2. Where indicated, cast handhole cover frame integrally with handhole structure.

C. Drainage: Install drains in bottom of manholes where indicated. Coordinate with drainage provisions indicated.

D. Dampproofing: Apply dampproofing to exterior surfaces **handholes** after concrete has cured at least three days. Dampproofing materials and installation are specified in Section 071113 "Bituminous Dampproofing." After ducts are connected and grouted, and before backfilling,

dampproof joints and connections, and touch up abrasions and scars. Dampproof exterior of manhole chimneys after mortar has cured at least three days.

E. Hardware: Install removable hardware, including pulling eyes, cable stanchions, and cable arms, and insulators, as required for installation and support of cables and conductors and as indicated.

F. Fixed Manhole Ladders: Arrange to provide for safe entry with maximum clearance from cables and other items in manholes.

G. Field-Installed Bolting Anchors in Manholes and Concrete Handholes: Do not drill deeper than 3-7/8 inches (97 mm) for manholes and 2 inches (50 mm) for handholes, for anchor bolts installed in the field. Use a minimum of two anchors for each cable stanchion.

3.7 INSTALLATION OF HANDHOLES AND BOXES OTHER THAN PRECAST CONCRETE

A. Install handholes and boxes level and plumb and with orientation and depth coordinated with connecting ducts, to minimize bends and deflections required for proper entrances. Use box extension if required to match depths of ducts, and seal joint between box and extension as recommended by manufacturer.

B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch (12.5-mm) sieve to No. 4 (4.75-mm) sieve and compacted to same density as adjacent undisturbed earth.

C. Elevation: In paved areas and trafficways, set cover flush with finished grade. Set covers of other handholes 1 inch (25 mm) above finished grade.

D. Install removable hardware, including pulling eyes, cable stanchions, cable arms, and insulators, as required for installation and support of cables and conductors and as indicated. Select arm lengths to be long enough to provide spare space for future cables, but short enough to preserve adequate working clearances in enclosure.

E. Field cut openings for ducts and conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

F. For enclosures installed in asphalt paving and subject to occasional, nondeliberate, heavy-vehicle loading, form and pour a concrete ring encircling, and in contact with, enclosure and with top surface screeded to top of box cover frame. Bottom of ring shall rest on compacted earth.

1. Concrete: 3000 psi (20 kPa), 28-day strength, complying with Section 033000 "Cast-in-Place Concrete," with a troweled finish.
2. Dimensions: 10 inches wide by 12 inches deep.

3.8 GROUNDING

A. Ground underground ducts and utility structures according to Section 260526 "Grounding and Bonding for Electrical Systems."

3.9 FIELD QUALITY CONTROL

A. Perform the following tests and inspections and prepare test reports:

1. Demonstrate capability and compliance with requirements on completion of installation of underground ducts and utility structures.
2. Pull solid aluminum or wood test mandrel through duct to prove joint integrity and adequate bend radii, and test for out-of-round duct. Provide a minimum 6-inch- (150-mm-) long mandrel equal to 80 percent fill of duct. If obstructions are indicated, remove obstructions and retest.
3. Test handhole grounding to ensure electrical continuity of grounding and bonding connections. Measure and report ground resistance as specified in Section 260526 "Grounding and Bonding for Electrical Systems."

B. Correct deficiencies and retest as specified above to demonstrate compliance.

3.10 CLEANING

A. Pull leather-washer-type duct cleaner, with graduated washer sizes, through full length of ducts. Follow with rubber duct swab for final cleaning and to assist in spreading lubricant throughout ducts.

B. Clean internal surfaces of manholes, including sump. Remove foreign material.

END OF SECTION 260543

SECTION 260553

IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Identification for raceways.
2. Identification of power and control cables.
3. Identification for conductors.
4. Underground-line warning tape.
5. Warning labels and signs.
6. Instruction signs.
7. Equipment identification labels.
8. Miscellaneous identification products.

1.3 SUBMITTALS

A. Product Data: For each electrical identification product indicated.

1.4 QUALITY ASSURANCE

A. Comply with NFPA 70.

B. Comply with 29 CFR 1910.144 and 29 CFR 1910.145.

1.5 COORDINATION

A. Coordinate identification names, abbreviations, colors, and other features with requirements in other Sections requiring identification applications, Drawings, Shop Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual; and with those required by codes, standards, and 29 CFR 1910.145. Use consistent designations throughout Project.

B. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.

C. Coordinate installation of identifying devices with location of access panels and doors.

D. Install identifying devices before installing acoustical ceilings and similar concealment.

PART 2 - PRODUCTS

2.1 CONDUCTOR IDENTIFICATION MATERIALS

A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils (0.08 mm) thick by 1 to 2 inches (25 to 50 mm) wide.

B. Self-Adhesive Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound adhesive tape for securing ends of legend label.

C. Snap-Around Labels: Slit, pretensioned, flexible, preprinted, color-coded acrylic sleeve, with diameter sized to suit diameter of raceway or cable it identifies and to stay in place by gripping action.

D. Snap-Around, Color-Coding Bands: Slit, pretensioned, flexible, solid-colored acrylic sleeve, 2 inches (50 mm) long, with diameter sized to suit diameter of raceway or cable it identifies and to stay in place by gripping action.

E. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.

2.2 UNDERGROUND-LINE WARNING TAPE

A. Tape:

1. 3.5 mils and 6” wide.
2. Printing on tape shall be permanent and shall not be damaged by burial operations.
3. Polyethylene tape material and ink shall be chemically inert, and not subject to degrading when exposed to acids, alkalis, and other destructive substances commonly found in soils.

B. Color and Printing:

1. Inscriptions for Red-Colored Tapes: BURIED ELECTRIC LINE, CAUTION.
2. Inscriptions for Orange-Colored Tapes: TELEPHONE CABLE, CATV CABLE, COMMUNICATIONS CABLE, OPTICAL FIBER CABLE.

2.3 WARNING LABELS AND SIGNS

A. Comply with NFPA 70 and 29 CFR 1910.145.

B. Baked-Enamel Warning Signs:

1. Preprinted aluminum signs, punched or drilled for fasteners, with colors, legend, and size required for application.
2. 1/4-inch (6.4-mm) grommets in corners for mounting.
3. Nominal size, 7 by 10 inches (180 by 250 mm).

C. Warning label and sign shall include, but are not limited to, the following legends:
1. Workspace Clearance Warning: "WARNING - OSHA REGULATION - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES (915 MM)."
2. Location of multiple main disconnects are at defined locations. Approved by Authority Having Jurisdiction.

2.4 INSTRUCTION SIGNS

A. Engraved, laminated acrylic or melamine plastic, minimum 1/16 inch (1.6 mm) thick for signs up to 20 sq. inches (129 sq. cm) and 1/8 inch (3.2 mm) thick for larger sizes.

1. Engraved legend with black letters on white face .
2. Punched or drilled for mechanical fasteners.
3. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.

2.5 EQUIPMENT IDENTIFICATION LABELS

A. Self-Adhesive, Engraved, Laminated Acrylic or Melamine Label: Adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch (10 mm).

2.6 CABLE TIES

A. UV-Stabilized Cable Ties: Fungus inert, designed for continuous exposure to exterior sunlight, self extinguishing, one piece, self locking, Type 6/6 nylon.

1. Minimum Width: 3/16 inch (5 mm).
2. Tensile Strength at 73 deg F (23 deg C), According to ASTM D 638: 12,000 psi (82.7 MPa).
3. Temperature Range: Minus 40 to plus 185 deg F (Minus 40 to plus 85 deg C).
4. Color: Black.

B. Plenum-Rated Cable Ties: Self extinguishing, UV stabilized, one piece, self locking.

1. Minimum Width: 3/16 inch (5 mm).
2. Tensile Strength at 73 deg F (23 deg C), According to ASTM D 638: 7000 psi (48.2 MPa).
3. UL 94 Flame Rating: 94V-0.
4. Temperature Range: Minus 50 to plus 284 deg F (Minus 46 to plus 140 deg C).
5. Color: Black.

2.7 MISCELLANEOUS IDENTIFICATION PRODUCTS

A. Paint: Comply with requirements in Division 09 painting Sections for paint materials and application requirements. Select paint system applicable for surface material and location (exterior or interior).

B. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Verify identity of each item before installing identification products.

B. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.

C. Apply identification devices to surfaces that require finish after completing finish work.

D. Secure plastic name plates to equipment fronts using screws or rivets. Use of adhesive shall be per owner's approval only.

E. System Identification Color-Coding Bands for Raceways and Cables: Each color-coding band shall completely encircle cable or conduit. Place adjacent bands of two-color markings in contact, side by side. Locate bands at changes in direction, at penetrations of walls and floors, at 50-foot (15-m) maximum intervals in straight runs, and at 25-foot (7.6-m) maximum intervals in congested areas.

F. Cable Ties: For attaching tags. Use general-purpose type, except as listed below:

1. Outdoors: UV-stabilized nylon.
2. In Spaces Handling Environmental Air: Plenum rated.

G. Underground-Line Warning Tape: During backfilling of trenches install continuous underground-line warning tape directly above line at 6 to 8 inches (150 to 200 mm) below finished grade. Use multiple tapes where width of multiple lines installed in a common trench exceeds 16 inches (400 mm) overall.

3.2 IDENTIFICATION SCHEDULE

A. Accessible Raceways and 600 V or Less, for Service, Feeder, and Branch Circuits More Than A, and 120 V to ground: Identify with self-adhesive vinyl tape applied in bands. Install labels at 10-foot (3-m)] [30-foot (10-m) maximum intervals.

B. Accessible Raceways and Cables within Buildings: Identify the covers of each junction and pull box of the following systems with self-adhesive vinyl labels with the wiring system legend and system voltage. System legends shall be as follows:
   1. Normal Power – White letters on Black background.
   2. UPS – White letters on Orange background.

C. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and handholes, use color-coding conductor tape to identify the phase.

   1. Color-Coding for Phase and Voltage Level Identification, 600 V or Less: Use colors listed below for ungrounded service feeder and branch-circuit conductors.

      a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG, if authorities having jurisdiction permit.
      b. Colors for 208/120-V Circuits:

         1) Phase A: Black.
         2) Phase B: Red.
         3) Phase C: Blue.
         4) Neutral: White.

      c. Colors for 480/277-V Circuits:

         1) Phase A: Brown.
         2) Phase B: Orange. (Purple)
         3) Phase C: Yellow.
         4) Neutral: Gray.

      d. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches (150 mm) from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.

D. Conductors to Be Extended in the Future: Attach write-on tags to conductors and list source.

E. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, and signal connections.

   1. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, and pull points. Identify by system and circuit designation.
   2. Use system of marker tape designations that is uniform and consistent with system used by manufacturer for factory-installed connections.
   3. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual.

F. Locations of Underground Lines: Identify with underground-line warning tape for power, lighting, communication, and control wiring and optical fiber cable.

   1. Limit use of underground-line warning tape to direct-buried cables.

2. Install underground-line warning tape for both direct-buried cables and cables in raceway.

G. Workspace Indication: Install floor marking tape to show working clearances in the direction of access to live parts. Workspace shall be as required by NFPA 70 and 29 CFR 1926.403 unless otherwise indicated. Do not install at flush-mounted panelboards and similar equipment in finished spaces.

H. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Baked-enamel warning signs.

1. Comply with 29 CFR 1910.145.
2. Identify system voltage with black letters on an orange background.
3. Apply to exterior of door, cover, or other access.
4. For equipment with multiple power or control sources, apply to door or cover of equipment including, but not limited to, the following:
    a. Controls with external control power connections.

I. Operating Instruction Signs: Install instruction signs to facilitate proper operation and maintenance of electrical systems and items to which they connect. Install instruction signs with approved legend where instructions are needed for system or equipment operation.

J. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and the Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.

1. Labeling Instructions:

    a. Indoor Equipment: Engraved, laminated acrylic or melamine label. Unless otherwise indicated, provide a single line of text with 1/2-inch- (13-mm-) high letters on 1-1/2-inch- (38-mm-) high label; where two lines of text are required, use labels 2 inches (50 mm) high.
    b. Outdoor Equipment: Engraved, laminated acrylic or melamine label.
    c. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.
    d. Unless provided with self-adhesive means of attachment, fasten labels with appropriate mechanical fasteners that do not change the NEMA or NRTL rating of the enclosure.

2. Equipment to Be Labeled:

    a. Panelboards: Typewritten directory of circuits in the location provided by panelboard manufacturer. Panelboard identification shall be engraved, laminated acrylic or melamine label.
    b. Enclosures and electrical cabinets.
    c. Access doors and panels for concealed electrical items.
    d. Switchgear.

e. Switchboards.
f. Transformers: Label that includes tag designation shown on Drawings for the transformer, feeder, and panelboards or equipment supplied by the secondary.
g. Emergency system boxes and enclosures.
h. Motor-control centers.
i. Enclosed switches.
j. Enclosed circuit breakers.
k. Enclosed controllers.
l. Variable-speed controllers.
m. Push-button stations.
n. Power transfer equipment.
o. Contactors.
p. Remote-controlled switches, dimmer modules, and control devices.
q. Battery-inverter units.
r. Battery racks.
s. Power-generating units.
t. Monitoring and control equipment.
u. UPS equipment.

3. Nameplate Detail:

   a. For circuit breakers, panelboards, switchboards, disconnect switches, motor starters, and contactors: ¼-inch letters, identify source to and device load serves, including location.

4. Enclosure Color Coding:

   a. The following systems shall have each junction and pull box cover completely painted per the following:

System	Color of Box Cover
Ethernet Backbone	Blue
Telecommunications	Brown
FCMS	Green
Emergency Power	Red
Security**	White
Fire Alarm	Yellow
Clock	Fluorescent Violet
U.P.S.	Fluorescent Pink

**Security shall include, but not be limited to, the following systems:
- Card Access\Proximaty
- Duress Alarms
- Perimeter Door Alarms
- CCTV

END OF SECTION 260553

SECTION 262416

PANELBOARDS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Distribution panelboards.
2. Lighting and appliance branch-circuit panelboards.
3. Electronic-grade panelboards.

1.3 DEFINITIONS

A. SVR: Suppressed voltage rating.

B. TVSS: Transient voltage surge suppressor.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of panelboard, switching and overcurrent protective device, transient voltage suppression device, accessory, and component indicated. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.

B. Shop Drawings: For each panelboard and related equipment.

1. Include dimensioned plans, elevations, sections, and details. Show tabulations of installed devices, equipment features, and ratings.
2. Detail enclosure types and details for types other than NEMA 250, Type 1.
3. Detail bus configuration, current, and voltage ratings.
4. Short-circuit current rating of panelboards and overcurrent protective devices.
5. Include evidence of NRTL listing for series rating of installed devices.
6. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.
7. Include wiring diagrams for power, signal, and control wiring.

8. Include time-current coordination curves for each type and rating of overcurrent protective device included in panelboards. Submit on log-log graph paper; include selectable ranges for each type of overcurrent protective device.

1.5 INFORMATIONAL SUBMITTALS

A. Field Quality-Control Reports:

1. Test procedures used.
2. Test results that comply with requirements.
3. Results of failed tests and corrective action taken to achieve test results that comply with requirements.

B. Panelboard Schedules: For installation in panelboards. Submit final versions after load balancing.

1.6 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For panelboards and components to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:

1. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.
2. Time-current curves, including selectable ranges for each type of overcurrent protective device that allows adjustments.

1.7 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Keys: Two spares for each type of panelboard cabinet lock.
2. Circuit Breakers Including GFCI and Ground Fault Equipment Protection (GFEP) Types: Fuses for Fused Switches: Equal to 10 percent of quantity installed for each size and type, but no fewer than three of each size and type.
3. Fuses for Fused Power-Circuit Devices: Equal to 10 percent of quantity installed for each size and type, but no fewer than three of each size and type.

1.8 QUALITY ASSURANCE

A. Source Limitations: Obtain panelboards, overcurrent protective devices, components, and accessories from single source from single manufacturer.

B. Product Selection for Restricted Space: Drawings indicate maximum dimensions for panelboards including clearances between panelboards and adjacent surfaces and other items. Comply with indicated maximum dimensions.

C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

D. Comply with NEMA PB 1.

E. Comply with NFPA 70.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Remove loose packing and flammable materials from inside panelboards; install temporary electric heating (250 W per panelboard) to prevent condensation.

B. Handle and prepare panelboards for installation according to NEMA PB 1.

1.10 PROJECT CONDITIONS

A. Environmental Limitations:

1. Do not deliver or install panelboards until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above panelboards is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
2. Rate equipment for continuous operation under the following conditions unless otherwise indicated:

    a. Ambient Temperature: Not exceeding 23 deg F (minus 5 deg C) to plus 104 deg F (plus 40 deg C).
    b. Altitude: Not exceeding 6600 feet (2000 m).

B. Service Conditions: NEMA PB 1, usual service conditions, as follows:

1. Ambient temperatures within limits specified.
2. Altitude not exceeding 6600 feet (2000 m).

C. Interruption of Existing Electric Service: Do not interrupt electric service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electric service according to requirements indicated:

1. Notify Owner no fewer than two days in advance of proposed interruption of electric service.
2. Comply with NFPA 70E.

1.11 COORDINATION

A. Coordinate layout and installation of panelboards and components with other construction that penetrates walls or is supported by them, including electrical and other types of equipment, raceways, piping, encumbrances to workspace clearance requirements, and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.

B. Coordinate sizes and locations of concrete bases with actual equipment provided. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 03.

1.12 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace transient voltage suppression devices that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR PANELBOARDS

A. Enclosures: Flush- and surface-mounted cabinets.

1. Rated for environmental conditions at installed location.

a. Indoor Dry and Clean Locations: NEMA 250, Type 1.
b. Outdoor Locations: NEMA 250, Type 3R.

2. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover. Panel front shall be fabricated so that the panel may be opened to access the breakers and also to allow access to breaker wiring without removal of the front.
3. Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
4. Finishes:

a. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
b. Back Boxes: Galvanized steel.

5. Directory Card: Inside panelboard door, mounted in metal frame with transparent protective cover.

B. Incoming Mains Location: As required and as shown on plans.

C. Phase, Neutral, and Ground Buses:

1. Material: Hard-drawn copper, 98 percent conductivity.
2. Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
3. Isolated Ground Bus: Adequate for branch-circuit isolated ground conductors; insulated from box.
   Extra-Capacity Neutral Bus: Neutral bus rated 200 percent of phase bus and UL listed as suitable for nonlinear load. Where shown on plans.

D. Conductor Connectors: Suitable for use with conductor material and sizes.

1. Material: Hard-drawn copper, 98 percent conductivity.
2. Main and Neutral Lugs: Mechanical type.
3. Ground Lugs and Bus-Configured Terminators: Mechanical type.
4. Feed-Through Lugs: Mechanical type, suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.
5. Subfeed (Double) Lugs: Compression Mechanical type suitable for use with conductor material. Locate at same end of bus as incoming lugs or main device.
6. Extra-Capacity Neutral Lugs: Rated 200 percent of phase lugs mounted on extra-capacity neutral bus.

E. Service Equipment Label: NRTL labeled for use as service equipment for panelboards or load centers with one or more main service disconnecting and overcurrent protective devices.

F. Future Devices: Mounting brackets, bus connections, filler plates, and necessary appurtenances required for future installation of devices.

G. Panelboard Short-Circuit Current Rating: Rated for series-connected system with integral or remote upstream overcurrent protective devices and labeled by an NRTL. Include size and type of allowable upstream and branch devices, listed and labeled for series-connected short-circuit rating by an NRTL.

H. Panelboard Short-Circuit Current Rating: Fully rated to interrupt symmetrical short-circuit current available at terminals.

2.2 DISTRIBUTION PANELBOARDS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Siemens Energy & Automation, Inc.
4. Square D; a brand of Schneider Electric.

B. Panelboards: NEMA PB 1, power and feeder distribution type.

C. Doors: Secured with vault-type latch with tumbler lock; keyed alike.

1. For doors more than [36 inches (914 mm)] high, provide two latches, keyed alike.

2. Door or doors shall allow access to breakers dead front and also to the breaker wiring without removal of front.

D. Mains: As indicated.

E. Branch Overcurrent Protective Devices for Circuit-Breaker Frame Sizes 125 A and Smaller: Bolt-on circuit breakers.

F. Branch Overcurrent Protective Devices for Circuit-Breaker Frame Sizes Larger Than 125 A: Bolt-on circuit breakers.

2.3 LIGHTING AND APPLIANCE BRANCH-CIRCUIT PANELBOARDS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Siemens Energy & Automation, Inc.
4. Square D; a brand of Schneider Electric.

B. Panelboards: NEMA PB 1, lighting and appliance branch-circuit type.

C. Mains: Circuit breaker or lugs only.

D. Branch Overcurrent Protective Devices: Bolt-on circuit breakers, replaceable without disturbing adjacent units.

E. Doors: Concealed hinges; secured with flush latch with tumbler lock; keyed alike.

F. Door shall be available to open over breaker lugs.

2.4 LOAD CENTERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Siemens Energy & Automation, Inc.
4. Square D; a brand of Schneider Electric.

B. Mains: As indicated. On drawings.

C. Branch Overcurrent Protective Devices: Plug-in circuit breakers, replaceable without disturbing adjacent units.

D. Conductor Connectors: Mechanical type for main, neutral, and ground lugs and buses.

2.5 ELECTRONIC-GRADE PANELBOARDS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Siemens Energy & Automation, Inc.
4. Square D; a brand of Schneider Electric.

B. Panelboards: NEMA PB 1; with factory-installed, integral TVSS; labeled by an NRTL for compliance with UL 67 after installing TVSS.

C. Doors: Secured with vault-type latch with tumbler lock; keyed alike.

D. Main Overcurrent Protective Devices: Bolt-on thermal-magnetic circuit breakers.

E. Branch Overcurrent Protective Devices: Bolt-on thermal-magnetic circuit breakers.

F. Buses:

1. Copper phase and neutral buses; 200 percent capacity neutral bus and lugs.
2. Copper equipment and isolated ground buses.

G. Surge Protection Device: IEEE C62.41-compliant, integrally mounted, bolt-on, solid-state, parallel-connected, type, with sine-wave tracking suppression and filtering modules, short-circuit current rating complying with UL 1449, second edition, and matching or exceeding the panelboard short-circuit rating, redundant suppression circuits, with individually fused metal-oxide varistors.

1. Accessories:

a. Fuses rated at 200-kA interrupting capacity.
b. Fabrication using bolted compression lugs for internal wiring.
c. Integral disconnect switch.
d. Redundant suppression circuits.
e. Redundant replaceable modules.
f. Arrangement with wire connections to phase buses, neutral bus, and ground bus.
g. LED indicator lights for power and protection status.
h. Audible alarm, with silencing switch, to indicate when protection has failed.
i. Form-C contacts rated at 5 A and 250-V ac, one normally open and one normally closed, for remote monitoring of system operation. Contacts shall reverse position on failure of any surge diversion module or on opening of any current-limiting device. Coordinate with building power monitoring and control system.
j. Four digit, transient-event counter set to totalize transient surges.

2. Peak Single-Impulse Surge Current Rating: 120 kA per mode/240 kA per phase.
3. Minimum single-impulse current ratings, using 8-by-20-mic.sec. waveform described in IEEE C62.41.2.

    a. Line to Neutral: 70,000 A.
    b. Line to Ground: 70,000 A.
    c. Neutral to Ground: 50,000 A.

4. Withstand Capabilities: 12,000 IEEE C62.41, Category C3 (10 kA), 8-by-20-mic.sec. surges with less than 5 percent change in clamping voltage.
5. Protection modes and UL 1449 SVR for grounded wye circuits with 480Y/277 208Y/120 -V, three-phase, four-wire circuits shall be as follows:

    a. Line to Neutral: 800 V for 480Y/277 400 V for 208Y/120.
    b. Line to Ground: 800 V for 480Y/277 400 V for 208Y/120.
    c. Neutral to Ground: 800 V for 480Y/277 400 V for 208Y/120.

6. Protection modes and UL 1449 SVR for 240-, 480-, or 600-V, three-phase, three-wire, delta circuits shall be as follows:

    a. Line to Line: 2000 V for 480 V 1000 V for 240 V.
    b. Line to Ground: 1500 V for 480 V 800 V for 240 V.

2.6 DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Siemens Energy & Automation, Inc.
4. Square D; a brand of Schneider Electric.
5. Thor.

B. Molded-Case Circuit Breaker (MCCB): Comply with UL 489, with interrupting capacity to meet available fault currents.

1. Thermal-Magnetic Circuit Breakers: Inverse time-current element for low-level overloads, and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger.
2. Electronic trip circuit breakers with rms sensing; field-replaceable rating plug or field-replicable electronic trip;400A and Larger and the following field-adjustable settings:

    a. Instantaneous trip.
    b. Long- and short-time pickup levels.
    c. Long- and short-time time adjustments.
    d.

3. Molded-Case Circuit-Breaker (MCCB) Features and Accessories:

a. Standard frame sizes, trip ratings, and number of poles.
b. Lugs: Mechanical style, suitable for number, size, trip ratings, and conductor materials.
c. Application Listing: Appropriate for application; Type SWD for switching fluorescent lighting loads; Type HID for feeding fluorescent and high-intensity discharge (HID) lighting circuits.

2.7 ACCESSORY COMPONENTS AND FEATURES

A. Accessory Set: Include tools and miscellaneous items required for overcurrent protective device test, inspection, maintenance, and operation.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Receive, inspect, handle, and store panelboards according to [NECA 407] [NEMA PB 1.1].

B. Examine panelboards before installation. Reject panelboards that are damaged or rusted or have been subjected to water saturation.

C. Examine elements and surfaces to receive panelboards for compliance with installation tolerances and other conditions affecting performance of the Work.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install panelboards and accessories according NEMA PB 1.1.

B. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from panelboards.

C. Mount top of trim 90 inches (2286 mm) above finished floor unless otherwise indicated.

D. Mount panelboard cabinet plumb and rigid without distortion of box. Mount recessed panelboards with fronts uniformly flush with wall finish and mating with back box.

E. Install overcurrent protective devices and controllers not already factory installed.

1. Set field-adjustable, circuit-breaker trip ranges.

F. Install filler plates in unused spaces.

G. Stub four 1-inch empty conduits from panelboard into accessible ceiling space or space designated to be ceiling space in the future. Retain option in first paragraph below if retaining "Load Balancing" Paragraph in "Adjusting" Article.

H. Arrange conductors in gutters into groups and bundle and wrap with wire ties after completing load balancing.

I. Comply with NECA 1.

3.3 IDENTIFICATION

A. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs complying with Division 26 Section "Identification for Electrical Systems."

B. Create a directory to indicate installed circuit loads after balancing panelboard loads; incorporate Owner's final room designations. Obtain approval before installing. Use a computer or typewriter to create directory; handwritten directories are not acceptable.

C. Panelboard Nameplates: Label each panelboard with a nameplate complying with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."

D. Device Nameplates: For distribution panels label each branch circuit device in distribution panelboards with a nameplate complying with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."

3.4 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.

B. Perform tests and inspections.

1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

C. Acceptance Testing Preparation:

1. Test insulation resistance for each panelboard bus, component, connecting supply, feeder, and control circuit.
2. Test continuity of each circuit.

D. Tests and Inspections:

1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
3. Perform the following infrared scan tests and inspections and prepare reports:

a. Initial Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each panelboard. Remove front panels so joints and connections are accessible to portable scanner.
b. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each panelboard 11 months after date of Substantial Completion.
c. Instruments and Equipment:

1) Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.

E. Panelboards will be considered defective if they do not pass tests and inspections.

F. Prepare test and inspection reports, including a certified report that identifies panelboards included and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.5 ADJUSTING

A. Adjust moving parts and operable component to function smoothly, and lubricate as recommended by manufacturer.

B. Set field-adjustable circuit-breaker trip ranges as specified in Division 26 Section "Overcurrent Protective Device Coordination Study."

C. Load Balancing: After Substantial Completion, but not more than 60 days after Final Acceptance, measure load balancing and make circuit changes.

1. Measure as directed during period of normal system loading.
2. Perform load-balancing circuit changes outside normal occupancy/working schedule of the facility and at time directed. Avoid disrupting critical 24-hour services such as fax machines and on-line data processing, computing, transmitting, and receiving equipment.
3. After circuit changes, recheck loads during normal load period. Record all load readings before and after changes and submit test records.
4. Tolerance: Difference exceeding 20 percent between phase loads, within a panelboard, is not acceptable. Rebalance and recheck as necessary to meet this minimum requirement.

3.6 PROTECTION

A. Temporary Heating: Apply temporary heat to maintain temperature according to manufacturer's written instructions.

END OF SECTION 262416

SECTION 262726

WIRING DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Receptacles, receptacles with integral GFCI, and associated device plates.
2. Wall-switch and occupancy sensors.
3. Communications outlets.

B. Related Sections include the following:

1. Division 27 Section "Communications Horizontal Cabling" for workstation outlets.

1.3 DEFINITIONS

A. EMI: Electromagnetic interference.

B. GFCI: Ground-fault circuit interrupter.

C. TVSS: Transient voltage surge suppressor.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: List of legends and description of materials and process used for premarking wall plates.

C. Field quality-control test reports. Submitted prior to final punch list.

D. Operation and Maintenance Data: For wiring devices to include in all manufacturers' packing label warnings and instruction manuals that include labeling conditions.

E. Submit on digital wiring analyzer to be used to test voltage drop on receptacles.

1.5 QUALITY ASSURANCE

A. Source Limitations: Obtain each type of wiring device and associated wall plate through one source from a single manufacturer. Insofar as they are available, obtain all wiring devices and associated wall plates from a single manufacturer and one source.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

C. Comply with NFPA 70.

1.6 COORDINATION

A. Receptacles for Owner-Furnished Equipment: Match plug configurations.

1. Cord and Plug Sets: Match equipment requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers' Names: Shortened versions (shown in parentheses) of the following manufacturers' names are used in other Part 2 articles:

1. Cooper Wiring Devices; a division of Cooper Industries, Inc. (Cooper).
2. Hubbell Incorporated; Wiring Device-Kellems (Hubbell).
3. Leviton Mfg. Company Inc. (Leviton).
4. Pass & Seymour/Legrand; Wiring Devices & Accessories (Pass & Seymour).
5. Hubbell Building Automation Systems.

2.2 STRAIGHT BLADE RECEPTACLES

A. Convenience Receptacles, 125 V, 20 A: Comply with NEMA WD 1, NEMA WD 6 configuration 5-20R, and UL 498.

1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
2. Products: Subject to compliance with requirements, provide one of the following:

a. Cooper; 5351 (single), 5352 (duplex).
b. Hubbell; HBL5351 (single), CR5352 (duplex).
c. Leviton; 5891 (single), 5352 (duplex).
d. Pass & Seymour; 5381 (single), 5352 (duplex).

2.3 GFCI RECEPTACLES

A. General Description: Straight blade, non-feed-through type. Comply with NEMA WD 1, NEMA WD 6, UL 498, and UL 943, Class A, and include indicator light that is lighted when device is tripped.

B. Duplex GFCI Convenience Receptacles, 125 V, 20 A:

1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
2. Products: Subject to compliance with requirements, provide one of the following:

    a. Cooper; GF20.
    b. Pass & Seymour; 2084.

2.4 SNAP SWITCHES

A. Comply with NEMA WD 1 and UL 20.

B. Switches, 120/277 V, 20 A:

1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
2. Products: Subject to compliance with requirements, provide one of the following:

    a. Cooper; 2221 (single pole), 2222 (two pole), 2223 (three way), 2224 (four way).
    b. Hubbell; CS1221 (single pole), CS1222 (two pole), CS1223 (three way), CS1224 (four way).
    c. Leviton; 1221-2 (single pole), 1222-2 (two pole), 1223-2 (three way), 1224-2 (four way).
    d. Pass & Seymour; 20AC1 (single pole), 20AC2 (two pole), 20AC3 (three way), 20AC4 (four way).

2.5 WALL PLATES

A. Single and combination types to match corresponding wiring devices.

1. Plate-Securing Screws: Metal with head color to match plate finish.
2. Material for Finished Spaces: Smooth, high-impact thermoplastic 0.035-inch- (1-mm-) thick Material for Unfinished Spaces: Galvanized steel.

2.6 FINISHES

A. Color: Wiring device catalog numbers in Section Text do not designate device color.

1. Wiring Devices Connected to Normal Power SystemAs selected by Engineer, unless otherwise indicated or required by NFPA 70 or device listing.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with NECA 1, including the mounting heights listed in that standard, unless otherwise noted.

B. Coordination with Other Trades:

1. Take steps to insure that devices and their boxes are protected. Do not place wall finish materials over device boxes and do not cut holes for boxes with routers that are guided by riding against outside of the boxes.
2. Keep outlet boxes free of plaster, drywall joint compound, mortar, cement, concrete, dust, paint, and other material that may contaminate the raceway system, conductors, and cables.
3. Install device boxes in brick or block walls so that the cover plate does not cross a joint unless the joint is troweled flush with the face of the wall.
4. Install wiring devices after all wall preparation, including painting, is complete.

C. Conductors:

1. Do not strip insulation from conductors until just before they are spliced or terminated on devices.
2. Strip insulation evenly around the conductor using tools designed for the purpose. Avoid scoring or nicking of solid wire or cutting strands from stranded wire.
3. The length of free conductors at outlets for devices shall meet provisions of NFPA 70, Article 300, without pigtails.
4. Existing Conductors:

    a. Cut back and pigtail, or replace all damaged conductors.
    b. Straighten conductors that remain and remove corrosion and foreign matter.
    c. Pigtailing existing conductors is permitted provided the outlet box is large enough.

D. Device Installation:

1. Replace all devices that have been in temporary use during construction or that show signs that they were installed before building finishing operations were complete.
2. Keep each wiring device in its package or otherwise protected until it is time to connect conductors.
3. Do not remove surface protection, such as plastic film and smudge covers, until the last possible moment.
4. Connect devices to branch circuits using pigtails that are not less than 6 inches (152 mm) in length.
5. When there is a choice, use side wiring with binding-head screw terminals. Wrap solid conductor tightly clockwise, 2/3 to 3/4 of the way around terminal screw.
6. Use a torque screwdriver when a torque is recommended or required by the manufacturer.
7. When conductors larger than No. 12 AWG are installed on 15- or 20-A circuits, splice No. 12 AWG pigtails for device connections.
8. Tighten unused terminal screws on the device.

9. When mounting into metal boxes, remove the fiber or plastic washers used to hold device mounting screws in yokes, allowing metal-to-metal contact.

E. Receptacle Orientation:

1. Install ground pin of vertically mounted receptacles up.

F. Device Plates: Do not use oversized or extra-deep plates. Repair wall finishes and remount outlet boxes when standard device plates do not fit flush or do not cover rough wall opening.

G. Arrangement of Devices: Unless otherwise indicated, mount flush, with long dimension vertical and with grounding terminal of receptacles on top. Group adjacent switches under single, multigang wall plates.

H. Adjust locations of floor service outlets and service poles to suit arrangement of partitions and furnishings. Verify with Engineer and Owner that all floor outlets and service poles are coordinated with furniture to be installed.

3.2 IDENTIFICATION

A. Comply with Division 26 Section "Identification for Electrical Systems."

1. Receptacles: Identify panelboard and circuit number from which served. Use hot, stamped or engraved machine printing with black-filled lettering on face of plate, and durable wire markers or tags inside outlet boxes.

3.3 FIELD QUALITY CONTROL

A. Perform tests and inspections and prepare test reports.
1. Test Instrument for Convenience Receptacles: Digital wiring analyzer with digital readout or illuminated LED indicators of measurement.

B. Tests for Convenience Receptacles:

1. Line Voltage: Acceptable range is 105 to 132 V.
2. Percent Voltage Drop under 15-A Load: A value of 6 percent or higher is not acceptable. Report voltage drop on receptacle circuit as follows: Receptacle circuit L-1 (Typical) Voltage measured = 119V. All receptacle circuits shall be reported. Final close out of project will not be attained without report.
3. Ground Impedance: Values of up to 2 ohms are acceptable.
4. GFCI Trip: Test for tripping values specified in UL 1436 and UL 943.
5. Using the test plug, verify that the device and its outlet box are securely mounted.
6. The tests shall be diagnostic, indicating damaged conductors, high resistance at the circuit breaker, poor connections, inadequate fault current path, defective devices, or similar problems. Correct circuit conditions, remove malfunctioning units and replace with new ones, and retest as specified above.

C. Test straight blade for the retention force of the grounding blade according to NFPA 99. Retention force shall be not less than 4 oz. (115 g).

END OF SECTION 262726

SECTION 262813

FUSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Cartridge fuses rated 600-V ac and less for use in control circuits, enclosed switches, panelboards, switchboards, enclosed controllers and motor-control centers.
2. Spare-fuse cabinets.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated. Include construction details, material, dimensions, descriptions of individual components, and finishes for spare-fuse cabinets. Include the following for each fuse type indicated:

1. Dimensions and manufacturer's technical data on features, performance, electrical characteristics, and ratings.
2. Current-limitation curves for fuses with current-limiting characteristics.
3. Time-current coordination curves (average melt) and current-limitation curves (instantaneous peak let-through current) for each type and rating of fuse.
4. Fuse sizes for elevator disconnect switches.

B. Operation and Maintenance Data: For fuses to include in operation and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:

1. Current-limitation curves for fuses with current-limiting characteristics.
2. Time-current coordination curves (average melt) and current-limitation curves (instantaneous peak let-through current) for each type and rating of fuse.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain fuses, for use within a specific product or circuit, from single source from single manufacturer.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. Comply with NEMA FU 1 for cartridge fuses.

D. Comply with NFPA 70.

1.5 PROJECT CONDITIONS

A. Where ambient temperature to which fuses are directly exposed is more than 100 deg F (38 deg C), apply manufacturer's ambient temperature adjustment factors to fuse ratings.

1.6 COORDINATION

A. Coordinate fuse ratings with utilization equipment nameplate limitations of maximum fuse size and with system short-circuit current levels.

1.7 EXTRA MATERIALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Fuses:
    a. Three spare of each size and type
    b. Fuse cabinet sized to contain spare fuse stock.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Cooper Bussmann, Inc.
2. Ferraz Shawmut, Inc.
3. Littelfuse, Inc.

2.2 CARTRIDGE FUSES

A. Characteristics: NEMA FU 1, nonrenewable cartridge fuses with voltage ratings consistent with circuit voltages.

2.3 SPARE-FUSE CABINET

A. Characteristics: Wall-mounted steel unit with full-length, recessed piano-hinged door and key-coded cam lock and pull.

1. Size: Adequate for storage of spare fuses specified.
2. Finish: Gray, baked enamel.
3. Identification: "SPARE FUSES" in 1-1/2-inch- (38-mm-) high letters on exterior of door.
4. Fuse Pullers: For each size of fuse, where applicable and available, from fuse manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine fuses before installation. Reject fuses that are moisture damaged or physically damaged.

B. Examine holders to receive fuses for compliance with installation tolerances and other conditions affecting performance, such as rejection features.

C. Examine utilization equipment nameplates and installation instructions. Install fuses of sizes and with characteristics appropriate for each piece of equipment.

D. Evaluate ambient temperatures to determine if fuse rating adjustment factors must be applied to fuse ratings.

E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 FUSE APPLICATIONS

A. Cartridge Fuses:

1. Service Entrance: Class L, time delay; Class J, time delay.
2. Feeders: Class L, time delay [Class RK1, fast acting] [Class RK1, time delay] [Class RK5, fast acting] [Class RK5, time delay] [Class J, fast acting] [Class J, time delay].
3. Motor Branch Circuits: Class RK.
4. Other Branch Circuits: Class RK1, time delay; Class J, time delay.
5. Control Circuits: Class CC, time delay.

3.3 INSTALLATION

A. Install fuses in fusible devices. Arrange fuses so rating information is readable without removing fuse.

B. Install spare-fuse cabinet(s).

3.4 IDENTIFICATION

A. Install labels complying with requirements for identification specified in Division 26 Section "Identification for Electrical Systems" and indicating fuse replacement information on inside door of each fused switch and adjacent to each fuse block, socket, and holder.

END OF SECTION 262813

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Fusible switches.
2. Nonfusible switches.
3. Enclosures.

1.3 DEFINITIONS

A. NC: Normally closed.

B. NO: Normally open.

C. SPDT: Single pole, double throw.

1.4 SUBMITTALS

A. Product Data: For each type of enclosed switch, circuit breaker, accessory, and component indicated. Include dimensioned elevations, sections, weights, and manufacturers' technical data on features, performance, electrical characteristics, ratings, accessories, and finishes.

1. Enclosure types and details for types other than NEMA 250, Type 1.
2. Current and voltage ratings.
3. Short-circuit current ratings (interrupting and withstand, as appropriate).
4. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices, accessories, and auxiliary components.
5. Include time-current coordination curves (average melt) for each type and rating of overcurrent protective device; include selectable ranges for each type of overcurrent protective device.

B. Shop Drawings: For enclosed switches and circuit breakers. Include plans, elevations, sections, details, and attachments to other work.

1. Wiring Diagrams: For power, signal, and control wiring.

C. Operation and Maintenance Data: For enclosed switches and circuit breakers to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:

1. Manufacturer's written instructions for testing and adjusting enclosed switches and circuit breakers.
2. Time-current coordination curves (average melt) for each type and rating of overcurrent protective device; include selectable ranges for each type of overcurrent protective device.

1.5 QUALITY ASSURANCE

A. Source Limitations: Obtain enclosed switches and circuit breakers, overcurrent protective devices, components, and accessories, within same product category, from single source from single manufacturer.

B. Product Selection for Restricted Space: Drawings indicate maximum dimensions for enclosed switches and circuit breakers, including clearances between enclosures, and adjacent surfaces and other items. Comply with indicated maximum dimensions.

C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

D. Comply with NFPA 70.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Rate equipment for continuous operation under the following conditions unless otherwise indicated:

1. Ambient Temperature: Not less than minus 22 deg F (minus 30 deg C) and not exceeding 104 deg F (40 deg C).
2. Altitude: Not exceeding 6600 feet (2010 m).

1.7 COORDINATION

A. Coordinate layout and installation of switches, circuit breakers, and components with equipment served and adjacent surfaces. Maintain required workspace clearances and required clearances for equipment access doors and panels.

1.8 EXTRA MATERIALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Fuses: Equal to 10 percent of quantity installed for each size and type, but no fewer than three of each size and type.
2. Fuse Pullers: Two for each size and type.

PART 2 - PRODUCTS

2.1 FUSIBLE SWITCHES

A. Basis-of-Design Product: Subject to compliance with requirements, provide or product by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Siemens Energy & Automation, Inc.
4. Square D; a brand of Schneider Electric.

B. Type HD, Heavy Duty, Single Throw, 240 or 600-V ac, UL 98 and NEMA KS 1, horsepower rated, with clips or bolt pads to accommodate fuses, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.

C. Accessories:

1. Equipment Ground Kit: Internally mounted and labeled for copper ground conductors.
2. Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
3. Isolated Ground Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
4. Class R Fuse Kit: Provides rejection of other fuse types when Class R fuses are specified.
5. Hookstick Handle: Allows use of a hookstick to operate the handle.
6. Lugs: Mechanical type, suitable for number, size, and conductor material.
7. Service-Rated Switches: Labeled for use as service equipment.

2.2 NONFUSIBLE SWITCHES

A. Basis-of-Design Product: Subject to compliance with requirements, provide product by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Siemens Energy & Automation, Inc.
4. Square D; a brand of Schneider Electric.

B. Type HD, Heavy Duty, Single Throw, 240 or 600-V ac: UL 98 and NEMA KS 1, horsepower rated, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.

C. Accessories:

1. Equipment Ground Kit: Internally mounted and labeled for copper ground conductors.
2. Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper neutral conductors.
3. For isolated grounded systems Isolated Ground Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
4. Hookstick Handle: Allows use of a hookstick to operate the handle.
5. Lugs: Mechanical type, suitable for number, size, and conductor material.

2.3 ENCLOSURES

A. Enclosed Switches and Circuit Breakers: NEMA AB 1, NEMA KS 1, NEMA 250, and UL 50, to comply with environmental conditions at installed location.

1. Indoor, Dry and Clean Locations: NEMA 250, Type 1.
2. Outdoor Locations: NEMA 250, Type 3R.
3. Kitchen Areas: NEMA 250, Type 4X, stainless steel.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine elements and surfaces to receive enclosed switches and circuit breakers for compliance with installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install individual wall-mounted switches and circuit breakers with tops at uniform height unless otherwise indicated.

B. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from enclosures and components.

C. Install fuses in fusible devices.

D. Comply with NECA 1.

3.3 IDENTIFICATION

A. Comply with requirements in Division 26 Section "Identification for Electrical Systems."

1. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs.
2. Label each enclosure with engraved metal or laminated-plastic nameplate.

3.4 FIELD QUALITY CONTROL

A. Acceptance Testing Preparation:
   1. Test continuity of each circuit.

B. Tests and Inspections:

   1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
   2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.

C. Enclosed switches and circuit breakers will be considered defective if they do not pass tests and inspections.

3.5 ADJUSTING

A. Adjust moving parts and operable components to function smoothly, and lubricate as recommended by manufacturer.

END OF SECTION 262816

SECTION 265100 - INTERIOR LIGHTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Interior lighting fixtures, lamps, and ballasts.
2. Emergency lighting units.
3. Exit signs.
4. Lighting fixture supports.

1.3 DEFINITIONS

A. BF: Ballast factor.

B. CCT: Correlated color temperature.

C. CRI: Color-rendering index.

D. HID: High-intensity discharge.

E. LER: Luminaire efficacy rating.

F. Lumen: Measured output of lamp and luminaire, or both.

G. Luminaire: Complete lighting fixture, including ballast housing if provided.

1.4 SUBMITTALS

A. Product Data: For each type of lighting fixture, arranged in order of fixture designation. Include data on features, accessories, finishes, and the following:

1. Physical description of lighting fixture including dimensions.
2. Emergency lighting units including battery and charger.
3. Ballast, including BF.
4. Energy-efficiency data.
5. Life, output (lumens, CCT, and CRI), and energy-efficiency data for lamps.

6. Photometric data and adjustment factors based on laboratory tests, complying with IESNA Lighting Measurements Testing & Calculation Guides, of each lighting fixture type. The adjustment factors shall be for lamps, ballasts, and accessories identical to those indicated for the lighting fixture as applied in this Project.
    a. Manufacturer Certified Data: Photometric data shall be certified by a manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products.

B. Shop Drawings: For nonstandard or custom lighting fixtures. Include plans, elevations, sections, details, and attachments to other work.

1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
2. Wiring Diagrams: For power, signal, and control wiring.

C. Installation instructions.

D. Coordination Drawings: Reflected ceiling plan(s) and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:

1. Lighting fixtures.
2. Suspended ceiling components.
3. Partitions and millwork that penetrate the ceiling or extends to within 12 inches (305 mm) of the plane of the luminaires.
4. Ceiling-mounted projectors.
5. Structural members to which suspension systems for lighting fixtures will be attached.
6. Other items in finished ceiling including the following:

    a. Air outlets and inlets.
    b. Speakers.
    c. Sprinklers.
    d. Smoke and fire detectors.
    e. Occupancy sensors.
    f. Access panels.

7. Perimeter moldings.

E. Qualification Data: For qualified agencies providing photometric data for lighting fixtures.

F. Product Certificates: For each type of ballast for bi-level and dimmer-controlled fixtures, from manufacturer.

G. Field quality-control reports.

H. Operation and Maintenance Data: For lighting equipment and fixtures to include in emergency, operation, and maintenance manuals.

1. Provide a list of all lamp types used on Project; use ANSI and manufacturers' codes.

I. Warranty: Sample of special warranty.

1.5 QUALITY ASSURANCE

A. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by manufacturers' laboratories that are accredited under the National Volunteer Laboratory Accreditation Program for Energy Efficient Lighting Products.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. Comply with NFPA 70.

D. FM Global Compliance: Lighting fixtures for hazardous locations shall be listed and labeled for indicated class and division of hazard by FM Global.

1.6 COORDINATION

A. Coordinate layout and installation of lighting fixtures and suspension system with other construction that penetrates ceilings or is supported by them, including HVAC equipment, fire-suppression system, and partition assemblies.

1.7 WARRANTY

A. Special Warranty for Emergency Lighting Batteries: Manufacturer's standard form in which manufacturer of battery-powered emergency lighting unit agrees to repair or replace components of rechargeable batteries that fail in materials or workmanship within specified warranty period.

1. Warranty Period for Emergency Lighting Unit Batteries: 10 years from date of Substantial Completion. Full warranty shall apply for first year, and prorated warranty for the remaining nine years.
2. Warranty Period for Emergency Fluorescent Ballast and Self-Powered Exit Sign Batteries: Seven years from date of Substantial Completion. Full warranty shall apply for first year, and prorated warranty for the remaining six years.

B. Special warranty for Ballasts: Manufacturer's standard form in which ballast manufacturer agrees to repair or replace ballasts that fail in materials or workmanship within specified warranty period.

1. Warranty Period for electronic Ballasts: Five years from date of substantial completion.
2. Warranty Period for Electromagnetic Ballasts: Three years from date of substantial completion.

C. Special warranty for T5 and T8 florescent lamps: Manufacturer's standard form, made out to Owner and signed by Lamp manufacturer agreeing to replace lamps that fail in materials or workmanship, f.o.b. the nearest shipping point to project site, within specified warranty period indicated below.

1. Warranty Period: One year from date of substantial completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Interior Lighting fixture schedule where titles below are column or row headings that indicate lists, the following requirements apply to product selection:

1. Basis-of-Design Product: The design for each lighting fixture is based on the product named. Subject to compliance with requirements, provide either the named product or approved equal. Equal products shall be submitted to engineer for approval 10 days prior to bid in binder format with any deviations of specified items noted. Only items approved through addendum shall be acceptable.

2.2 GENERAL REQUIREMENTS FOR LIGHTING FIXTURES AND COMPONENTS

A. Recessed Fixtures: Comply with NEMA LE 4 for ceiling compatibility for recessed fixtures.

B. Fluorescent Fixtures: Comply with UL 1598. Where LER is specified, test according to NEMA LE 5 and NEMA LE 5A as applicable.

C. HID Fixtures: Comply with UL 1598. Where LER is specified, test according to NEMA LE 5B.

D. Metal Parts: Free of burrs and sharp corners and edges.

E. Sheet Metal Components: Steel unless otherwise indicated. Form and support to prevent warping and sagging.

F. Doors, Frames, and Other Internal Access: Smooth operating, free of light leakage under operating conditions, and designed to permit relamping without use of tools. Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during relamping and when secured in operating position.

G. Diffusers and Globes:

1. Acrylic Lighting Diffusers: 100 percent virgin acrylic plastic. High resistance to yellowing and other changes due to aging, exposure to heat, and UV radiation.

a. Lens Thickness: At least 0.125 inch (3.175 mm) minimum unless otherwise indicated.
b. UV stabilized.

H. Factory-Applied Labels: Comply with UL 1598. Include recommended lamps and ballasts. Labels shall be located where they will be readily visible to service personnel, but not seen from normal viewing angles when lamps are in place.

1. Label shall include the following lamp and ballast characteristics:

a. "USE ONLY" and include specific lamp type.
b. Lamp diameter code (T-4, T-5, T-8, T-12, etc.), tube configuration (twin, quad, triple, etc.), base type, and nominal wattage for fluorescent and compact fluorescent luminaires.
c. Lamp type, wattage, bulb type (ED17, BD56, etc.) and coating (clear or coated) for HID luminaires.
d. Start type (preheat, rapid start, instant start, etc.) for fluorescent and compact fluorescent luminaires.
e. ANSI ballast type (M98, M57, etc.) for HID luminaires.
f. CCT and CRI for all luminaires.

I. Electromagnetic-Interference Filters: Factory installed to suppress conducted electromagnetic interference as required by MIL-STD-461E. Fabricate lighting fixtures with one filter on each ballast indicated to require a filter.

2.3 BALLASTS FOR LINEAR FLUORESCENT LAMPS

A. General Requirements for Electronic Ballasts:

1. Comply with UL 935 and with ANSI C82.11.
2. Designed for type and quantity of lamps served.
3. Ballasts shall be designed for full light output unless another BF, dimmer, or bi-level control is indicated.
4. Sound Rating: Class A.
5. Total Harmonic Distortion Rating: Less than 10 percent.
6. Transient Voltage Protection: IEEE C62.41.1 and IEEE C62.41.2, Category A or better.
7. Operating Frequency: 20 kHz or higher.
8. Lamp Current Crest Factor: 1.7 or less.
9. BF: 0.88 or higher.
10. Power Factor: 0.98 or higher.
11. Parallel Lamp Circuits: Multiple lamp ballasts shall comply with ANSI C82.11 and shall be connected to maintain full light output on surviving lamps if one or more lamps fail.

B. Electromagnetic Ballasts: Comply with ANSI C82.1; energy saving, high-power factor, Class P, and having automatic-reset thermal protection.

1. Ballast Manufacturer Certification: Indicated by label.

C. Single Ballasts for Multiple Lighting Fixtures: Factory wired with ballast arrangements and bundled extension wiring to suit final installation conditions without modification or rewiring in the field.

2.4 EXIT SIGNS

A. General Requirements for Exit Signs: Comply with UL 924; for sign colors, visibility, luminance, and lettering size, comply with authorities having jurisdiction.

B. Internally Lighted Signs:

1. Lamps for AC Operation: Fluorescent, two for each fixture, 20,000 hours of rated lamp life.
2. Lamps for AC Operation: LEDs, 70,000 hours minimum rated lamp life.
3. Self-Powered Exit Signs (Battery Type): Integral automatic charger in a self-contained power pack.

    a. Battery: Sealed, maintenance-free, nickel-cadmium type.
    b. Charger: Fully automatic, solid-state type with sealed transfer relay.
    c. Operation: Relay automatically energizes lamp from battery when circuit voltage drops to 80 percent of nominal voltage or below. When normal voltage is restored, relay disconnects lamps from battery, and battery is automatically recharged and floated on charger.
    d. Test Push Button: Push-to-test type, in unit housing, simulates loss of normal power and demonstrates unit operability.
    e. LED Indicator Light: Indicates normal power on. Normal glow indicates trickle charge; bright glow indicates charging at end of discharge cycle.
    f. Remote Test: Switch in hand-held remote device aimed in direction of tested unit initiates coded infrared signal. Signal reception by factory-installed infrared receiver in tested unit triggers simulation of loss of its normal power supply, providing visual confirmation of either proper or failed emergency response.
    g. Integral Self-Test: Factory-installed electronic device automatically initiates code-required test of unit emergency operation at required intervals. Test failure is annunciated by an integral audible alarm and a flashing red LED.

2.5 EMERGENCY LIGHTING UNITS

A. General Requirements for Emergency Lighting Units: Self-contained units complying with UL 924.

1. Battery: Sealed, maintenance-free, lead-acid type.
2. Charger: Fully automatic, solid-state type with sealed transfer relay.
3. Operation: Relay automatically turns lamp on when power-supply circuit voltage drops to 80 percent of nominal voltage or below. Lamp automatically disconnects from battery when voltage approaches deep-discharge level. When normal voltage is restored, relay disconnects lamps from battery, and battery is automatically recharged and floated on charger.

4. Test Push Button: Push-to-test type, in unit housing, simulates loss of normal power and demonstrates unit operability.
5. LED Indicator Light: Indicates normal power on. Normal glow indicates trickle charge; bright glow indicates charging at end of discharge cycle.
6. Wire Guard: Heavy-chrome-plated wire guard protects lamp heads or fixtures.
7. Integral Time-Delay Relay: Holds unit on for fixed interval of 15 minutes when power is restored after an outage.
8. Remote Test: Switch in hand-held remote device aimed in direction of tested unit initiates coded infrared signal. Signal reception by factory-installed infrared receiver in tested unit triggers simulation of loss of its normal power supply, providing visual confirmation of either proper or failed emergency response.
9. Integral Self-Test: Factory-installed electronic device automatically initiates code-required test of unit emergency operation at required intervals. Test failure is annunciated by an integral audible alarm and a flashing red LED.

2.6 FLUORESCENT LAMPS

A. T8 rapid-start lamps, rated 32 W maximum, nominal length of 48 inches (1220 mm), 2800 initial lumens (minimum), CRI 75 (minimum), color temperature 4100 K, and average rated life 20,000 hours unless otherwise indicated.

B. T8 rapid-start lamps, rated 17 W maximum, nominal length of 24 inches (610 mm), 1300 initial lumens (minimum), CRI 75 (minimum), color temperature 4100 K, and average rated life of 20,000 hours unless otherwise indicated.

C. T5 rapid-start lamps, rated 28 W maximum, nominal length of 45.2 inches (1150 mm), 2900 initial lumens (minimum), CRI 85 (minimum), color temperature 4100 K, and average rated life of 20,000 hours unless otherwise indicated.

D. T5HO rapid-start, high-output lamps, rated 54 W maximum, nominal length of 45.2 inches (1150 mm), 5000 initial lumens (minimum), CRI 85 (minimum), color temperature 4100 K, and average rated life of 20,000 hours unless otherwise indicated.

2.7 LIGHTING FIXTURE SUPPORT COMPONENTS

A. Comply with Division 26 Section "Hangers and Supports for Electrical Systems" for channel- and angle-iron supports and nonmetallic channel and angle supports.

B. Single-Stem Hangers: 1/2-inch (13-mm) steel tubing with swivel ball fittings and ceiling canopy. Finish same as fixture.

C. Twin-Stem Hangers: Two, 1/2-inch (13-mm) steel tubes with single canopy designed to mount a single fixture. Finish same as fixture.

D. Wires: ASTM A 641/A 641M, Class 3, soft temper, zinc-coated steel, 12 gage (2.68 mm).

E. Wires for Humid Spaces: ASTM A 580/A 580M, Composition 302 or 304, annealed stainless steel, 12 gage (2.68 mm).

F. Rod Hangers: 3/16-inch (5-mm) minimum diameter, cadmium-plated, threaded steel rod.

G. Hook Hangers: Integrated assembly matched to fixture and line voltage and equipped with threaded attachment, cord, and locking-type plug.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Lighting fixtures:

1. Set level, plumb, and square with ceilings and walls unless otherwise indicated.
2. Install lamps in each luminaire.

B. Temporary Lighting: If it is necessary, and approved by Architect, to use permanent luminaires for temporary lighting, install and energize the minimum number of luminaires necessary. When construction is sufficiently complete, remove the temporary luminaires, disassemble, clean thoroughly, install new lamps, and reinstall.

C. Remote Mounting of Ballasts: Distance between the ballast and fixture shall not exceed that recommended by ballast manufacturer. Verify, with ballast manufacturers, maximum distance between ballast and luminaire.

D. Lay-in Ceiling Lighting Fixtures Supports: Use grid as a support element.

1. Install ceiling support system rods or wires for each fixture. Locate not more than 6 inches (150 mm) from lighting fixture corners.
2. Support Clips: Fasten to lighting fixtures and to ceiling grid members at or near each fixture corner with clips that are UL listed for the application.
3. Fixtures of Sizes Less Than Ceiling Grid: Install as indicated on reflected ceiling plans or center in acoustical panel, and support fixtures independently with at least two 3/4-inch (20-mm) metal channels spanning and secured to ceiling tees.
4. Install at least one independent support rod or wire from structure to a tab on lighting fixture. Wire or rod shall have breaking strength of the weight of fixture at a safety factor of 3.

E. Suspended Lighting Fixture Support:

1. Pendants and Rods: Where longer than 48 inches (1200 mm), brace to limit swinging.
2. Stem-Mounted, Single-Unit Fixtures: Suspend with twin-stem hangers.
3. Continuous Rows: Use tubing or stem for wiring at one point and tubing or rod for suspension for each unit length of fixture chassis, including one at each end.
4. Do not use grid as support for pendant luminaires. Connect support wires or rods to building structure.

F. Connect wiring according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."

3.2 IDENTIFICATION

A. Install labels with panel and circuit numbers on concealed junction and outlet boxes. Comply with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."

3.3 FIELD QUALITY CONTROL

A. Verify that self-luminous exit signs are installed according to their listing and the requirements in NFPA 101.

B. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

3.4 STARTUP SERVICE

A. Burn-in all lamps that require specific aging period to operate properly, prior to occupancy by Owner. Burn-in fluorescent and compact fluorescent lamps intended to be dimmed, for at least 100 hours at full voltage.

END OF SECTION 265100

SECTION 265600

EXTERIOR LIGHTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Exterior luminaires with lamps and ballasts.
2. Poles and accessories.

B. Related Sections:

1. Division 26 Section "Interior Lighting" for exterior luminaires normally mounted on exterior surfaces of buildings.

1.3 DEFINITIONS

A. CCT: Correlated color temperature.

B. CRI: Color-rendering index.

C. HID: High-intensity discharge.

D. LER: Luminaire efficacy rating.

E. Luminaire: Complete lighting fixture, including ballast housing if provided.

F. Pole: Luminaire support structure, including tower used for large area illumination.

G. Standard: Same definition as "Pole" above.

1.4 SUBMITTALS

A. Product Data: For each luminaire, pole, and support component, arranged in order of lighting unit designation. Include data on features, accessories, finishes, and the following:

1. Physical description of luminaire, including materials, dimensions, effective projected area, and verification of indicated parameters.

2. Details of attaching luminaires and accessories.
3. Details of installation and construction.
4. Luminaire materials.
5. Photometric data based on laboratory tests of each luminaire type, complete with indicated lamps, ballasts, and accessories.

    a. Testing Agency Certified Data: For indicated luminaires, photometric data shall be certified by a qualified independent testing agency. Photometric data for remaining luminaires shall be certified by manufacturer.
    b. Manufacturer Certified Data: Photometric data shall be certified by manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products.
6. Ballasts, including energy-efficiency data.
7. Lamps, including life, output, CCT, CRI, lumens, and energy-efficiency data.
8. Materials, dimensions, and finishes of poles.
9. Means of attaching luminaires to supports, and indication that attachment is suitable for components involved.
10. Anchor bolts for poles.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
    1. Anchor-bolt templates keyed to specific poles and certified by manufacturer.

C. Pole and Support Component Certificates: Signed by manufacturers of poles, certifying that products are designed for indicated load requirements in AASHTO LTS-4-M and that load imposed by luminaire and attachments has been included in design. The certification shall be based on design calculations by a professional engineer.

D. Qualification Data: For qualified agencies providing photometric data for lighting fixtures.

E. Field quality-control reports.

F. Operation and Maintenance Data: For luminaires and poles to include in emergency, operation, and maintenance manuals.

G. Warranty: Sample of special warranty.

1.5 QUALITY ASSURANCE

A. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by manufacturers' laboratories that are accredited under the National Volunteer Laboratory Accreditation Program for Energy Efficient Lighting Products.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. Comply with IEEE C2, "National Electrical Safety Code."

D. Comply with NFPA 70.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Package aluminum poles for shipping according to ASTM B 660.

B. Store poles on decay-resistant-treated skids at least 12 inches (300 mm) above grade and vegetation. Support poles to prevent distortion and arrange to provide free air circulation.

C. Retain factory-applied pole wrappings on metal poles until right before pole installation. For poles with nonmetallic finishes, handle with web fabric straps.

1.7 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace products that fail in materials or workmanship; that corrode; or that fade, stain, perforate, erode, or chalk due to effects of weather or solar radiation within specified warranty period. Manufacturer may exclude lightning damage, hail damage, vandalism, abuse, or unauthorized repairs or alterations from special warranty coverage.

1. Warranty Period for Luminaires: Five years from date of Substantial Completion.
2. Warranty Period for Metal Corrosion: Five years from date of Substantial Completion.
3. Warranty Period for Color Retention: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. An exterior Lighting Fixture Schedule where titles below are column or row headings that introduce lists, the following requirements apply to product selection:

1. Equal products shall be submitted to engineer for approval 10 days prior to bid in binder format, with any deviations from specified items noted. Only items approved through addendum shall be acceptable.

2.2 GENERAL REQUIREMENTS FOR LUMINAIRES

A. Luminaires shall comply with UL 1598 and be listed and labeled for installation in wet locations by an NRTL acceptable to authorities having jurisdiction.

B. Lateral Light Distribution Patterns: Comply with IESNA RP-8 for parameters of lateral light distribution patterns indicated for luminaires.

C. Metal Parts: Free of burrs and sharp corners and edges.

D. Sheet Metal Components: Corrosion-resistant aluminum unless otherwise indicated. Form and support to prevent warping and sagging.

E. Housings: Rigidly formed, weather- and light-tight enclosures that will not warp, sag, or deform in use. Provide filter/breather for enclosed luminaires.

F. Doors, Frames, and Other Internal Access: Smooth operating, free of light leakage under operating conditions, and designed to permit relamping without use of tools. Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during relamping and when secured in operating position. Doors shall be removable for cleaning or replacing lenses. Designed to disconnect ballast when door opens.

G. Exposed Hardware Material: Stainless steel.

H. Plastic Parts: High resistance to yellowing and other changes due to aging, exposure to heat, and UV radiation.

I. Reflecting surfaces shall have minimum reflectance as follows unless otherwise indicated:

1. White Surfaces: 85 percent.
2. Specular Surfaces: 83 percent.
3. Diffusing Specular Surfaces: 75 percent.

J. Lenses and Refractors Gaskets: Use heat- and aging-resistant resilient gaskets to seal and cushion lenses and refractors in luminaire doors.

K. Luminaire Finish: Manufacturer's standard paint applied to factory-assembled and -tested luminaire before shipping. Where indicated, match finish process and color of pole or support materials.

L. Factory-Applied Finish for Steel Luminaires: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

1. Surface Preparation: Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning," to remove dirt, oil, grease, and other contaminants that could impair paint bond. Grind welds and polish surfaces to a smooth, even finish. Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or SSPC-SP 8, "Pickling."
2. Exterior Surfaces: Manufacturer's standard finish consisting of one or more coats of primer and two finish coats of high-gloss, high-build polyurethane enamel.

    a. Color: As selected from manufacturer's standard catalog of colors.

M. Factory-Applied Labels: Comply with UL 1598. Include recommended lamps and ballasts. Labels shall be located where they will be readily visible to service personnel, but not seen from normal viewing angles when lamps are in place.

1. Label shall include the following lamp and ballast characteristics:

    a. "USES ONLY" and include specific lamp type.
    b. Lamp diameter code (T-4, T-5, T-8, T-12), tube configuration (twin, quad, triple), base type, and nominal wattage for fluorescent and compact fluorescent luminaires.
    c. Lamp type, wattage, bulb type (ED17, BD56, etc.) and coating (clear or coated) for HID luminaires.

d. Start type (preheat, rapid start, instant start) for fluorescent and compact fluorescent luminaires.
e. ANSI ballast type (M98, M57, etc.) for HID luminaires.
f. CCT and CRI for all luminaires.

2.3 FLUORESCENT BALLASTS AND LAMPS

A. Ballasts for Low-Temperature Environments:

1. Temperatures 0 Deg F and Higher: Electronic or electromagnetic type rated for 0 deg F starting and operating temperature with indicated lamp types.
2. Temperatures Minus 20 Deg F and Higher: Electromagnetic type designed for use with indicated lamp types.

B. Ballast Characteristics:

1. Power Factor: 98 percent, minimum.
2. Sound Rating: Class A.
3. Total Harmonic Distortion Rating: Less than 10 percent.
4. Electromagnetic Ballasts: Comply with ANSI C82.1, energy-saving, high power factor, Class P, automatic-reset thermal protection.
5. Case Temperature for Compact Lamp Ballasts: 65 deg C, maximum.
6. Transient-Voltage Protection: Comply with IEEE C62.41.1 and IEEE C62.41.2, Category A or better.

C. Low-Temperature Lamp Capability: Rated for reliable starting and operation with ballast provided at temperatures 0 deg F (minus 18 deg C) and higher.

2.4 BALLASTS FOR HID LAMPS

A. Comply with ANSI C82.4 and UL 1029 and capable of open-circuit operation without reduction of average lamp life. Include the following features unless otherwise indicated:

1. Ballast Circuit: Constant-wattage autotransformer or regulating high-power-factor type.
2. Minimum Starting Temperature: Minus 22 deg F (Minus 30 deg C).
3. Normal Ambient Operating Temperature: 104 deg F (40 deg C).
4. Ballast Fuses: One in each ungrounded power supply conductor. Voltage and current ratings as recommended by ballast manufacturer.

2.5 HID LAMPS

A. Metal-Halide Lamps: ANSI C78.43, with minimum CRI 65, and CCT color temperature 4000K.

B. Pulse-Start, Metal-Halide Lamps: Minimum CRI 65, and CCT color temperature 4000 K.

C. Ceramic, Pulse-Start, Metal-Halide Lamps: Minimum CRI 80, and CCT color temperature 4000 K.

2.6 GENERAL REQUIREMENTS FOR POLES AND SUPPORT COMPONENTS

A. Luminaire Attachment Provisions: Comply with luminaire manufacturers' mounting requirements. Use stainless-steel fasteners and mounting bolts unless otherwise indicated.

B. Mountings, Fasteners, and Appurtenances: Corrosion-resistant items compatible with support components.

1. Materials: Shall not cause galvanic action at contact points.
2. Anchor Bolts, Leveling Nuts, Bolt Caps, and Washers: Hot-dip galvanized after fabrication unless otherwise indicated.
3. Anchor-Bolt Template: Plywood or steel.

2.7 STEEL POLES

A. Poles: Comply with ASTM A 500, Grade B, carbon steel with a minimum yield of 46,000 psig; one-piece construction up to 40 feet in height with access handhole in pole wall.

1. Shape: Round, straight.
2. Mounting Provisions: Butt flange for bolted mounting on foundation or breakaway support.

B. Brackets for Luminaires: Detachable, cantilever, without underbrace.

1. Adapter fitting welded to pole, allowing the bracket to be bolted to the pole mounted adapter, then bolted together with stainless-steel bolts.
2. Cross Section: Tapered oval, with straight tubular end section to accommodate luminaire.
3. Match pole material and finish.

C. Pole-Top Tenons: Fabricated to support luminaire or luminaires and brackets indicated, and securely fastened to pole top.

D. Grounding and Bonding Lugs: Welded 1/2-inch (13-mm) threaded lug, complying with requirements in Division 26 Section "Grounding and Bonding for Electrical Systems," listed for attaching grounding and bonding conductors of type and size listed in that Section, and accessible through handhole.

E. Prime-Coat Finish: Manufacturer's standard prime-coat finish ready for field painting.

F. Factory-Painted Finish: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

1. Surface Preparation: Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning," to remove dirt, oil, grease, and other contaminants that could impair paint bond. Grind welds and polish surfaces to a smooth, even finish. Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or with SSPC-SP 8, "Pickling."
2. Interior Surfaces of Pole: One coat of bituminous paint, or otherwise treat for equal corrosion protection.

3. Exterior Surfaces: Manufacturer's standard finish consisting of one or more coats of primer and two finish coats of high-gloss, high-build polyurethane enamel.

    a. Color: As indicated by manufacturer's designations.

PART 3 - EXECUTION

3.1 LUMINAIRE INSTALLATION

A. Install lamps in each luminaire.

B. Fasten luminaire to indicated structural supports.

1. Use fastening methods and materials selected to resist seismic forces defined for the application and approved by manufacturer.

C. Adjust luminaires that require field adjustment or aiming.

3.2 POLE INSTALLATION

A. Alignment: Align pole foundations and poles for optimum directional alignment of luminaires and their mounting provisions on the pole.

B. Clearances: Maintain the following minimum horizontal distances of poles from surface and underground features unless otherwise indicated on Drawings:

1. Fire Hydrants and Storm Drainage Piping: 60 inches.
2. Water, Gas, Electric, Communication, and Sewer Lines: 10 feet.
3. Trees: 15 feet from tree trunk.

C. Concrete Pole Foundations: Set anchor bolts according to anchor-bolt templates furnished by pole manufacturer. Concrete materials, installation, and finishing requirements are specified in Division 03 Section "Cast-in-Place Concrete."

D. Foundation-Mounted Poles: Mount pole with leveling nuts, and tighten top nuts to torque level recommended by pole manufacturer.

1. Use anchor bolts and nuts selected to resist seismic forces defined for the application and approved by manufacturer.
2. Grout void between pole base and foundation. Use nonshrink or expanding concrete grout firmly packed to fill space.
3. Install base covers unless otherwise indicated.
4. Use a short piece of 1/2-inch diameter pipe to make a drain hole through grout. Arrange to drain condensation from interior of pole.

E. Poles and Pole Foundations Set in Concrete Paved Areas: Install poles with minimum of 6-inch wide, unpaved gap between the pole or pole foundation and the edge of adjacent concrete slab. Fill unpaved ring with pea gravel to a level 1 inch below top of concrete slab.

F. Raise and set poles using web fabric slings (not chain or cable).

3.3 CORROSION PREVENTION

A. Aluminum: Do not use in contact with earth or concrete. When in direct contact with a dissimilar metal, protect aluminum by insulating fittings or treatment.

B. Steel Conduits: Comply with Division 26 Section "Raceway and Boxes for Electrical Systems." In concrete foundations, wrap conduit with 0.010-inch thick, pipe-wrapping plastic tape applied with a 50 percent overlap.

3.4 GROUNDING

A. Ground metal poles and support structures according to Division 26 Section "Grounding and Bonding for Electrical Systems."

1. Install grounding electrode for each pole unless otherwise indicated.
2. Install grounding conductor pigtail in the base for connecting luminaire to grounding system.

B. Ground nonmetallic poles and support structures according to Division 26 Section "Grounding and Bonding for Electrical Systems."

1. Install grounding electrode for each pole.
2. Install grounding conductor and conductor protector.
3. Ground metallic components of pole accessories and foundations.

3.5 FIELD QUALITY CONTROL

A. Inspect each installed fixture for damage. Replace damaged fixtures and components.

B. Illumination Observations: Verify normal operation of lighting units after installing luminaires and energizing circuits with normal power source.

1. Verify operation of photoelectric controls.

C. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

3.6 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain luminaire lowering devices.

END OF SECTION 265600

SECTION 31 05 13

SOILS FOR EARTHWORK

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Subsoil materials.
   2. Topsoil materials.

B. Related Sections:
   1. Section 310513 - Aggregates for Earthwork.
   2. Section 320516 - Aggregates for Exterior Improvements.
   3. Section 312213 - Rough Grading.
   4. Section 312323 - Backfill.
   5. Section 312317 - Trenching.

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
   1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:
   1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
   2. ASTM D1557 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (6,000 ft-lbf/ft3 (2,700 kN-m/m3)).
   3. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

PART 2 PRODUCTS

2.1 SOURCE QUALITY CONTROL

A. Section 014000 - Quality Requirements: Testing and Inspection Services Testing and analysis of soil material.

B. Testing and Analysis of Subsoil Material:Perform in accordance with ASTM D698.

C. Testing and Analysis of Topsoil Material: Perform in accordance with ASTM D698.

D. When tests indicate materials do not meet specified requirements, change material and retest.

E. Furnish materials of each type from same source throughout the Work.

PART 3 EXECUTION

3.1 EXCAVATION

A. Excavate subsoil and topsoil from areas designated. Strip topsoil to full depth of topsoil in designated areas.

B. Stockpile excavated material meeting requirements for subsoil materials and topsoil materials.

C. Remove excess excavated materials subsoil and topsoil not intended for reuse, from site.

D. Remove excavated materials not meeting requirements for subsoil materials and topsoil materials from site.

3.2 STOCKPILING

A. Stockpile materials on site at locations designated by Architect/Engineer.

B. Stockpile in sufficient quantities to meet Project schedule and requirements.

C. Separate differing materials with dividers or stockpile apart to prevent mixing.

D. Prevent intermixing of soil types or contamination.

E. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

3.3 STOCKPILE CLEANUP

A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

END OF SECTION

SECTION 31 10 00

SITE CLEARING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Removing surface debris.
2. Removing designated trees, shrubs, and other plant life.
3. Removing abandoned utilities.
4. Excavating topsoil.

B. Related Sections:
1. Section 312213 - Rough Grading.
2. Section 312318 - Rock Removal.

PART 2 EXECUTION

2.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Verification of existing conditions before starting work.

B. Verify existing plant life designated to remain is tagged or identified.

C. Identify waste area for placing removed materials.

2.2 PREPARATION

A. Call Local Utility Line Information not less than three working days before performing Work.
1. Request underground utilities to be located and marked within and surrounding construction areas.

2.3 PROTECTION

A. Locate, identify, and protect utilities indicated to remain, from damage.

B. Protect trees, plant growth, and features designated to remain, as final landscaping

C. Protect bench marks, survey control points, and existing structures from damage or displacement.

2.4 CLEARING

A. Clear areas required for access to site and execution of Work.

B. Remove trees and shrubs within marked areas. Remove stumps.

C. Clear undergrowth and deadwood, without disturbing subsoil.

D. Apply herbicide to remaining stumps to inhibit growth.

2.5 REMOVAL

A. Remove debris, rock, and extracted plant life from site.

B. Remove abandoned utilities. Indicated removal termination point for underground utilities on Record Documents.

C. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.

D. Do not burn or bury materials on site. Leave site in clean condition.

2.6 TOPSOIL EXCAVATION

A. Excavate topsoil from areas to be further excavated, relandscaped, or regraded, without mixing with foreign materials for use in finish grading.

B. Do not excavate wet topsoil.

C. Stockpile in area designated on site to depth not exceeding 8 feet and protect from erosion.

D. Remove excess topsoil not intended for reuse, from site.

END OF SECTION

SECTION 31 21 00

EXCAVATION, BACKFILL AND GRADING FOR SITE WORK OUTSIDE OF BUILDING

PART 1 - GENERAL

1.1 SECTION INCLUDES:

A. Grading and earthwork which occurs in areas other than under structures, under paving, or trenching for utilities.

B. Earthwork consists of operations required for the excavation of materials on site; excavation of borrow material from designated areas; compaction of natural or improved sub-grades: finish grading; disposal of excess or unsuitable materials; and other required operations. Earthwork shall conform with dimensions and typical sections shown, and within lines and grades established on Drawings.

1.2 RELATED SECTIONS:

A. Trench Excavation, Backfill and Compaction - Section 312200.

1.3 REFERENCES:

A. ASTM D698 - Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 lbf/ft^3).

B. ASTM D4972 - pH of Soil.

C. ASTM G57 - Field Measurement of Soil Resistivity Using the Wenner Four Electrode Method.

D. ASTM D4318 - Liquid Limit, Plastic Limit and Plasticity Index of Soils.

1.4 EXISTING UTILITIES:

A. Where pipes, ducts and structures are encountered in the excavation but are not shown on the Drawings, immediately notify the ENGINEER.

1.5 DEFINITIONS:

A. Classification: Earthwork materials are classified in accordance with definitions in this Article.

B. Topsoil: Top 8 inches of natural surface soil possessing the characteristics of representative soils on the site that produce growths of grass or other vegetation. Topsoil includes roots and other vegetation.

C. General Site Fill: Suitable, clean material excavated on-site or off-site may be used as fill material. Suitable material shall consist of clay soils classified as CH according to the unified soil classification system. Clay soil used as fill shall have a liquid limit of less than 55 and a Plasticity Index comparable with on-site soils.

D. Select Fill: Select fill material, as required for construction, defined in the Geotechnical Report, shall consist of inorganic silty or sandy clay.

E. Subgrade: Consists of that portion of the surface on which a compacted fill, backfill or topsoil is placed.

F. Borrow: Material taken from on-site designated areas or approved off-site sources to make up any deficit of excavated material. Obtain from area that is normally dry and well drained. Borrow does not include top soil.

G. Finish Grading: Operations required for smoothing disturbed areas that are not overlaid with pavement.

H. Excavation: Excavation of every description and of whatever substances encountered within the limits of the project to the lines and grades indicated on the Drawings.

I. Compaction: Compaction of soil materials shall be measured as a percent of Standard Proctor density as determined by the ASTM D698.

PART 2 - PRODUCTS

2.1 SELECT FILL:

A. Source: Obtain select fill material from required excavation, or if excavated material is not adequate, from borrow areas approved by the Geotechnical ENGINEER. Material from source shall be tested for compliance with project requirements and approved by the Owner and Testing Laboratory.

B. Suitability: Use the best material available from excavation or borrow, suitability of select fill is subject to the ENGINEER'S approval.

C. Quality: Select fill material must be free of rock and clay lumps or excessive silts. Do not use soil containing brush, roots, sod or similar organic materials.

D. Characteristics: Select fill material shall consist of inorganic silty or sandy clay. Additional select fill requirements are described in Geotechnical Report.

2.2 FILL AND BACKFILL UNDER TOPSOIL:

A. Source: Obtain site fill from required excavation or, if excavated material is not sufficient, from borrow areas approved by the ENGINEER.

B. Suitability: Use the best material available from excavation or borrow. Suitability of fill material is subject to the Testing Laboratory\Engineer's approval.

C. Quality: Fill material shall be free of excessive silts. Do not use soil containing brush, roots, sod or similar organic materials.

D. Characteristics: Fill material shall have a plasticity index between 6 and 25, inclusive, and shall generally be of similar character to that of existing soil at the site.

PART 3 – EXECUTION

3.1 STRIP AND STOCKPILE:

A. Remove topsoil at all non-paved areas where excavation of topsoil is required or where fill material will be added for site grading. Remove top 6 inches of topsoil where necessary and stockpile on the property as directed by the Owner. Protect stockpiled topsoil from other excavated materials, dumping of unwanted material, dumping by the public, and erosion. Upon completion of rough grading, replace topsoil in 4-inch minimum layer to finish grade elevations as shown on the grading plan.

3.2 EXCAVATION:

A. Objective: As shown on the Drawings, excavate to lines, grades and elevations required for subsequent construction. All excavation shall be made in such manner as to permit all surfaces to be brought to final line and grade within plus or minus 0.1 foot. Over excavation shall be restored by the Contractor at his own expense. Finished grades consistently high or low will not be acceptable and shall be corrected by the Contractor at his expense and no additional cost to the Owner.

B. Drainage: During excavation, maintain grades as required to provide positive drainage away from structures; or, as directed by the Engineer, install temporary drains or drainage ditches to intercept or divert surface water and prevent interference or delay of the work.

C. Stockpiling: If at time of excavation it is not possible to place material in the proper section of permanent construction, stockpile the material in Owner or Architect approved areas for later use.

D. Stone or Rock: Stone or rock fragments greater than 6" will not be allowed in fills or embankments. Stones or rock fragments larger than 2 inches in their greatest dimension will not be permitted in top 6 inches of subgrade.

E. Dressing: Uniformly dress cut and fill slopes to slope, cross section and alignment, as shown.

3.3 TREATMENT OF SUBGRADES:

A. All topsoil and vegetation shall be stripped from the ground surface and stockpiled, exposing sound undisturbed subgrade soils.

B. After stripping the topsoil in areas to receive fill or cut areas, the exposed ground surface shall be scarified to a depth of 6 inches, the moisture adjusted, and then recompact to a density of 95 to MIN. percent of the maximum density as obtained in the Standard Proctor Compaction Test (ASTM D698), at a moisture content between minus 1 to plus 3 percent of optimum. Any soft or compressible areas detected during the recompaction process shall be undercut such that sound subgrade soils are exposed and recompacted. Site excavated or select fill shall then be used to bring all areas to grade. Allow for placement of minimum 4-inch layer of top soil in areas not covered by building or pavement.

C. Finished subgrade shall be inspected by Testing Laboratory for determination that subgrade meets requirements of Contract Documents.

3.4 PLACING FILL AND BACKFILL:

A. Examination of Subgrade: Do not place fill on any part of the subgrade until the subgrade preparation has been accepted by the Engineer.

B. Removing Debris: During the dumping and spreading process, remove all roots, stones and debris that are uncovered in the fill material.

C. Spreading Fill and Backfill: After dumping, spread the material in horizontal layers over the entire fill area. The thickness of each layer before compaction shall not exceed 8 inches unless otherwise directed by the Engineer. Maintain positive drainage throughout construction. The combined excavation and fill placing operation shall be such that the material when compacted in the fill will be blended sufficiently to secure the best practicable degree of compaction. The suitability of the materials shall be subject to testing by the Testing Laboratory and approval of the Engineer. After each layer of fill has been spread to the proper depth, it shall be thoroughly manipulated with a disc plow or other suitable and approved equipment until the material is uniformly mixed, pulverized and brought to a uniform approved moisture content.

D. Attaining Proper Bond: If, in the opinion of the Testing Laboratory, the compacted surface of a layer is too smooth to bond with succeeding layers, loosen the surface by harrowing or other approved method before continuing the work.

E. Place materials to proper elevation allowing for depth of topsoil furnished under this Contract.

3.5 MOISTURE CONTROL:

A. Intent: Developing the maximum density obtainable with the natural moisture of the material is preferred. However, the moisture content shall not vary from the optimum, as determined by ASTM D698, by more than minus 1 to plus 3 percent of optimum.

B. Adjustment: If the moisture content is too high, adjust to within the specified limits by spreading the material and permitting it to dry. Assist the drying process by discing or

harrowing if necessary. When the material is too dry, sprinkle each layer with water. Work the moisture into the soil by harrowing or other Engineer approved method.

3.6 COMPACTION:

A. Rough Grade: Compact each layer of fill material with suitable equipment as necessary to secure 95% to 98% Standard Proctor Density (ASTM D698) within the specified range of the moisture content.

B. Finish Grade: Place and lightly compact topsoil to achieve finish grades.

3.7 DISTRIBUTION OF TOPSOIL:

A. Perform rough grading and topsoil/finish grading work.

B. Preparation:

1. Prior to placing topsoil, scarify the subgrade to a depth of 2 inches to provide effective bonding of the topsoil with the subgrade.
2. Shape all areas designated for grading, including cut and fill areas, to receive a minimum of 4 inches of topsoil

C. Placement:

1. Do not haul or place wet topsoil. Also prohibited is placement of topsoil on a subgrade that is excessively wet, extremely dry, or in a condition otherwise detrimental to proper grading or proposed planting.
2. Distribute topsoil uniformly and spread evenly. Correct irregularities in the surface to prevent formation of depressions where water could stand.
3. Perform the spreading operation so that planting can proceed with little additional tillage or soil preparation. Leave the area smooth and suitable for lawn planting.
4. Lightly compact topsoil to obtain proper bond with previously placed or prepared material.

D. Maintenance: Where any portion of the surface becomes eroded or otherwise damaged, repair the affected area to establish the condition and grade prior to topsoil placement; then replace topsoil.

3.8 MATERIAL DISPOSAL:

A. Excess Excavation Material (soil material free of trees, stumps, logs, brush, roots, rubbish and other objectionable matter which has been accepted by the Geotechnical Engineer): Remove excess excavated material from the construction site or place on the property as directed by the ENGINEER.

B. Waste Material (soil material including trees, stumps, logs, brush, roots, rubbish and other objectionable matter which has not been accepted by the Geotechnical Engineer): Remove waste material from the project site before Final Inspection. Legally dispose of material at a licensed site or with written and notarized permission from the property owner for a private disposal site. All costs associated with waste material removal and disposal shall be paid for by the Contractor.

PART 4 - TESTING

4.1 PROCEDURE

A. The testing laboratory will make tests of in-place density in accordance with ASTM Standards. Backfill operations will be monitored continuously by the testing laboratory at structures. It will be the responsibility of the CONTRACTOR to notify the testing laboratory before backfill operations begin.

END OF SECTION 312100

SECTION 31 22 13

ROUGH GRADING

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Excavating topsoil.
2. Excavating subsoil.
3. Cutting, grading, filling, compacting site for site structures, building pads.

B. Related Sections:
1. Section 310513 - Soils for Earthwork: Soils for fill.
2. Section310516 - Aggregates for Earthwork: Aggregates for fill.
3. Section 311000 - Site Clearing: Excavating topsoil.
4. Section 312316 - Excavation and Fill: Building excavation.
5. Section 312318 - Rock Removal.
6. Section 312323 - Backfill: General building area backfilling.
7. Section 312317 - Trenching: Trenching and backfilling for utilities.

1.2 REFERENCES

A. American Association of State Highway and Transportation Officials:
1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:
1. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
2. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
3. ASTM D1556 - Standard Test Method for Density of Soil in Place by the Sand-Cone Method.
4. ASTM D1557 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (6,000 ft-lbf/ft3 (2,700 kN-m/m3)).
5. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
6. ASTM D2419 - Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate.
7. ASTM D2434 - Standard Test Method for Permeability of Granular Soils (Constant Head).
8. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
9. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

PART 2 EXECUTION

2.1 PREPARATION

A. Call Local Utility Line Information service not less than three working days before performing Work.
   1. Request underground utilities to be located and marked within and surrounding construction areas.

B. Identify required lines, levels, contours, and datum.

C. Protect utilities indicated to remain from damage.

D. Protect bench marks, survey control point, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

2.2 FILLING

A. Fill areas to contours and elevations with unfrozen materials.

B. Place fill material in continuous layers and compact as required.

C. Maintain optimum moisture content of fill materials to attain required compaction density.

D. Slope grade away from building minimum 2 percent slope for minimum distance of 10 ft, unless noted otherwise.

E. Make grade changes gradual. Blend slope into level areas.

2.3 FIELD QUALITY CONTROL

A. Perform in place compaction tests in accordance with the following:
   1. As required by geotechnical engineer.

END OF SECTION

SECTION 31 23 16

EXCAVATION AND FILL

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Soil densification.
   2. Excavating for building foundations.
   3. Excavating for slabs-on-grade.
   4. Excavating for site structures.

B. Related Sections:
   1. Section 310513 - Soils for Earthwork: Stockpiling excavated materials.
   2. Section 310516 - Aggregates for Earthwork: Stockpiling excavated materials.
   3. Section 312213 - Rough Grading: Topsoil and subsoil removal from site surface.
   4. Section 312318- Rock Removal: Removal of rock during excavating.
   5. Section 312323- Backfill.
   6. Section 312317 - Trenching: Excavating for utility trenches.

1.2 REFERENCES

A. ASTM International:
   1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
   2. ASTM D1556 - Standard Test Method for Density of Soil in Place by the Sand-Cone Method.
   3. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
   4. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

B. Local utility standards when working within 24 inches of utility lines.

PART 2 EXECUTION

2.1 EXCAVATION

A. Underpin adjacent structures which may be damaged by excavation work.

B. Excavate subsoil to accommodate building foundations, slabs-on-grade.

C. Excavate to working elevation for piling work.

D. Compact disturbed load bearing soil in direct contact with foundations to original bearing capacity; perform compaction in accordance with Section 02320 and Section 02324.

E. Grade top perimeter of excavation to prevent surface water from draining into excavation.

F. Trim excavation. Remove loose matter.

G. Notify Architect/Engineer of unexpected subsurface conditions.

H. Correct areas over excavated with structural fill.

I. Remove excess and unsuitable material from site.

J. Repair or replace items indicated to remain damaged by excavation.

2.2 PROTECTION

A. Prevent displacement or loose soil from falling into excavation; maintain soil stability.

B. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.

C. Protect structures, utilities and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth operations.

END OF SECTION

SECTION 31 25 00

EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION

PART 1-GENERAL

1.1 WORK INCLUDED

A. Furnish labor, materials, equipment and incidentals necessary to provide erosion and sediment control for the duration of the construction period including furnishing, installing and maintaining erosion and sediment control structures and procedures and the proper removal when no longer required.

B. The intent of this specification is to provide guidelines for the Contractor to adhere to all State, Federal, and Local environmental regulations. It is also the intent to provide preventive measures to keep sediment from entering any storm water system, including open channels. It is the Contractor's responsibility to adhere to all State, Federal and Local requirements. While the Owner may require the Contractor to install erosion control devices during construction, this will in no way relieve the Contractor of his responsibility.

1.2 QUALITY ASSURANCE

A. Comply with applicable requirements of all governing authorities having jurisdiction. The Specifications and the Plans are not represented as being comprehensive, but rather to convey the intent to provide complete slope protection and erosion control for both the Owner's and adjacent property.

B. Erosion control measures shall be established at the beginning of construction and maintained during the entire length of construction. On-site areas which are subject to severe erosion and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation are to be identified and receive additional erosion control measures as directed by the Owner or the Engineer.

C. All land-disturbing activities shall be planned and conducted to minimize the size of the area to be exposed at any one time and to minimize the time of exposure.

D. Surface water runoff originating upgrade of exposed area shall be controlled to reduce erosion and sediment loss during the period of exposure.

E. When the increase in the peak rates and velocity of storm water runoff resulting from a land-disturbing activity is sufficient to cause accelerated erosion of the receiving ditch or stream, the Contractor shall install measures to control both the velocity and rate of release so as to minimize accelerated erosion and increased sedimentation of the stream as directed by the Owner or the Engineer.

F. All land-disturbing activities shall be planned and conducted so as to minimize off-site sedimentation damage.

G. The Contractor shall be responsible for periodically cleaning out and disposing of all sediment once the storage capacity of the drainage feature or structure receiving the sediment is reduced by one-half. The Contractor shall also be responsible for cleaning out and disposing of all sediment at the time of completion of the Work.

1.3 SUBMITTALS

A. Submittals shall be in accordance with Section 013300, SUBMITTALS, and shall include:
   1. Manufacturer's Literature: Descriptive data of installation methods and procedures.
   2. Certificates: Manufacturer's certification that materials meet specification requirements.

1.4 JOB CONDITIONS; CODES AND ORDINANCES

A. Comply with the local codes and ordinances. If local codes and ordinances require more stringent or additional erosion and sediment control measures during construction, Contractor shall provide such measures.

PART 2 - PRODUCTS

2.1 MATERIALS

A. STRAW BALES: Straw bales shall weigh a minimum of fifty (50) pounds and shall be at least 30" in length. Bales shall be composed entirely of vegetable matter and be free of seeds. Binding shall be either wire or nylon string, jute or cotton binding is unacceptable. Bales shall be used for not more than three months before being replaced. However, if weather conditions cause biological degradation of the straw bales, they shall be replaced sooner than the three month time period to prevent a loss of structural integrity of the dike.

B. SILT FENCE: Silt fence fabric shall be a nylon reinforced polypropylene fabric which has a built-in cord running the entire length of the top edge of the fabric. The fabric must meet the following minimum criteria:

Tensile Strength, ASTM D4632	90 lbs.,
Puncture Rating, ASTM D4833	60 lbs.,
Mullen Burst Rating, ASTM D3786	200 psi,
Apparent Opening Size, U.S. Sieve No.	40

Silt fence shall be "Enviro Fence" preassembled silt fence, AMXCO Silt Stop prefabricated silt fence, AMOCO Style 2155 preassembled silt fence or approved equal.

C. SILT FENCE POSTS: A minimum 2" x 2" (nominal) x 54" pressure treated wood posts of Number 2 Grade southern yellow pine or approved equal.

D. SAND BAG: Sand bag material shall be polypropylene, polyethylene, polyamide or cotton burlap woven fabric, minimum unit weight four (4) ounces per square yard, mullen burst strength exceeding 300 psi and ultraviolet stability exceeding 70%. Length shall be 24 to 30 inches, width shall be 16 to 18 inches and thickness shall be six (6) to eight (8) inches and having an approximate weight of 40 pounds. Sand bags shall be filled with coarse grade sand, free from deleterious material. All sand shall pass through a No. 10 sieve.

E. P.V.C. PIPE: Pipe shall be SDR-35 polyvinyl chloride having a minimum nominal internal diameter of 4". Pipes shall be sized for anticipated flows.

F. SOIL RETENTION BLANKET: Soil retention blankets shall consist of a geocomposite of excelsior or fiber blanket with an extruded plastic net attached to the tope side. The plastic net shall be photodegradable and the excelsior or fiber blanket shall be made smolder resistant without the use of chemicals. Soil retention blankets shall be high velocity type to resist severe runoff. The soil retention blanket shall be one (1) of the following classes and types:

1. Class 1. "Slope Protection"
   (a) Type A. Slopes of 3:1 or flatter - Clay soils
   (b) Type B. Slopes of 3:1 or flatter - Sandy soils
   (c) Type C. Slopes steeper than 3:1 - Clay soils
   (d) Type D. Slopes steeper than 3:1 - Sandy soils

2. Class 2. "Flexible Channel Liner"
   (a) Type E. Short-term duration (Up to 2 Years)
   Shear Stress (t_D)< 1.0 lb./sq. ft.
   (b) Type F. Short-term duration (Up to 2 Years)
   Shear Stress (t_d) 1.0 to 2.0 lb./sq. ft.
   (c) Type G. Long-term duration (Longer than 2 Years)
   Shear Stress (t_d) > 2.0 to < 5.0 lb./sq. ft.
   (d) Type H. Long-term duration (Longer than 2 Years)
   Shear Stress (t_d) greater than 0 Equal to 5.0 lb./sq. ft.

The Contractor has the option of selecting an approved soil retention blanket provided that selection conforms to the following list of approved soil retention blankets for slope protection applications:

CLASS I. SLOPE PROTECTION

TYPE A: Slopes of 3:1 or Flatter-Clay Soils

Airtrol® ANTI-WASH®/GEOJUTE® (Regular)
Contech Standards®
Contech Standards Plus®
Green Triangle Regular®
Green Triangle Superior®
GREENSTREAK® PEC MAT
Curlex®
North American Green® S150
North American Green® S75
North American Green® SC150
POLYJUTEÔ 407/GT
SOIL SAVER®
TerraJute®
Verdyol® ERO-MAT®
Xcel Regular®
Xcel Superior®

TYPE B: Slopes of 3:1 or Flatter-Sandy Soils

Contech Standards®
Contech Standards Plus®
GEOCOIR®/DEKOWE® 700
Green Triangle Superior®
Green Triangle Regular®
North American Green® S75
North American Green® SC150
North American Green® S150
POLYJUTEÔ 407/GT
TerraJute®
Verdyol® ERO-MAT®
Xcel Superior®
Xcel Regular®

TYPE C: Slopes Steeper than 3:1-Clay Soils

Airtrol®
ANTI-WASH®/GEOJUTE® (Regular)
Contech Standards Plus®
Curlex®
Green Triangle Superior®
GREENSTREAK® PEC-MAT
North American Green® SC150
North American Green® S150
POLYJUTEÔ 407/GT
SOIL SAVER®
TerraJute®
Xcel Superior®

TYPE D: Slopes Steeper than 3:1-Sandy Soils

Contech Standards Plus®
GEOCOIR®/DEKOWE® 700
Green Triangle Superior®
North American Green® S150
North American Green® SC150
POLYJUTEÔ 407GT
TerraJute®
Xcel Superior®

CLASS II: FLEXIBLE CHANNEL LINER PROTECTION

PART 3 - EXECUTION

3.1 INSTALLATION

A. TEMPORARY STRAW BALE DIKE

1. Straw bales shall be embedded a minimum of 4" and securely anchored using 2" x 2" wood stakes driven through the bales into the ground a minimum of 6". Straw bales are to be placed directly adjacent to one another leaving no gap between them.
2. Bales shall be placed in a single row, lengthwise on proposed line, with ends of adjacent bales tightly abutting one another. In swales and ditches, the barrier shall extend to such a length that the bottoms of the end bales are higher in elevation than the top of the lowest middle bale. Additional bales shall be placed behind the first row where the bales abut each other. The additional bale is used to prevent unfiltered runoff from escaping between the bales.
3. The excavated soil shall be backfilled against the barrier. Backfill shall conform to ground level on the downhill side and shall be built up to 4" above ground level on the uphill side. Loose straw shall be scattered over the area immediately uphill from a straw barrier.

B. SILT FENCE

1. The purpose of a silt fence is to intercept and detain water-borne sediment from unprotected areas to a limited extent. The Contractor shall excavate a 6" by 6" trench for site fence bedding along the lower perimeters of the site where necessary to prevent sediment from entering any drainage system. The Contractor shall install the silt fence in accordance with the manufacturer's recommendations and instructions. Silt fence is used during the period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. This fence shall remain in place until the disturbed area is permanently stabilized. Silt fence should not be used where there is a concentration of water in a channel or drainage way or where soil conditions prevent a minimum toe-in depth of 6" or installation of support post to depth of 12". Fabric shall overlap at abutting ends a minimum of 3' and shall be jointed such that no leakage or bypass occurs. If concentrated flow occurs after installation, corrective action must be taken such as placing rock berm in the areas of concentrated flow.

C. SAND BAG BERM

1. The purpose of a sandbag berm is to intercept sediment-laden water from disturbed areas such as construction in steam beds, create a retention pond, detain sediment and release water in sheet flow.
2. A temporary sand bag berm shall be installed across a channel or right of way in a developing or disturbed area and should be used when the contributing drainage area is greater than 5 acres. The berm shall be a minimum height of 18", measured from the top of the existing ground at the upslope toe to the top of the berm. The berm shall be sized to have a minimum width of 48" measured at the bottom of the berm and 18" measured at the top of the berm.
3. The sand bag berm shall be inspected after each rain. The sand bags shall be reshaped or replaced as needed during inspection. Additional inspections shall be made daily by the responsible party and when the silt reaches 6", the accumulated silt shall be removed and disposed of at an approved site in a manner that will not contribute to additional siltation. The sand bag berm shall be left in place until all upstream areas are stabilized and accumulated silt removed; removal must be done by hand.

D. SOIL RETENTION BLANKETS

1. A soil retention blanket (SRB) is a geotextile or biodegradable fabric placed over disturbed areas to limit the effects of erosion due to rainfall impact and runoff across barren soil. Soil retention blankets are manufactured by a wide variety of vendors addressing a wide variety of conditions such as vegetation establishment and high velocity flow. Blankets are used in areas which are difficult to stabilize such as steep slopes, drainage swales or high pedestrian traffic areas.
2. The soil retention blanket, whether installed as slope protection or as flexible channel liner, shall be placed within 24 hours after seeding or sodding operations have been completed, or as approved by the Engineer. Prior to placing the blanket, the area to be covered shall be relatively free of all rocks or clods over 1-1/2" in maximum dimension and all sticks or other foreign material which will prevent the close contact of the blanket with the soil. The area shall be smooth and free of ruts and other depressions. If as a result of rain, the prepared bed becomes crusted or eroded or if any eroded places, ruts or depressions exist for any reason, the Contractor shall be required to rework the soil until it is smooth and to reseed or resod the area at the Contractor's expense.
3. Installation and anchorage of the soil retention blanket shall be in accordance with the manufacturer's recommendations.

E. PROTECTION OF BARE AREAS

1. Apply seeding and soil retention blanket to bare areas including new embankment areas, fills, stripped areas, graded areas or otherwise disturbed areas, which have a grade greater than 5% or which will be exposed for more than 30 days.
2. Bare working areas on which it is not practical or desirable to install seeding and soil retention blankets, as determined by the Engineer, such as areas under proposed building slabs, shall be temporarily sloped to drain at a minimum of 0.2% and a maximum of 5% grade. These areas shall then be "trackwalked" with a crawler dozer traveling up and down the slope to form the effect of small "terraces" with the tracks of the dozer. Apply a minimum of three (3) coverages to each area with the dozer tracks.
3. Route runoff from the areas through the appropriate silt fence system.
4. Protect earth spoil areas by "trackwalking" and silt fences.

F. INTERCEPTOR SWALE

1. Interceptor swales may have a v-shape or be trapezoidal with a flat bottom and side slopes of 3:1 or flatter. These are used to shorten the length of exposed slope by intercepting runoff and can also serve as perimeter swales preventing off-site runoff from entering the disturbed area or prevent sediment-laden runoff from leaving the construction site or disturbed area. The outflow from a swale must be directed to a stabilized outlet or sediment trapping device. The swales should remain in place until the disturbed area is permanently stabilized.
2. Stone Stabilization shall be used when grades exceed 2% or velocities exceed 6' per second and shall consist of a layer of crushed stone 3" thick, or flexible channel liner soil retention blankets. Stabilization shall extend across the bottom of the swale and up both sides of the channel to minimum height of 3" above the design water surface elevation based on a two year storm.
3. Interceptor swale shall be installed across exposed slopes during construction and should intercept no more than five (5) acres of runoff. Swales shall have a minimum bottom width of 2'-0" and a maximum depth of 1'-6" with side slopes of 3:1 or flatter. Swale must have positive

drainage for its entire length to an outlet. When the slope exceeds 3%, or velocities exceed 4' per second (regardless of slope), stone stabilization is required. Check dams are also recommended to reduce velocities in the swales possibly reducing the amount of stabilization necessary. Swales should be inspected on a weekly basis during wet weather and repairs should be made promptly to maintain a consistent cross section.

4. All trees, brush, stumps, obstructions and other material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
5. The swale shall be excavated or shaped to line, grade, and cross-section as required to meet criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
6. All earth removed and not needed in construction shall be disposed of in an approved spoils site so that it will be conveyed to a sediment trapping device.
7. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device.
8. The on-site location may need to be adjusted to meet field conditions in order to utilized the most suitable outlet.
9. Minimum compaction for the swale shall be 90% standard proctor.

G. LOCATION OF EROSION AND SEDIMENT CONTROL STRUCTURES

1. Locate erosion and sediment control structures as required to prevent erosion and removal of sediment from the project site. Silt fences shall be required for disturbed areas and soil stockpiles/spoil areas. Each silt fence installation shall have a minimum net length (exclusive of embedments into diversion dikes or other ineffective areas) of 25'. The runoff from a maximum of one (1) acre of disturbed area or soil stockpile/ spoil area shall be routed through any individual silt fence installation.
2. Install diversion dikes to divert runoff to the silt fence installation.
3. Install silt traps at the inlet (upstream) end of the drainage structures, including open channels, through which runoff from disturbed areas or soil stockpiles/spoil areas may drain.
4. Provide an overall erosion and sediment control system which protects disturbed areas and soil stockpiles/spoil areas. The system shall be modified by the Contractor from time to time to effectively control erosion and sediment during construction.

3.2 MAINTENANCE

A. Maintain erosion and sediment control structures and procedures in full working order at all times during construction. This shall include any necessary repair or replacement of items which have become damaged or ineffective. Remove sediment on a regular basis which accumulates in sediment control devices and place the material in approved earth spoil areas or return the material to the area from which it eroded.

B. Upon completion of construction, properly remove the temporary erosion and sediment control structures and complete the area as indicated.
C. Soil retention blankets will not require removal if installed on a finished graded area specified to receive seeding.

3.3 FIELD QUALITY CONTROL

A. In the event of conflict between the requirements and storm water pollution control laws, rules or regulations or other Federal, State or Local agencies, the more restrictive laws, rules or regulations shall apply.

END OF SECTION 312500

SECTION 31 31 16

TERMITE CONTROL

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Soil treatment for termite control.

B. Related Sections:
   1. Section 310513 - Soils for Earthwork: Backfill materials.
   2. Section 312316 - Excavation and Fill: Subgrade preparation.
   3. Section 033000 - Cast-In-Place Concrete: Slabs on grade and foundations placed over treated soil.

1.2 REFERENCES

A. Environmental Protection Agency:
   1. EPA FIFRA - Federal Insecticide, Fungicide and Rodenticide Act.

B. National Pest Management Association:
   1. NPMA WDO - Wood Destroying Organism Library.

1.3 SUBMITTALS

A. Product Data: Submit toxicants to be used, composition by percentage, dilution schedule, intended application rate. Include product label information.

B. Test Reports: Indicate regulatory agency approval reports.

C. Manufacturer's Application Instructions: Indicate caution requirements and in accordance with current product label of chosen pesticide.

D. Certify applications followed NPMA WDO for termite control or other regional location guidance.

1.4 CLOSEOUT SUBMITTALS

A. Project Record Documents: Record moisture content of soil before application, date and rate of application, areas of application, diary of toxicity meter readings and corresponding soil coverage.

B. Operation and Maintenance Data: Indicate re-treatment schedule.

1.5 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing Products specified in this section with minimum three years documented experience.

B. Applicator: Company specializing in performing the Work of this sectionand licensed in State of Texas.

1.6 SEQUENCING

A. Section 011000 - Summary: Work sequence.

B. Apply toxicant immediately prior to installation of vapor barrier under slabs-on-grade in accordance with product label supplemented by the NPCA’s ARP for termiticiding or local requirements.

1.7 WARRANTY

A. Warranty: Include coverage for damage and repairs to building and building contents caused by termites. Repair damage. Re-treat where required.

PART 2 PRODUCTS

2.1 MATERIALS

A. Toxicant Chemical: EPA FIFRA approved; synthetically color dyed to permit visual identification of treated soil.

B. Diluent: Recommended by toxicant manufacturer.

2.2 MIXES

A. Mix toxicant to manufacturer's instructions.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements:Verification of existing conditions before starting work.

B. Verify soil surfaces are unfrozen, sufficiently dry to absorb toxicant, and ready to receive treatment.

C. Verify final grading and excavation are complete.

3.2 APPLICATION

A. Apply toxicant at locations indicated in Schedule at end of section.

B. Apply extra treatment to structure penetration surfaces including pipe or ducts, and soil penetrations including grounding rods or posts.

C. Re-treat disturbed treated soil with same toxicant as original treatment.

D. When inspection or testing identifies presence of termites, re-treat soil and re-test.

3.3 PROTECTION OF FINISHED WORK

A. Section 017000 - Execution Requirements: Protecting finished Work.

B. Do not permit soil grading over treated work.

END OF SECTION

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SECTION 31 63 29

DRILLED CONCRETE PIERS AND SHAFTS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
1. Machine drilled shaft.
2. Placing shaft liner.
3. Shear rings.
4. Concrete fill.
5. Reinforcement.

B. Related Sections:
1. Section 032000 - Concrete Reinforcement: Requirements for concrete reinforcement.
2. Section 033000 - Cast-In-Place Concrete.

1.2 REFERENCES

A. American Concrete Institute:
1. ACI 336.1 - Reference Specification for the Construction of Drilled Piers.

B. ADSC - The International Association of Foundation Drilling:
1. ADSC TL-4 - Drilled Shafts: Construction Procedures and Design Methods.

C. ASTM International:
1. ASTM A252 - Standard Specification for Welded and Seamless Steel Pipe Piles.
2. ASTM D1143 - Standard Test Method for Piles Under Static Axial Compressive Load.
3. ASTM D4380 - Standard Test Method for Density of Bentonitic Slurries.
4. ASTM D4381 - Standard Test Method for Sand Content by Volume of Bentonitic Slurries.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Section 016000 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.

B. Store and handle controlled slurry materials in accordance with manufacturers instructions.

C. Mix, store, and transport controlled slurry materials using equipment made for this purpose.

PART 2 PRODUCTS

2.1 DRILLED CONCRETE PIERS AND SHAFTS

A. Concrete Materials and Mix: Specified in Section 033000.

B. Reinforcement: Specified in Section 032000.

C. Equipment: Appropriate to dewater excavated shaft.

D. Controlled Slurry:
1. Use controlled bentonite or polymer slurry only at locations specified or indicated on Drawings.
2. Bentonite and Polymer Materials: Suitable for intended purpose according to manufacturer.
3. Controlled Slurry Properties:

Properties	Results at 68EF	Test Methods
Density, before concreting, for slurry 1 ft from pier bottom	64 pcf max.for polymer slurry	API 13B,Section 1 (Mud Balance)
	85 pcf max for bentonite slurry	ASTM D4380
Marsh funnel viscosity, for entry slurry and pier slurry	26-50 sec/qt	API 13B,Section 2 (Marsh Funnel and Cup)
Sand content by volume, before concreting for slurry 1 ft from pier bottom	1% max for polymer slurry	API 13B,Section 4 (Sand Screen Set)
	25% max for bentonite slurry	ASTM D4381
pH, during excavation	8-12	API 13B,Section 6 (Paper test strips or glass-electrode pH meter)

4. Provide physical or chemical treatment of water or slurry necessary to meet specified requirements.

PART 3 EXECUTION

3.1 EXAMINATION

A. Section 013000 - Administrative Requirements: Coordination and project conditions.

B. Verify site conditions are ready for Work of this section.

3.2 PREPARATION

A. Use placement method that will not cause damage to nearby structures.

B. Document existing conditions for existing structures susceptible to damage:
   1. Before move, inspect existing structure thoroughly and notify Architect/Engineer in writing of visible defects and factors capable of affecting safe movement of structure to final location.
   2. Compile list of existing visible defects to building structure, finishes, and accessories. This list will form basis for determining required repair Work after move.

C. Notify adjacent and affected land owners and building occupants within 14 days before proceeding with the Work.

D. Notify utility companies to mark location of existing underground services. Do not begin work of this section until existing underground services are marked.

E. Provide survey benchmarks and control points before beginning construction of piers.

F. Protect underground utilities and structures near the Work, from damage.

3.3 INSTALLATION

A. Drill vertical pier shafts to diameters and depths indicated.

B. Place steel liners immediately after drilling. Set firmly in place. Use shaft liner when free water is encountered.

C. Clean shaft and bottom of loose material. Maintain shafts free of water.

D. Allow inspection of shaft and liner prior to placement of reinforcement and concrete.

E. Provide dowels for connection of caps and grade beams.

F. Concreting: In accordance with Section 03300 and the following requirements:
   1. General:
      a. Do not place concrete before Architect/Engineer has inspected pier.
      b. Inspect piers before concreting, to verify loose material within pier has been removed.
      c. Place concrete immediately after completion of cleaning operation and inspection. When concreting is postponed, repeat cleaning and inspection.
      d. Place concrete in one continuous operation without cessation from bottom of pier to cut-off elevation to ensure complete homogeneity of concrete throughout pier with no possibilities of cavities, air pockets, honeycombing or cold joints forming in concrete.

e. Concrete Slump Dry Method: 5 to 6 inches.

3.4 DRILLING TOLERANCES

A. Section 014000 - Quality Requirements Tolerances.

B. Tolerances for deviations from design position, orientation and elevation:
   1. Maximum Deviation from Position at Top of Shaft: 3 inches.
   2. Maximum Deviation of Pier Shaft Radius at Bottom of Shaft: Minus 0 inches.
   3. Maximum Deviation of Pier Cut-Off Elevations: Plus 1 inch and minus 3 inches.

C. Furnish corrective design and construction required to accommodate deviations exceeding specified tolerances, including replacement of piers, when necessary.

3.5 FIELD QUALITY CONTROL

A. Section 014000 - Quality Requirements: Testing and Section inspection services.

B. Engage licensed surveyor to perform survey work specified in this section, including survey of design and actual pier locations, and plumbness.

C. Monitor benchmarks and survey control points for displacement during construction. Correct or replace displaced survey controls. Verify previous measurements relying on displaced controls.

D. Submit survey information as the Work progresses, to expedite construction operations.

E. Contractor Supervision: Provide supervision of each phase of drilled pier construction. Check each drilled pier or shaft for required depth, clean-up, workmanship, and for tolerance requirements before concrete is placed.

F. Unacceptable Piers: Piers that fail, are placed out of position, exceed allowable tolerances, have defect inclusions, or are damaged.

G. Provide additional piers or replace piers failing to conform to specified requirements.

END OF SECTION

SECTION 32 11 29

LIME STABILIZED SUBGRADE

PART 1 – GENERAL

1.1 Description

A. Mix and compact lime, water, and subgrade or base (with or without asphaltic concrete pavement) in the roadway.

PART 2 – PRODUCTS

2.1 Materials

A. Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications. Use Tex-100-E for material definitions.

1. Lime. Furnish lime that meets the requirements of DMS-6350 “Lime and Lime Slurry,” and DMS-6330, “Lime Sources Prequalification of Hydrated Lime.” Use hydrated lime, commercial lime slurry.
2. Water. Furnish water free of industrial wastes and other objectionable material.
3. Asphalt. When asphalt or emulsion is permitted for curing purposes, furnish materials that meet the requirements of TxDOT Item 300, “Asphalts, Oils, and Emulsions,” as shown on the plans or as directed.
4. Mix Design. The Engineer will determine the target lime content and optimum moisture content in accordance with Geotechnical Engineering Report.

2.2 Equipment

A. Provide machinery, tools, and equipment necessary for proper execution of the work. Provide rollers in accordance with TxDOT Item 210, “Rolling.” Provide proof rollers in accordance with TxDOT Item 216, “Proof Rolling,” when required.

1. Storage Facility. Store quicklime and dry hydrated lime in closed, weatherproof containers.
2. Slurry Equipment. Use slurry tanks equipped with agitation devices to slurry hydrated lime or quicklime on the project or other approved location. The Engineer may approve other slurrying methods.

   Provide a pump for agitating the slurry when the distributor truck is not equipped with an agitator. Equip the distributor truck with a sampling device in accordance with Tex-600-J, Part I, when using commercial lime slurry.
3. Pulverization Equipment. Provide pulverization equipment that:
   - cuts and pulverizes material uniformly to the proper depth with cutters that plane to a uniform surface over the entire width of the cut,
   - provides a visible indication of the depth of cut at all times, and
   - uniformly mixes the materials.

PART 3 - EXECUTION

3.1 Construction

A. Construct each layer uniformly, free of loose or segregated areas, and with the required density and moisture content. Provide a smooth surface that conforms to the typical sections, lines, and grades shown on the plans or as directed.

1. Preparation of Subgrade for Treatment. Remove existing asphalt concrete pavement when shown on the plans or as directed. Shape existing to conform to typical sections shown on the plans and as directed.

2. Pulverization. Pulverize or scarify existing material after shaping so that 100% passes a 2-1/2-in. sieve. If the material cannot be uniformly processed to the required depth in a single pass, excavate and windrow the material to expose a secondary grade to achieve processing to plan depth.

3. Application of Lime. Uniformly apply lime using slurry placement as shown on the plans or as directed in Geotechnical Engineering Report. Add lime at the percentage determined in Geotechnical Engineering Report. Apply lime only on an area where mixing can be completed during the same working day.

   Start lime application only when the air temperature is at least 35°F and rising or is at least 40°F. The temperature will be taken in the shade and away from artificial heat. Suspend application when weather conditions are unsuitable.

   Minimize dust and scattering of lime by wind. Do not apply lime when wind conditions, cause blowing lime to become dangerous to traffic or objectionable to adjacent property owners.

   a. Dry Placement. Before applying lime, bring the prepared roadway to approximately optimum moisture content. When necessary, sprinkle. Distribute the required quantity of hydrated lime or pebble grade quicklime with approved equipment. Only hydrated lime may be distributed by bag. Do not use a motor grader to spread hydrated lime.

   b. Slurry Placement. Provide slurry free of objectionable materials, at or above the approved minimum dry solids content, and with a uniform consistency that will allow ease of handling and uniform application. Deliver commercial lime slurry to the jobsite or prepare lime slurry at the jobsite or other approved location by using hydrated lime or quicklime, as specified.

      Distribute slurry uniformly by making successive passes over a measured section of roadway until the specified lime content is reached. Uniformly spread the residue from quicklime slurry over the length of the roadway being processed, unless otherwise directed.

4. Mixing. Begin mixing within 6 hours of application of lime. Hydrated lime exposed to the open air for 6 hours or more between application and mixing, or that experiences excessive loss due to washing or blowing, will not be accepted for payment.

   Thoroughly mix the material and lime using approved equipment. Allow the mixture to mellow for 1 to 4 days, as directed. When pebble grade quicklime is used, allow the mixture to mellow for 2 to 4 days, as directed. Sprinkle the treated materials during the mixing and mellowing operation, as directed, to achieve adequate hydration and proper moisture content. After mellowing, resume mixing until a homogeneous, friable mixture is obtained.

   After mixing, sample the mixture at roadway moisture and test in accordance with Tex-101-E, Part III, to determine compliance with the gradation requirements in Table 1.

Table 1
Gradation Requirements (Minimum % Passing)

Sieve Size	Base	Subgrade
1-3/4 in.	100	100
3/4 in.	85	85
No. 4	–	60

5. Compaction. Compact the mixture using density control, unless otherwise shown on the plans. Multiple lifts are permitted when shown on the plans or approved. Bring each layer to the moisture content directed. When necessary, sprinkle the treated material. Determine the moisture content of the mixture at the beginning and during compaction in accordance with Tex-103-E.

   Begin rolling longitudinally at the sides and proceed toward the center, overlapping on successive trips by at least one-half the width of the roller unit. On superelevated curves, begin rolling at the low side and progress toward the high side. Offset alternate trips of the roller. Operate rollers at a speed between 2 and 6 MPH, as directed.

   Rework, recompact, and refinish material that fails to meet or that loses required moisture, density, stability, or finish before the next course is placed or the project is accepted. Continue work until specification requirements are met.

   a. Ordinary Compaction. Roll with approved compaction equipment, as directed. Correct irregularities, depressions, and weak spots immediately by scarifying the areas affected, adding or removing treated material as required, reshaping, and recompacting.

   b. Density Control. The Engineer will determine roadway density of completed sections in accordance with Tex-115-E. The Engineer may accept the section if no more than 1 of the 5 most recent density tests is below the specified density and the failing test is no more than 3 pcf below the specified density.

      i. Subgrade. Compact to at least 95% of the maximum density determined in accordance with Tex-121-E, unless otherwise shown on the plans.

6. Reworking a Section. When a section is reworked within 72 hours after completion of compaction, rework the section to provide the required density. When a section is reworked more than 72 hr. after completion of compaction, add additional lime at 25% of the percentage determined by Geotechnical Engineering Report. Reworking includes loosening, adding material or removing unacceptable material if necessary, mixing as directed, compacting, and finishing. When density control is specified, determine a new maximum density of the reworked material in accordance with Tex-121-E, and compact to at least 95% of this density.

7. Finishing. Immediately after completing compaction of the final course, clip, skin, or tight-blade the surface of the lime-treated material with a maintainer or subgrade trimmer to a depth of approximately 1/4 in. Remove loosened material and dispose of at an approved location. Roll the clipped surface immediately with a pneumatic tire roller until a smooth surface is attained. Add small amounts of water as needed during rolling. Shape and maintain the course and surface in conformity with the typical sections, lines, and grades shown on the plans or as directed.

   Finish grade of constructed subgrade in accordance with plans.

8. Curing. Cure for the minimum number of days shown in Table 2 by sprinkling or by applying an asphalt material at a rate of 0.05 to 0.20 gal. per square yard as directed. Maintain moisture during curing. Upon completion of curing, maintain the moisture content in accordance with TxDOT Article 132.3.E, “Maintenance of Moisture and Reworking” for subgrade and TxDOT Article 247.4.E, “Curing” for bases prior to placing subsequent courses. Do not allow equipment

on the finished course during curing except as required for sprinkling, unless otherwise approved. Apply seals or additional courses within 14 calendar days of final compaction.

Table 2
Minimum Curing Requirements Before Placing Subsequent Courses[1]

Untreated Material	Curing (Days)
PI ≤ 35	2
PI > 35	5

1. Subject to the approval of the Geotechnical Engineer. Proof rolling may be required as an indicator of adequate curing.

END OF SECTION 321129

SECTION 321216

DENSE-GRADED HOT-MIX ASPHALT (METHOD)

PART 1 - GENERAL

1.1 DESCRIPTION:

A. Construct a pavement layer composed of a compacted, dense-graded mixture of aggregate and asphalt binder mixed hot in a mixing plant.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications. Notify the Engineer of all material sources. Notify the Engineer before changing any material source or formulation. When the Contractor makes a source or formulation change, the Engineer will verify that the requirements of this Item are met and may require a new laboratory mixture design, trial batch, or both. The Engineer may sample and test project materials at any time during the project to verify compliance.

B. Aggregate. Furnish aggregates from sources that conform to the requirements shown in Table 1, and as specified in this Section, unless otherwise shown on the plans. Provide aggregate stockpiles that meet the definition in this Section for either coarse aggregate or fine aggregate. When reclaimed asphalt pavement (RAP) is allowed by plan note, provide RAP stockpiles in accordance with this Section. Aggregate from RAP is not required to meet Table 1 requirements unless otherwise shown on the plans. Supply mechanically crushed gravel or stone aggregates that meet the definitions in Tex-100-E. The Engineer will designate the plant or the quarry as the sampling location. Samples must be from materials produced for the project. The Engineer will establish the surface aggregate classification (SAC) and perform Los Angeles abrasion, magnesium sulfate soundness, and Micro-Deval tests. Perform all other aggregate quality tests listed in Table 1. Document all test results on the mixture design report. The Engineer may perform tests on independent or split samples to verify Contractor test results. Stockpile aggregates for each source and type separately. Determine aggregate gradations for mixture design and production testing based on the washed sieve analysis given in Tex-200-F, Part II. Do not add material to an approved stockpile from sources that do not meet the aggregate quality requirements of the Department's *Bituminous Rated Source Quality Catalog* (BRSQC) unless otherwise approved.

1. Coarse Aggregate. Coarse aggregate stockpiles must have no more than 20% material passing the No. 8 sieve. Provide aggregates from sources listed in the BRSQC. Provide aggregate from nonlisted sources only when tested by the Engineer and approved before use. Allow 30 calendar days for the Engineer to sample, test, and report results for nonlisted sources.

   Provide coarse aggregate with at least the minimum SAC shown on the plans. SAC requirements apply only to aggregates used on the surface of travel lanes, unless otherwise

shown on the plans. The SAC for sources on the Department's AQMP is listed in the BRSQC.

Class B aggregate meeting all other requirements in Table 1 may be blended with a Class A aggregate in order to meet requirements for Class A materials. When blending Class A and B aggregates to meet a Class A requirement, ensure that at least 50% by weight of the material retained on the No. 4 sieve comes from the Class A aggregate source. Blend by volume if the bulk specific gravities of the Class A and B aggregates differ by more than 0.300. When blending, do not use Class C or D aggregates. For blending purposes, coarse aggregate from RAP will be considered as Class B aggregate.

2. RAP. RAP is salvaged, milled, pulverized, broken, or crushed asphalt pavement. Crush or break RAP so that 100% of the particles pass the 2-in. sieve.
RAP from either Contractor- or Department-owned sources, including RAP generated during the project, is permitted only when shown on the plans. Department-owned RAP, if allowed for use, will be available at the location shown on the plans. When RAP is used, determine asphalt content and gradation for mixture design purposes. Perform other tests on RAP when shown on the plans.

   When RAP is allowed by plan note, use no more than 30% RAP in Type A or B mixtures unless otherwise shown on the plans. For all other mixtures, use no more than 20% RAP unless otherwise shown on the plans.

   Do not use RAP contaminated with dirt or other objectionable materials. Do not use the RAP if the decantation value exceeds 5% and the plasticity index is greater than 8. Test the stockpiled RAP for decantation in accordance with the laboratory method given in Tex-406-A, Part I. Determine the plasticity index using Tex-106-E if the decantation value exceeds 5%. The decantation and plasticity index requirements do not apply to RAP samples with asphalt removed by extraction.

   Do not intermingle Contractor-owned RAP stockpiles with Department-owned RAP stockpiles. Remove unused Contractor-owned RAP material from the project site upon completion of the project. Return unused Department-owned RAP to the designated stockpile location.

3. Fine Aggregate. Fine aggregates consist of manufactured sands, screenings, and field sands. Fine aggregate stockpiles must meet the gradation requirements in Table 2. Supply fine aggregates that are free from organic impurities. The Engineer may test the fine aggregate in accordance with Tex-408-A to verify the material is free from organic impurities. At most 15% of the total aggregate may be field sand or other uncrushed fine aggregate. With the exception of field sand, use fine aggregate from coarse aggregate sources that meet the requirements shown in Table 1, unless otherwise approved.
If 10% or more of the stockpile is retained on the No. 4 sieve, test the stockpile and verify that it meets the requirements in Table 1 for coarse aggregate angularity (Tex-460-A) and flat and elongated particles (Tex-280-F).

Table 1
Aggregate Quality Requirements

Property	Test Method	Requirement
Coarse Aggregate		
SAC	AQMP	As shown on plans
Deleterious material, %, max	Tex-217-F, Part I	1.5
Decantation, %, max	Tex-217-F, Part II	1.5
Micro-Deval abrasion, %, max	Tex-461-A	Note 1
Los Angeles abrasion, %, max	Tex-410-A	40
Magnesium sulfate soundness, 5 cycles, %, max	Tex-411-A	30[2]
Coarse aggregate angularity, 2 crushed faces, %, min	Tex 460-A, Part I	85[3]
Flat and elongated particles @ 5:1, %, max	Tex-280-F	10
Fine Aggregate		
Linear shrinkage, %, max	Tex-107-E	3
Combined Aggregate[4]		
Sand equivalent, %, min	Tex-203-F	45

1. Not used for acceptance purposes. Used by the Engineer as an indicator of the need for further investigation.
2. Unless otherwise shown on the plans.
3. Unless otherwise shown on the plans. Only applies to crushed gravel.
4. Aggregates, without mineral filler, RAP, or additives, combined as used in the job-mix formula (JMF).

Table 2
Gradation Requirements for Fine Aggregate

Sieve Size	% Passing by Weight or Volume
3/8"	100
#8	70–100
#200	0–30

C. Mineral Filler. Mineral filler consists of finely divided mineral matter such as agricultural lime, crusher fines, hydrated lime, cement, or fly ash. Mineral filler is allowed unless otherwise shown on the plans. Do not use more than 2% hydrated lime or cement, unless otherwise shown on the plans. The plans may require or disallow specific mineral fillers. When used, provide mineral filler that:

- is sufficiently dry, free-flowing, and free from clumps and foreign matter;
- does not exceed 3% linear shrinkage when tested in accordance with Tex-107-E; and
- meets the gradation requirements in Table 3:

Table 3
Gradation Requirements for Mineral Filler

Sieve Size	% Passing by Weight or Volume
#8	100
#200	55–100

D. Baghouse Fines. Fines collected by the baghouse or other dust-collecting equipment may be reintroduced into the mixing drum.

E. Asphalt Binder. Furnish the type and grade of performance-graded (PG) asphalt binder specified on the plans in accordance with Section 300.2.J, "Performance-Graded Binders."

F. Tack Coat. Unless otherwise shown on the plans or approved, furnish CSS-1H, SS-1H, or a PG binder with a minimum high-temperature grade of PG 58 for tack coat binder in accordance with Item 300, "Asphalts, Oils, and Emulsions." Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use. If required, verify that emulsified asphalt proposed for use meets the minimum residual asphalt percentage specified in Item 300, "Asphalts, Oils, and Emulsions." The Engineer will obtain at least 1 sample of the tack coat binder per project and test it to verify compliance with Item 300. The Engineer will obtain the sample from the asphalt distributor immediately before use.

G. Additives. When shown on the plans, use the type and rate of additive specified. Other additives that facilitate mixing or improve the quality of the mixture may be allowed when approved. If lime or a liquid antistripping agent is used, add in accordance with Item 301, "Asphalt Antistripping Agents." Do not add lime directly into the mixing drum of any plant where lime is removed through the exhaust stream unless the plant has a baghouse or dust collection system that reintroduces the lime back into the drum.

2.2 EQUIPMENT

A. Provide required or necessary equipment in accordance with Item 320, "Equipment for Asphalt Concrete Pavement."

PART 3 - EXECUTION

3.1 CONSTRUCTION

A. Design, produce, store, transport, place, and compact the specified paving mixture in accordance with the requirements of this Item. Unless otherwise shown on the plans, provide the mix design. The Department will perform quality assurance (QA) testing. Provide quality control (QC) testing as needed to meet the requirements of this Item.

B. Mixture Design:

1. Design Requirements. Use a Level II specialist certified by a Department-approved hot-mix asphalt certification program to develop the mixture design. Have the Level II specialist sign the design documents. Unless otherwise shown on the plans, use the typical weight design example given in Tex-204-F, Part I, to design a mixture meeting the requirements listed in Tables 1 through 6. Use an approved laboratory to perform the Hamburg Wheel test and provide results with the mixture design, or provide the laboratory mixture and request that the Department perform the Hamburg Wheel test. The Construction Division maintains a list of approved laboratories. Furnish the Engineer with representative samples of all materials used in the mixture design. The Engineer will verify the mixture design. If the design cannot be verified by the Engineer, furnish another mixture design. The Contractor may submit a new mixture design at any time during the project. The Engineer will approve all mixture designs before the Contractor can begin production. Provide the Engineer with a mixture design report using Department-provided software. Include the following items in the report:
   - the combined aggregate gradation, source, specific gravity, and percent of each material used;
   - results of all applicable tests;
   - the mixing and molding temperatures;
   - the signature of the Level II person or persons who performed the design;
   - the date the mixture design was performed; and

- a unique identification number for the mixture design.

Table 4
Master Gradation Bands (% Passing by Weight or Volume) and Volumetric Properties

Sieve Size	A Coarse Base	B Fine Base	C Coarse Surface	D Fine Surface	F Fine Mixture
1-1/2"	98.0–100.0	–	–	–	–
1"	78.0–94.0	98.0–100.0	–	–	–
3/4"	64.0–85.0	84.0–98.0	95.0–100.0	–	–
1/2"	50.0–70.0	–	–	98.0–100.0	–
3/8"	–	60.0–80.0	70.0–85.0	85.0–100.0	98.0–100.0
#4	30.0–50.0	40.0–60.0	43.0–63.0	50.0–70.0	80.0–86.0
#8	22.0–36.0	29.0–43.0	32.0–44.0	35.0–46.0	38.0–48.0
#30	8.0–23.0	13.0–28.0	14.0–28.0	15.0–29.0	12.0–27.0
#50	3.0–19.0	6.0–20.0	7.0–21.0	7.0–20.0	6.0–19.0
#200	2.0–7.0	2.0–7.0	2.0–7.0	2.0–7.0	2.0–7.0
Design VMA[1], % Minimum					
–	12.0	13.0	14.0	15.0	16.0
Plant-Produced VMA, % Minimum					
–	11.0	12.0	13.0	14.0	15.0

1. Voids in Mineral Aggregates.

Table 5
Laboratory Mixture Design Properties

Property	Test Method	Requirement
Target laboratory-molded density, %	Tex-207-F	96.0[1]
Tensile strength (dry), psi (molded to 93% ±1% density)	Tex-226-F	85–200[2]
Boil test[3]	Tex-530-C	–

1. Unless otherwise shown on the plans.
2. May exceed 200 psi when approved and may be waived when approved.
3. Used to establish baseline for comparison to production results. May be waived when approved.

Table 6
Hamburg Wheel Test Requirements[1]

High-Temperature Binder Grade	Minimum # of Passes[2] @ 0.5" Rut Depth, Tested @ 122°F
PG 64 or lower	10,000
PG 70	15,000
PG 76 or higher	20,000

1. Tested in accordance with Tex-242-F.
2. May be decreased or waived when shown on the plans.

C. Job-Mix Formula Approval. The job-mix formula (JMF) is the combined aggregate gradation and target asphalt percentage used to establish target values for mixture production. JMF is the original laboratory mixture design used to produce the trial batch. The Engineer and the Contractor will verify JMF based on plant-produced mixture from the trial batch unless otherwise approved. The Engineer may accept an existing mixture design previously used on a Department project and may waive the trial batch to verify JMF. If the JMF is not verified by the Engineer from the trial batch, adjust the JMF or redesign the mix and produce as many trial batches as necessary to verify the JMF.
Provide the Engineer with split samples of the mixtures and blank samples used to determine the ignition oven correction factors. The Engineer will determine the aggregate and asphalt correction factors from the ignition oven using Tex-236-F.

The Engineer will use a Texas gyratory compactor calibrated in accordance with Tex-914-F in molding production samples.

The Engineer will perform Tex-530-C and retain the tested sample for comparison purposes during production. The Engineer may waive the requirement for the boil test.

D. JMF Field Adjustments. Produce a mixture of uniform composition closely conforming to the approved JMF.
If, during initial days of production, the Contractor or Engineer determines that adjustments to the JMF are necessary to achieve the specified requirements, or to more nearly match the

aggregate production, the Engineer may allow adjustment of the JMF within the tolerances of Table 7 without a laboratory redesign of the mixture.

The Engineer will adjust the asphalt content to maintain desirable laboratory density near the optimum value while achieving other mix requirements.

Table 7
Operational Tolerances

Description	Test Method	Allowable Difference from JMF Target
Individual % retained for #8 sieve and larger	Tex-200-F or Tex-236-F	±5.0[1]
Individual % retained for sieves smaller than #8 and larger than #200		±3.0[1]
% passing the #200 sieve		±2.0[1]
Asphalt content, %	Tex-236-F	±0.3[1]
Laboratory-molded density, %	Tex-207-F	±1.0
VMA, %, min		Note 2

1. When within these tolerances, mixture production gradations may fall outside the master grading limits; however, the percent passing the #200 sieve will be considered out of tolerance when outside the master grading limits.
2. Test and verify that Table 4 requirements are met.

E. Production Operations. Perform a new trial batch when the plant or plant location is changed. The Engineer may suspend production for noncompliance with this Item. Take corrective action and obtain approval to proceed after any production suspension for noncompliance.

1. Operational Tolerances. During production, do not exceed the operational tolerances in Table 7. Stop production if testing indicates tolerances are exceeded on:
   - 3 consecutive tests on any individual sieve,
   - 4 consecutive tests on any of the sieves, or
   - 2 consecutive tests on asphalt content.

   Begin production only when test results or other information indicate, to the satisfaction of the Engineer, that the next mixture produced will be within Table 7 tolerances.

2. Storage and Heating of Materials. Do not heat the asphalt binder above the temperatures specified in Item 300, "Asphalts, Oils, and Emulsions" or outside the manufacturer's recommended values. On a daily basis, provide the Engineer with the records of asphalt binder and hot-mix asphalt discharge temperatures in accordance with Item 320, "Equipment for Asphalt Concrete Pavement." Unless otherwise approved, do not store mixture for a period long enough to affect the quality of the mixture, nor in any case longer than 12 hr.

3. Mixing and Discharge of Materials. Notify the Engineer of the target discharge temperature and produce the mixture within 25°F of the target. Monitor the temperature of the material in

the truck before shipping to ensure that it does not exceed 350°F. The Department will not pay for or allow placement of any mixture produced at more than 350°F. Control the mixing time and temperature so that substantially all moisture is removed from the mixture before discharging from the plant.

F. Hauling Operations. Before use, clean all truck beds to ensure mixture is not contaminated. When a release agent is necessary to coat truck beds, use a release agent on the approved list maintained by the Construction Division.

G. Placement Operations. Prepare the surface by removing raised pavement markers and objectionable material such as moisture, dirt, sand, leaves, and other loose impediments from the surface before placing mixture. Remove vegetation from pavement edges. Place the mixture to meet the typical section requirements and produce a smooth, finished surface with a uniform appearance and texture. Offset longitudinal joints of successive courses of hot mix by at least 6 in. Place mixture so longitudinal joints on the surface course coincide with lane lines, or as directed. Ensure that all finished surfaces will drain properly. Place mixture within the compacted lift thickness shown in Table 8, unless otherwise shown on the plans or allowed.

Table 8
Compacted Lift Thickness and Required Core Height

Mixture Type	Compacted Lift Thickness	
	Minimum (in.)	Maximum (in.)
A	3.00	6.00
B	2.50	5.00
C	2.00	4.00
D	1.50	3.00
F	1.25	2.50

1. Weather Conditions. Place mixture when the roadway surface temperature is 60°F or higher unless otherwise approved. Measure the roadway surface temperature with a handheld infrared thermometer. Unless otherwise shown on the plans, place mixtures only when weather conditions and moisture conditions of the roadway surface are suitable in the opinion of the Engineer.

2. Tack Coat. Clean the surface before placing the tack coat. Unless otherwise approved, apply tack coat uniformly at the rate directed by the Engineer. The Engineer will set the rate between 0.04 and 0.10 gal. of residual asphalt per square yard of surface area. Apply a thin, uniform tack coat to all contact surfaces of curbs, structures, and all joints. Prevent splattering of tack coat when placed adjacent to curb, gutter, and structures. Roll the tack coat with a pneumatic-tire roller when directed. The Engineer may use Tex-243-F to verify that the tack coat has adequate adhesive properties. The Engineer may suspend paving operations until there is adequate adhesion.

H. Lay-Down Operations.

1. Minimum Mixture Placement Temperatures. Use Table 9 for suggested minimum mixture placement temperatures.

2. Windrow Operations. When hot mix is placed in windrows, operate windrow pickup equipment so that substantially all the mixture deposited on the roadbed is picked up and loaded into the paver.

Table 9
Suggested Minimum Mixture Placement Temperature

High-Temperature Binder Grade	Minimum Placement Temperature (Before Entering Paver)
PG 64 or lower	260°F
PG 70	270°F
PG 76	280°F
PG 82 or higher	290°F

I. Compaction. Use air void control unless ordinary compaction control is specified on the plans. Avoid displacement of the mixture. If displacement occurs, correct to the satisfaction of the Engineer. Ensure pavement is fully compacted before allowing rollers to stand on the pavement. Unless otherwise directed, use only water or an approved release agent on rollers, tamps, and other compaction equipment. Keep diesel, gasoline, oil, grease, and other foreign matter off the mixture. Unless otherwise directed, operate vibratory rollers in static mode when not compacting, when changing directions, or when the plan depth of the pavement mat is less than 1-1/2 in. Use tamps to thoroughly compact the edges of the pavement along curbs, headers, and similar structures and in locations that will not allow thorough compaction with the rollers. The Engineer may require rolling with a trench roller on widened areas, in trenches, and in other limited areas.

Allow the compacted pavement to cool to 160°F or lower before opening to traffic unless otherwise directed. When directed, sprinkle the finished mat with water or limewater to expedite opening the roadway to traffic.

1. Air Void Control. Compact dense-graded hot-mix asphalt to contain from 5% to 9% in-place air voids. Do not increase the asphalt content of the mixture to reduce pavement air voids.

   a. Rollers. Furnish the type, size, and number or rollers required for compaction, as approved. Use a pneumatic-tire roller to seal the surface, unless otherwise shown on the plans. Use additional rollers as required to remove any roller marks.

   b. Air Void Determination. Unless otherwise shown on the plans, obtain 2 roadway specimens at each location selected by the Engineer for in-place air void determination. The Engineer will measure air voids in accordance with Tex-207-F and Tex-227-F. Before drying to a constant weight, cores may be predried using a Corelok or similar vacuum device to remove excess moisture. The Engineer will use the average air void content of the 2 cores to calculate the in-place air voids at the selected location.

   c. Air Voids Out of Range. If the in-place air void content in the compacted mixture is below 5% or greater than 9%, change the production and placement operations to bring the in-place air void content within requirements. The Engineer may suspend production until the in-place air void content is brought to the required level, and may require a test section as described in Section 340.4.H.1.d, “Test Section.”

d. Test Section. Construct a test section of 1 lane-width and at most 0.2 mi. in length to demonstrate that compaction to between 5% and 9% in-place air voids can be obtained. Continue this procedure until a test section with 5% to 9% in-place air voids can be produced. The Engineer will allow only 2 test sections per day. When a test section producing satisfactory in-place air void content is placed, resume full production.

2. Ordinary Compaction Control. Furnish the type, size, and number or rollers required for compaction, as approved. Furnish at least 1 medium pneumatic-tire roller (minimum 12-ton weight). Use the control strip method given in Tex-207-F, Part IV, to establish rolling patterns that achieve maximum compaction. Follow the selected rolling pattern unless changes that affect compaction occur in the mixture or placement conditions. When such changes occur, establish a new rolling pattern. Compact the pavement to meet the requirements of the plans and specifications.
   When rolling with the 3-wheel, tandem or vibratory rollers, start by first rolling the joint with the adjacent pavement and then continue by rolling longitudinally at the sides. Proceed toward the center of the pavement, overlapping on successive trips by at least 1 ft., unless otherwise directed. Make alternate trips of the roller slightly different in length. On superelevated curves, begin rolling at the low side and progress toward the high side unless otherwise directed.

J. Irregularities. Immediately take corrective action if surface irregularities, including but not limited to segregation, rutting, raveling, flushing, fat spots, mat slippage, color, texture, roller marks, tears, gouges, streaks, or uncoated aggregate particles, are detected. The Engineer may suspend production or placement operations until the problem is corrected.
   At the expense of the Contractor and to the satisfaction of the Engineer, remove and replace any mixture that does not bond to the existing pavement or that has other surface irregularities identified above.

K. Ride Quality. Use Surface Test Type A to evaluate ride quality in accordance with Item 585, “Ride Quality for Pavement Surfaces,” unless otherwise shown on the plans.

END OF SECTION 321216

SECTION 321220

PAVING REPAIR AND RESURFACING

PART - GENERAL

1.1 WORK INCLUDED

A. Furnish labor, materials, equipment and incidentals necessary to repair and resurface pavement. This section shall govern for the repair or replacement of pavement or other improved surfaces damaged or destroyed in performing the construction of water and sewer lines. Construction of such projects below pavement subgrade is covered by Section 312200 TRENCH, EXCAVATION, BACKFILL, AND COMPACTION.

1.2 SUBMITTALS

A. Submittals shall be in accordance with Section 013330, SUBMITTALS and shall include:

1. Proposed material list and sources
2. Experience record of proposed paving subcontractor

1.3 STANDARDS

A. The applicable provisions of the following standards shall apply as if written here in their entirety:

1. Texas Department of Transportation (TxDOT), Standard Specifications for Construction of Highways, Streets, and Bridges, latest edition.

1.4 JOB CONDITIONS

A. Do not place materials when, in the opinion of the Engineer, weather conditions are unsuitable. Do not place concrete when the temperature is 40 degrees F and falling. Concrete may be placed when temperature is above 35 degrees F and rising. Do not place asphalt or asphaltic concrete when the temperature is below 50 degrees F and falling. Asphalt or asphaltic concrete may be placed when temperature is above 40 degrees F and rising.

PART 2 - PRODUCTS

2.1 MATERIALS

A. CONCRETE PAVEMENT

1. CONCRETE: 3,500 psi.
2. REINFORCING STEEL: Of the same size and spacing as in the existing concrete pavement unless otherwise indicated. New billet steel, deformed bars, conforming to ASTM A615, Grade 60.

B. ASPHALT PAVEMENT

1. HOT MIX ASPHALTIC CONCRETE
   a. HMAC Surface Course: Conforming to TxDOT Standard Specifications, Item 340, Type D.
   b. Asphaltic Materials Used in the Mix: Conforming to TxDOT Standard Specifications, Item 300. The grade of asphalt shall be AC-20. Other grades of asphalt will be considered if weather conditions or mix design appear to warrant a change.
   c. AGGREGATE: Conforming to TxDOT Standard Specification, Item 340.2.
   d. PRIME COAT: Conforming to TxDOT Standard Specifications, Item 300, Grade MC-30, or an appropriate asphalt emulsion.
   e. TACK COAT: Cut-back asphalt RC-2 or MC-2 conforming to ASTM D598, unless otherwise approved by the Engineer.
2. TWO-COURSE SURFACE TREATMENT: Conforming to TxDOT Standard Specifications, Item 316. Asphaltic materials shall conform to TxDOT Standard Specifications, Item 300, AC-10 for hot weather and AC-5 for cooler weather. Aggregates shall conform to TxDOT Standard Specifications, Item 302. First course shall be Grade 1 and second course shall be Grade 2.
3. FLEXIBLE BASE: Of the depth and to the extent shown on the plans. Unless otherwise shown on plans, flexible base shall be one (1) or more of the following listed options:
   a. Flexible Base Material: Conforming to TxDOT Standard Specifications, Item 247, Type A, B, C, or D, Grade 1 or Grade 2.
   b. Full Depth Asphaltic Concrete: Conforming to TxDOT Standard Specifications, Item 340, Type A, B, or C.

PART 3 - EXECUTION

3.1 PREPARATION

A. CONCRETE PAVEMENT

Cut pavement in parallel straight lines a minimum of 1' outside trench walls on each side to permit pavement removal before trench excavation. Make cuts by sawing partial pavement depth to avoid cutting reinforcing steel. After concrete pavement is broken up and removed, cut off existing reinforcing steel to provide a minimum of 30 bar diameters lap with new reinforcing steel on each side and bent back to clear the trench for excavation and pipe laying.

B. ASPHALT PAVEMENT

Cut paved surface in parallel straight lines outside trench walls prior to trench excavation. Before pavement replacement has begun, make additional straight line cuts and remove pavement a minimum of 1' outside trench walls.

C. SUBGRADE

The subgrade, including granular trench backfill, shall be approved by the Engineer before any base

or pavement surface is replaced. Moisten, reshape, and re-compact subgrade as necessary to receive the base material.

3.2 INSTALLATION

A. CONCRETE PAVEMENT REPLACEMENT

1. Install reinforcing steel on the approved subgrade and securely tie in place. Bend down existing reinforcing into proper position and securely tie each bar to new reinforcing bars. Support and tie reinforcing to steel bar chairs or other suitable supporting devices. New reinforcement shall be of equal size and spacing to existing steel, unless otherwise indicated. Install substantial forms to proper grade at pavement edges.
2. Rapidly deposit concrete on the subgrade in successive batches and distribute to the required depth and for the entire width of the pavement by shoveling or other approved methods. Do not use rakes in handling concrete. The placing operation shall be continuous. Level the concrete, as soon as placed, and then struck off and screed to such elevation above grade that when consolidated and finished the surface of the pavement shall be at the proper elevation. Tamp the entire surface and consolidate the concrete so as to insure maximum compaction and a minimum of voids.
3. After final floating and while the concrete is still workable, finish the surface to provide a uniform surface of gritty texture by brooming, use of belting, burlap drags or other approved methods.
4. Cure the concrete with an approved curing compound or other approved means. Concrete pavement shall not be opened to traffic until it has gained sufficient strength to withstand traffic without damage unless approved protective devices are provided. Concrete pavement at an age of seven (7) days or a strength of 2,000 psi may be opened to traffic.

B. FLEXIBLE BASE

1. Where the base course exceeds 6" in thickness, construct the flexible base in two (2) or more courses of equal thickness. Wet, manipulate, and compact material to 95% maximum density as determined by ASTM D698. Where deemed necessary by the Engineer, apply a uniform application of prime coat asphaltic material to the surface of the prepared subgrade, applied at a rate of not less than 0.30 gallon per square yard of surface.
2. Where plant mix asphalt material is used for base, construction shall be in accordance with TxDOT Standard Specifications, Item 351, as applicable to small areas.

C. ASPHALT PAVEMENT REPLACEMENT

1. HOT MIX ASPHALTIC CONCRETE: Apply prime coat to base or tack coat base as indicated. Coat contact surfaces of pavement edges and structures with asphalt before any pavement is placed. Do not place pavement until the Engineer has approved the base. Hauling or transporting of the material to the project site, placing, compaction, and shaping shall be in accordance with TxDOT Standard Specification Item 340.6 as applicable for small areas. After final compaction of the pavement, no vehicular traffic of any kind shall be permitted until the pavement has cooled and hardened for at least six (6) hours. Smooth the finished surface course, upon completion of final rolling true to grade and cross section. Immediately correct low or defective areas by cutting out the faulty areas and replacing with fresh, hot mixture. Compact

the area to conform to the remainder of the pavement.

2. TWO-COURSE ASPHALT SURFACE TREATMENT: On the approved surface of the finished base, asphalt at the rate of 0.20 to 0.30 gallons per square yard shall be applied by an approved distributor so operated to result in a uniform, proper distribution at the correct temperature. Immediately cover the surface with No. 1 aggregate, distribute at a rate of one cubic yard per 80 square yards, broom as necessary for uniform distribution, and roll with a flat wheel roller of ample weight. Make a second application of asphalt in the manner specified for the first application, at a rate of 0.30 to 0.40 gallon per square yard. Make the second application with No. 2 aggregate at a rate of one cubic yard per 110 square yards and process as specified for the first application. After the work has been completed, there should be a slight excess of aggregate on the surface.

D. OTHER IMPROVED SURFACES

Where water, storm drains, or sewer lines to be constructed traverse or cross through gravel surfaced public roads or shoulders, or private dirt or gravel driveways or parking areas, replace the surface with a quality material, workmanship and at a thickness at least equal to the existing surfaces.

END OF SECTION 321220

SECTION 321260

ASPHALTS, OILS AND EMULSIONS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Provide asphalt cements, cutback and emulsified asphalts, performance-graded asphalt binders, and other miscellaneous asphalt materials as specified on the plans.

PART 2 - PRODUCTS

2.1 MATERIALS:

A. Provide asphalt materials that meet the stated requirements when tested in accordance with the referenced Department, AASHTO, and ASTM test methods. Refer to the Material Inspection Guide (maintained by the Construction Division), Section 11. "Asphalt Inspection, Quality Control and Quality Assurance," for sampling and testing requirements. Acronyms used in this Item are defined in Table 1.

Table 1
Acronyms

Acronym	Definition
Test Procedure Designations	
Tex	Department
T or R	AASHTO
D	ASTM
Polymer Modifier Designations	
P	polymer-modified
SBR or L	styrene-butadiene rubber (latex)
SBS	styrene-butadiene-styrene block co-polymer
TR	tire rubber (from ambient temperature grinding of truck and passenger tires)
AC	asphalt cement
AE	asphalt emulsion
AE-P	asphalt emulsion prime
A-R	asphalt-rubber
C	cationic
EAP&T	emulsified asphalt prime and tack
H-suffix	harder residue (lower penetration)
HF	high float
MC	medium-curing

Table 1 (continued)
Acronyms

Acronym	Definition
MS	medium-setting
PCE	prime, cure, and erosion control
PG	performance grade
RC	rapid-curing
RS	rapid-setting
S-suffix	stockpile usage
SCM	special cutback material
SS	slow-setting

A. Asphalt Cement. Asphalt cement must be homogeneous, water-free, and nonfoaming when heated to 347°F, and must meet Table 2 requirements.

Table 2
Asphalt Cement

Property	Test Procedure	Viscosity Grade									
		AC-0.6		AC-1.5		AC-3		AC-5		AC-10	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity	T 202										
140°F, poise		40	80	100	200	250	350	400	600	800	1,200
275°F, poise		0.4	–	0.7	–	1.1	–	1.4	–	1.9	–
Penetration, 77°F, 100g, 5 sec.	T 49	350	–	250	–	210	–	135	–	85	–
Flash point, C.O.C., °F	T 48	425	–	425	–	425	–	425	–	450	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–	99.0	–	99.0	–
Spot test	Tex-509-C	Neg.		Neg.		Neg.		Neg.		Neg.	
Tests on residue from Thin-Film Oven Test:	T 179										
Viscosity, 140°F, poise	T 202	–	180	–	450	–	900	–	1,500	–	3,000
Ductility[1], 77°F 5 cm/min., cm	T 51	100	–	100	–	100	–	100	–	100	–

1. If AC-0.6 or AC-1.5 ductility at 77°F is less than 100 cm, material is acceptable if ductility at 60°F is more than 100 cm.

A. Polymer-Modified Asphalt Cement. Polymer-modified asphalt cement must be smooth and homogeneous, and comply with the requirements of Table 3. If requested, supply samples of the base asphalt cement and polymer additives.

Table 3
Polymer-Modified Asphalt Cement

Property	Test Procedure	Polymer-Modified Viscosity Grade							
		AC-5 w/2% SBR		AC-10 w/2% SBR		AC-15P		AC-20-5TR	
		Min	Max	Min	Max	Min	Max	Min	Max
Polymer		SBR		SBR		SBS		TR	
Polymer content, % (solids basis)	Tex-533-C	2.0	–	2.0	–	3.0	–	5.0	–
Dynamic shear, G*/sin δ, 64°C, 10 rad/s, kPa	T 315	–	–	–	–	–	–	1.0	–
Viscosity									
140°F, poise	T 202	700	–	1,300	–	1,500	–	2,000	–
275°F, poise	T 202	–	7.0	–	8.0	–	8.0	–	10.0
Penetration, 77°F, 100 g, 5 sec.	T 49	120	–	80	–	100	150	75	115
Ductility, 5cm/min., 39.2°F, cm	T 51	70	–	60	–	–	–	–	–
Elastic recovery, 50°F, %	Tex-539-C	–	–	–	–	55	–	55	–
Softening point, °F	T 53	–	–	–	–	–	–	120	–
Polymer separation, 48 hr.	Tex-540-C	None		None		None		None	
Flash point, C.O.C., °F	T 48	425	–	425	–	425	–	425	–
Tests on residue from Thin-Film Oven Test:	T 179								
Retained penetration ratio, 77°F	T 49	–	–	–	–	0.60	1.00	0.60	1.00
Tests on residue from RTFOT aging and pressure aging:	Tex-541-C and R 28								
Creep stiffness	T 313								
S, -18°C, MPa		–	–	–	–	–	–	–	300
m-value, -18°C		–	–	–	–	–	–	0.300	–

C. Cutback Asphalt. Cutback asphalt must meet the requirements of Tables 4, 5, and 6 for the specified type and grade. If requested, supply samples of the base asphalt cement and polymer additives.

Table 4
Rapid-Curing Cutback Asphalt

Property	Test Procedure	Type–Grade					
		RC-250		RC-800		RC-3000	
		Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	250	400	800	1,600	3,000	6,000
Water, %	T 55	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	80	–	80	–	80	–
Distillation test:	T 78						
Distillate, percentage by volume of total distillate to 680°F							
to 437°F		40	75	35	70	20	55
to 500°F		65	90	55	85	45	75
to 600°F		85	–	80	–	70	–
Residue from distillation, volume %		70	–	75	–	82	–
Tests on distillation residue:							
Penetration, 100 g, 5 sec., 77°F	T 49	80	120	80	120	80	120
Ductility, 5 cm/min., 77°F, cm	T 51	100	–	100	–	100	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–
Spot test	Tex-509-C	Neg.		Neg.		Neg.	

Table 5
Medium-Curing Cutback Asphalt

Property	Test Procedure	Type–Grade							
		MC-30		MC-250		MC-800		MC-3000	
		Min	Max	Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	30	60	250	500	800	1,600	3,000	6,000
Water, %	T 55	–	0.2	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	100	–	150	–	150	–	150	–
Distillation test:	T 78								
Distillate, percentage by volume of total distillate to 680°F									
to 437°F		–	25	–	10	–	–	–	–
to 500°F		40	70	15	55	–	35	–	15
to 600°F		75	93	60	87	45	80	15	75
Residue from distillation, volume %		50	–	67	–	75	–	80	–
Tests on distillation residue:									
Penetration, 100 g, 5 sec., 77°F	T 49	120	250	120	250	120	250	120	250
Ductility, 5 cm/min., 77°F, cm[1]	T 51	100	–	100	–	100	–	100	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–	99.0	–
Spot test	Tex-509-C	Neg.		Neg.		Neg.		Neg.	

Table 6
Special-Use Cutback Asphalt

Property	Test Procedure	Type–Grade					
		MC-2400L		SCM I		SCM II	
		Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	2,400	4,800	500	1,000	1,000	2,000
Water, %	T 55	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	150	–	175	–	175	–
Distillation test:	T 78						
Distillate, percentage by volume of total distillate to 680°F							
to 437°F		–	–	–	–	–	–
to 500°F		–	35	–	0.5	–	0.5
to 600°F		35	80	20	60	15	50
Residue from distillation, volume %		78	–	76	–	82	–
Tests on distillation residue:							
Polymer		SBR		–		–	
Polymer content, % (solids basis)	Tex-533-C	2.0	–	–	–	–	–
Penetration, 100 g, 5 sec., 77°F	T 49	150	300	180	–	180	–
Ductility, 5 cm/min., 39.2°F, cm	T 51	50	–	–	–	–	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–

D. Emulsified Asphalt. Emulsified asphalt must be homogeneous, not separate after thorough mixing, and meet the requirements for the specified type and grade in Tables 7, 8, 9, and 10.

Table 7
Emulsified Asphalt

Property	Test Procedure	Type–Grade									
		Rapid-Setting		Medium-Setting				Slow-Setting			
		HFRS-2		MS-2		AES-300		SS-1		SS-1H	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol	T 72										
77°F, sec.		–	–	–	–	75	400	20	100	20	100
122°F, sec.		150	400	100	300	–	–	–	–	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1
Miscibility	T 59	–		–		–		Pass		Pass	
Cement mixing, %	T 59	–	–	–	–	–	–	–	2.0	–	2.0
Coating ability and water resistance:	T 59										
dry aggregate/after spray		–		–		Good/Fair		–		–	
wet aggregate/after spray		–		–		Fair/Fair		–		–	
Demulsibility, 35 ml of 0.02 N $CaCl_2$, %	T 59	50	–	–	30	–	–	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	1	–	1	–	1
Freezing test, 3 cycles[1]	T 59	–		Pass		–		Pass		Pass	
Distillation test:	T 59										
Residue by distillation, % by wt.		65	–	65	–	65	–	60	–	60	–
Oil distillate, % by volume of emulsion		–	0.5	–	0.5	–	5	–	0.5	–	0.5
Tests on residue from distillation:											
Penetration, 77°F, 100 g, 5 sec.	T 49	100	140	120	160	300	–	120	160	70	100
Solubility in trichloroethylene, %	T 44	97.5	–	97.5		97.5	–	97.5	–	97.5	–
Ductility, 77°F, 5 cm/min., cm	T 51	100	–	100		–	–	100	–	80	–
Float test, 140°F, sec.	T 50	1,200	–	–		1,200	–	–	–	–	–

1. Applies only when the Engineer designates material for winter use.

Table 8
Cationic Emulsified Asphalt

Property	Test Procedure	Type–Grade											
		Rapid-Setting				Medium-Setting				Slow-Setting			
		CRS-2		CRS-2H		CMS-2		CMS-2S		CSS-1		CSS-1H	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol	T 72												
77°F, sec.		–	–	–	–	–	–	–	–	20	100	20	100
122°F, sec.		150	400	150	400	100	300	100	300	–	–	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1
Cement mixing, %	T 59	–	–	–	–	–	–	–	–	–	2.0	–	2.0
Coating ability and water resistance:	T 59												
dry aggregate/after spray		–		–		Good/Fair		Good/Fair		–		–	
wet aggregate/after spray		–		–		Fair/Fair		Fair/Fair		–		–	
Demulsibility, 35 ml of 0.8% sodium dioctyl sulfosuccinate, %	T 59	70	–	70	–	–	–	–	–	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	1	–	1	–	1	–	1
Particle charge	T 59	Positive		Positive		Positive		Positive		Positive		Positive	
Distillation test:	T 59												
Residue by distillation, % by wt.		65	–	65	–	65	–	65	–	60	–	60	–
Oil distillate, % by volume of emulsion		–	0.5	–	0.5	–	7	–	5	–	0.5	–	0.5
Tests on residue from distillation:													
Penetration, 77°F, 100 g, 5 sec.	T 49	120	160	70	110	120	200	300	–	120	160	70	110
Solubility in trichloroethylene, %	T 44	97.5	–	97.5	–	97.5	–	97.5	–	97.5	–	97.5	–
Ductility, 77°F, 5 cm/min., cm	T 51	100	–	80	–	100	–	–	–	100	–	80	–

Table 9
Polymer-Modified Emulsified Asphalt

Property	Test Procedure	Type–Grade											
		Rapid-Setting				Medium-Setting				Slow-Setting			
		RS-1P		HFRS-2P		AES-150P		AES-300P		AES-300S		SS-1P	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol	T 72												
77°F, sec.		–	–	–	–	75	400	75	400	75	400	30	100
122°F, sec.		50	200	150	400	–	–	–	–	–	–	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1	–	0.1
Miscibility	T 59	–		–		–		–		–		Pass	
Coating ability and water resistance:	T 59												
dry aggregate/after spray		–		–		Good/Fair		Good/Fair		Good/Fair		–	
wet aggregate/after spray		–		–		Fair/Fair		Fair/Fair		Fair/Fair		–	
Demulsibility, 35 ml of 0.02 N $CaCl_2$, %	T 59	60	–	50	–	–	–	–	–	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	1	–	1	–	1	–	1
Breaking index, g	Tex-542-C	–	80	–	–	–	–	–	–	–	–	–	–
Distillation test:[1]	T 59												
Residue by distillation, % by wt.		65	–	65	–	65	–	65	–	65	–	60	–
Oil distillate, % by volume of emulsion		–	3	–	0.5	–	3	–	5	–	7	–	0.5
Tests on residue from distillation:													
Polymer content, wt. % (solids basis)	Tex-533-C	–	–	3.0	–	–	–	–	–	–	–	3.0	–
Penetration, 77°F, 100 g, 5 sec.	T 49	225	300	90	140	150	300	300	–	300	–	100	140
Solubility in trichloroethylene, %	T 44	97.0	–	97.0	–	97.0	–	97.0	–	97.0	–	97.0	–
Viscosity, 140°F, poise	T 202	–	–	1,500	–	–	–	–	–	–	–	1,300	–
Float test, 140°F, sec.	T 50	–	–	1,200	–	1,200	–	1,200	–	1,200	–	–	–
Ductility[2], 39.2°F, 5 cm/min., cm	T 51	–	–	50	–	–	–	–	–	–	–	50	–
Elastic recovery[2], 50°F, %	Tex-539-C	55	–	55	–	–	–	–	–	–	–	–	–

Property	Test	Type–Grade											
Tests on RTFO curing of distillation residue Elastic recovery, 50°F, %	Tex-541-C Tex-539-C	–	–	–	–	50	–	50	–	30	–	–	–

1. Exception to T 59: Bring the temperature on the lower thermometer slowly to 350°F ±10°F. Maintain at this temperature for 20 min. Complete total distillation in 60 ±5 min. from the first application of heat.
2. HFRS-2P must meet one of either the ductility or elastic recovery requirements.

Table 10
Polymer-Modified Cationic Emulsified Asphalt

Property	Test Procedure	Type-Grade					
		Rapid-Setting				Slow-Setting	
		CRS-1P		CRS-2P		CSS-1P	
		Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol 77°F, sec. 122°F, sec.	T 72	 – 50	 – 150	 – 150	 – 400	 20 –	 100 –
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1
Demulsibility, 35 ml of 0.8% sodium dioctyl sulfosuccinate, %	T 59	60	–	70	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	1
Breaking index, g	Tex-542-C	–	80	–	–	–	–
Particle charge	T 59	Positive		Positive		Positive	
Distillation test:[1] Residue by distillation, % by weight Oil distillate, % by volume of emulsion	T 59	 65 –	 – 3	 65 –	 – 0.5	 62 –	 – 0.5
Tests on residue from distillation: Polymer content, wt. % (solids basis) Penetration, 77°F, 100 g, 5 sec. Viscosity, 140°F, poise Solubility in trichloroethylene, % Softening point, °F Ductility, 77°F, 5 cm/min., cm Ductility[2], 39.2°F, 5 cm/min., cm Elastic recovery[2], 50°F, %	 Tex-533-C T 49 T 202 T 44 T 53 T 51 T 51 Tex-539-C	 – 225 – 97.0 – – – 45	 – 300 – – – – – –	 3.0 90 1,300 97.0 – – 50 55	 – 150 – – – – – –	 3.0 55 – 97.0 135 70 – –	 – 90 – – – – – –

1. Exception to T 59: Bring the temperature on the lower thermometer slowly to 350°F ±0°F. Maintain at this temperature for 20 min. Complete total distillation in 60 ±5 min. from the first application of heat.
2. CRS-2P must meet one of either the ductility or elastic recovery requirements.

E. Specialty Emulsions. Specialty emulsions may be either asphalt-based or resin-based and must meet the requirements of Table 11

Table 11

Specialty Emulsions

Property	Test Procedure	Type–Grade					
		Medium-Setting				Slow-Setting	
		AE–P		EAP&T		PCE[1]	
		Min	Max	Min	Max	Min	Max
Viscosity, Saybolt Furol	T 72						
77°F, sec.		–	–	–	–	10	100
122°F, sec.		15	150	–	–	–	–
Sieve test, %	T 59	–	0.1	–	0.1	–	0.1
Miscibility[2]	T 59	–		Pass		Pass	
Demulsibility, 35 ml of 0.10 N $CaCl_2$, %	T 59	–	70	–	–	–	–
Storage stability, 1 day, %	T 59	–	1	–	1	–	–
Particle size[5], % by volume < 2.5 □m	Tex-238-F[3]	–	–	90	–	90	–
Asphalt emulsion distillation to 500°F followed by Cutback asphalt distillation of residue to 680°F:	T 59 & T 78						
Residue after both distillations, % by wt.		40	–	–	–	–	–
Total oil distillate from both distillations, % by volume of emulsion		25	40	–	–	–	–
Residue by distillation, % by wt.	T 59	–	–	60	–	–	–
Residue by evaporation[4], % by wt.	T 59	–	–	–	–	60	–
Tests on residue after all distillation(s):							
Viscosity, 140°F, poise	T 202	–	–	800	–	–	–
Kinematic viscosity[5], 140°F, cSt	T 201	–	–	–	–	100	350
Flash point C.O.C., °F	T 48	–	–	–	–	400	–
Solubility in trichloroethylene, %	T 44	97.5	–	–	–	–	–
Float test, 122°F, sec.	T 50	50	200	–	–	–	–

1. Supply with each shipment of PCE:
a) a copy of a lab report from an approved analytical lab, signed by a lab official, indicating the PCE formulation does not meet any characteristics of a Resource Conservation Recovery Act (RCRA) hazardous waste;
b) a certification from the producer that the formulation supplied does not differ from the one tested and that no listed RCRA hazardous wastes or PCBs have been mixed with the product; and
c) a Material Safety Data Sheet.
2. Exception to T 59: In dilution, use 350 ml of distilled or deionized water and a 1,000-ml beaker.
3. Use Tex-238-F, beginning at "Particle Size Analysis by Laser Diffraction," with distilled or deionized water as a medium and no dispersant, or use another approved method.
4. Exception to T 59: Leave sample in the oven until foaming ceases, then cool and weigh.
5. PCE must meet either the kinematic viscosity requirement or the particle size requirement.

F. Recycling Agent. Recycling agent and emulsified recycling agent must meet the requirements in Table 12. Additionally, recycling agent and residue from emulsified recycling agent, when added in the specified proportions to the recycled asphalt, must meet the properties specified on the plans.

Table 12
Recycling Agent and Emulsified Recycling Agent

Property	Test Procedure	Recycling Agent		Emulsified Recycling Agent	
		Min	Max	Min	Max
Viscosity, Saybolt Furol, 77°F, sec.	T 72	–	–	15	100
Sieve test, %	T 59	–	–	–	0.1
Miscibility[1]	T 59	–		No coagulation	
Residue by evaporation[2], % by wt.	T 59	–	–	60	–
Tests on recycling agent or residue from evaporation:					
Flash point, C.O.C., °F	T 48	400	–	400	–
Kinematic viscosity,	T 201				
140°F, cSt		75	200	75	200
275°F, cSt		–	10.0	–	10.0

1. Exception to T 59: Use 0.02 N $CaCl_2$ solution in place of water.
2. Exception to T 59: Maintain sample at 300°F until foaming ceases, then cool and weigh.

G. Crumb Rubber Modifier. Crumb rubber modifier (CRM) consists of automobile and truck tires processed by ambient temperature grinding.

CRM must be:

- free from contaminants including fabric, metal, and mineral and other nonrubber substances;
- free-flowing; and
- nonfoaming when added to hot asphalt binder.

When tested in accordance with Tex-200-F, Part I, using a 50-g sample, the rubber gradation must meet the requirements of the grades in Table 13.

Table 13
CRM Gradations

Sieve Size (% Passing)	Grade A		Grade B		Grade C		Grade D	Grade E
	Min	Max	Min	Max	Min	Max		
#8	100	–	–	–	–	–	As shown on the plans	As approved
#10	95	100	100	–	–	–		
#16	–	–	70	100	100	–		
#30	–	–	25	60	90	100		
#40	–	–	–	–	45	100		
#50	0	10	–	–	–	–		
#200	–	–	0	5	–	–		

H. Crack Sealer. Polymer modified asphalt-emulsion crack sealer must meet the requirements of Table 14. Rubber-asphalt crack sealer must meet the requirements of Table 15.

Table 14
Polymer-Modified Asphalt Emulsion Crack Sealer

Property	Test Procedure	Min	Max
Rotational viscosity, 77°F, cP	D 2196, Method A	10,000	25,000
Sieve test, %	T 59	–	0.1
Storage stability, 1 day, %	T 59	–	1
Evaporation	Tex-543-C		
Residue by evaporation, % by wt.		65	–
Tests on residue from evaporation:			
Penetration, 77°F, 100 g, 5 sec.	T 49	35	75
Softening point, °F	T 53	140	–
Ductility, 39.2°F, 5 cm/min., cm	T 51	100	–

Table 15
Rubber-Asphalt Crack Sealer

Property	Test Procedure	Class A		Class B	
		Min	Max	Min	Max
CRM content, Grade A or B, % by wt.	Tex-544-C	22	26	–	–
CRM content, Grade B, % by wt.	Tex-544-C	–	–	13	17
Virgin rubber content[1], % by wt.		–	–	2	–
Flash point[2], COC, °F	T 48	400	–	400	–
Penetration[3], 77°F, 150 g, 5 sec.	T 49	30	50	30	50
Penetration[3], 32°F, 200 g, 60 sec.	T 49	12	–	12	–
Softening point, °F	T 53	–	–	170	–
Bond[4]	D5329	–		Pass	

1. Provide certification that the min. % virgin rubber was added.
2. Before passing the test flame over the cup, agitate the sealing compound with a 3/8- to 1/2-in. (9.5- to 12.7-mm) wide, square-end metal spatula in a manner so as to bring the material on the bottom of the cup to the surface, i.e., turn the material over. Start at one side of the thermometer, move around to the other, and then return to the starting point using 8 to 10 rapid circular strokes. Accomplish agitation in 3 to 4 sec. Pass the test flame over the cup immediately after stirring is completed.
3. Exception to T 49: Substitute the cone specified in ASTM D 217 for the penetration needle.
4. No crack in the crack sealing materials or break in the bond between the sealer and the mortar blocks over 1/4 in. deep for any specimen after completion of the test.

I. Asphalt-Rubber Binders. Asphalt-rubber (A-R) binders are mixtures of asphalt binder and CRM, which have been reacted at elevated temperatures. The A-R binders meet D 6114 and contain a minimum of 15% CRM by weight. Types I or II, containing CRM Grade C, are used for hot mixed aggregate mixtures. Types II or III, containing CRM Grade B, are used for surface treatment binder. Table 16 describes required binder properties.

Table 16
A-R Binders

Property	Test Procedure	Binder Type					
		Type I		Type II		Type III	
		Min	Max	Min	Max	Min	Max
Apparent viscosity, 347°F, cP	D 2196, Method A	1,500	5,000	1,500	5,000	1,500	5,000
Penetration, 77°F, 100 g, 5 sec.	T 49	25	75	25	75	50	100
Penetration, 39.2°F, 200 g, 60 sec.	T 49	10	–	15	–	25	–
Softening point, °F	T 53	135	–	130	–	125	–
Resilience, 77°F, %	D 5329	25	–	20	–	10	–
Flash point, C.O.C., °F	T 48	450	–	450	–	450	–
Tests on residue from Thin-Film Oven Test: Retained penetration ratio, 39.2°F, 200 g, 60 sec., % of original	T 179 T 49	75	–	75	–	75	–

J. Performance-Graded Binders. PG binders must be smooth and homogeneous, show no separation when tested in accordance with Tex-540-C, and meet Table 17 requirements.

Separation testing is not required if:

- a modifier is introduced separately at the mix plant either by injection in the asphalt line or mixer,
- the binder is blended on site in continuously agitated tanks, or
- binder acceptance is based on field samples taken from an in-line sampling port at the hot mix plant after the addition of modifiers.

Table 17
Performance-Graded Binders

Property and Test Method	Performance Grade																		
	PG 58			PG 64				PG 70				PG 76				PG 82		
	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28
Average 7-day max pavement design temperature, °C[1]	< 58			< 64				< 70				< 76				< 82		
Min pavement design temperature, °C[1]	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28
ORIGINAL BINDER																		
Flash point, T 48, Min, °C	230																	
Viscosity, T 316:[2, 3] Max, 3.0 Pa·s, test temperature, °C	135																	
Dynamic shear, T 315:[4] G*/sin(□□, Min, 1.00 kPa Test temperature @ 10 rad/sec., °C	58			64				70				76				82		
Elastic recovery, D 6084, 50°F, % Min	–	–	30	–	–	30	50	–	30	50	60	30	50	60	70	50	60	70
ROLLING THIN-FILM OVEN (Tex-541-C)																		
Mass loss, Tex-541-C, Max, %	1.0																	
Dynamic shear, T 315: G*/sin(□□, Min, 2.20 kPa Test temperature @ 10 rad/sec., °C	58			64				70				76				82		
PRESSURE AGING VESSEL (PAV) RESIDUE (R 28)																		
PAV aging temperature, °C	100																	
Dynamic shear, T 315: G*/sin(□□, Max, 5000 kPa Test temperature @ 10 rad/sec., °C	25	22	19	28	25	22	19	28	25	22	19	28	25	22	19	28	25	22

Table 17
Performance-Graded Binders

Property and Test Method	Performance Grade																		
	PG 58			PG 64				PG 70				PG 76				PG 82		
	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28	-34	-16	-22	-28
Average 7-day max pavement design temperature, °C[1]	< 58			< 64				< 70				< 76				< 82		
Min pavement design temperature, °C[1]	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28	>-34	>-16	>-22	>-28
Creep stiffness, T 313:[5, 6]	-	-	-	-	-	-	-	-	-	-	-	-6	-	-	-	-	-	-
S, max, 300 MPa, *m*-value, min, 0.300 Test temperature @ 60 sec., °C	12	18	24	6	12	18	24	6	12	18	24		12	18	24	6	12	18
Direct tension, T 314:[6]	-	-	-	-	-	-	-	-	-	-	-	-6	-	-	-	-	-	-
Failure strain, min, 1.0% Test temperature 1.0 mm/min., °C	12	18	24	6	12	18	24	6	12	18	24		12	18	24	6	12	18

1. Pavement temperatures are estimated from air temperatures using an algorithm contained in a Department-supplied computer program, may be provided by the Department, or by following the procedures outlined in AASHTO MP 2 and PP 28.

2. This requirement may be waived at the Department's discretion if the supplier warrants that the asphalt binder can be adequately pumped, mixed, and compacted at temperatures that meet all applicable safety, environmental, and constructability requirements. At test temperatures where the binder is a Newtonian fluid, any suitable standard means of viscosity measurement may be used, including capillary (T 201 or T 202) or rotational viscometry (T 316).

3. Viscosity at 135°C is an indicator of mixing and compaction temperatures that can be expected in the lab and field. High values may indicate high mixing and compaction temperatures. Additionally, significant variation can occur from batch to batch. Contractors should be aware that variation could significantly impact their mixing and compaction operations. Contractors are therefore responsible for addressing any constructability issues that may arise.

4. For quality control of unmodified asphalt binder production, measurement of the viscosity of the original asphalt binder may be substituted for dynamic shear measurements of G*/sin(□) at test temperatures where the asphalt is a Newtonian fluid. Any suitable standard means of viscosity measurement may be used, including capillary (T 201 or T 202) or rotational viscometry (T 316).

5. Silicone beam molds, as described in AASHTO TP 1-93, are acceptable for use.

6. If creep stiffness is below 300 MPa, direct tension test is not required. If creep stiffness is between 300 and 600 MPa, the direct tension failure strain requirement can be used instead of the creep stiffness requirement. The *m*-value requirement must be satisfied in both cases.

2.2 EQUIPMENT

A. Provide all equipment necessary to transport, store, sample, heat, apply, and incorporate asphalts, oils and emulsions.

PART 3 – EXECUTION

3.1 CONSTRUCTION

A. Typical Material Use. Table 18 shows typical materials used for specific applications, Theses are typical uses only. Circumstances may require use of other material.

Table 18
Typical Material Use

Material Application	Typically Used Materials
Hot-mixed, hot-laid asphalt mixtures	PG binders, A-R binders Types I and II
Surface treatment	AC-5, AC-10, AC-5 w/2% SBR, AC-10 w/2% SBR, AC-15P, AC-20-5TR, HFRS-2, MS-2, CRS-2, CRS-2H, HFRS-2P, CRS-2P, A-R binders Types II and III
Surface treatment (cool weather)	RS-1P, CRS-1P, RC-250, RC-800, RC-3000, MC-250, MC-800, MC-3000, MC-2400L
Precoating	AC-5, AC-10, PG 64-22, SS-1, SS-1H, CSS-1, CSS-1H
Tack coat	PG Binders, SS-1H, CSS-1H, EAP&T
Fog seal	SS-1, SS-1H, CSS-1, CSS-1H
Hot-mixed, cold-laid asphalt mixtures	AC-0.6, AC-1.5, AC-3, AES-300, AES-300P, CMS-2, CMS-2S
Patching mix	MC-800, SCM I, SCM II, AES-300S
Recycling	AC-0.6, AC-1.5, AC-3, AES-150P, AES-300P, recycling agent, emulsified recycling agent
Crack sealing	SS-1P, polymer mod AE crack sealant, rubber asphalt crack sealers (Class A, Class B)
Microsurfacing	CSS-1P
Prime	MC-30, AE-P, EAP&T, PCE
Curing membrane	SS-1, SS-1H, CSS-1, CSS-1H, PCE
Erosion control	SS-1, SS-1H, CSS-1, CSS-1H, PCE

B. Storage and Application Temperatures. Use storage and application temperatures in accordance with Table 19. Store and apply materials at the lowest temperature yielding satisfactory results. Follow the manufacturer's instructions for any agitation requirements in storage. Manufacturer's instructions regarding recommended application and storage temperatures supercede those of Table 19.

Table 19
Storage and Application Temperatures

Type–Grade	Application		Storage Maximum (°F)
	Recommended Range, °F	Maximum Allowable (°F)	
AC-0.6, AC-1.5, AC-3	200–300	350	350
AC-5, AC-10	275–350	350	350
AC-5 w/2% SBR, AC-10 w/2% SBR, AC-15P, AC-20-5TR	300–375	375	360
RC-250	125–180	200	200
RC-800	170–230	260	260
RC-3000	215–275	285	285
MC-30, AE-P	70–150	175	175
MC-250	125–210	240	240
MC-800, SCM I, SCM II	175–260	275	275
MC-3000, MC-2400L	225–275	290	290
HFRS-2, MS-2, CRS-2, CRS-2H, HFRS-2P, CRS-2P, CMS-2, CMS-2S, AES-300, AES-300S, AES-150P, AES-300P	120–160	180	180
SS-1, SS-1H, CSS-1, CSS-1H, PCE, EAP&T, SS-1P, RS-1P, CRS-1P, CSS-1P, recycling agent, emulsified recycling agent, polymer mod AE crack sealant	50–130	140	140
PG binders	275–350	350	350
Rubber asphalt crack sealers (Class A, Class B)	350–375	400	–
A-R binders Types I, II, and III	325–425	425	425

END OF SECTION 312100

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SECTION 321270 - FLEXIBLE BASE

PART I - GENERAL

1.1 DESCRIPTION

A. Construct a foundation course composed of flexible base.

PART 2 -PRODUCTS

2.1 MATERIALS

A. Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications. Notify the Engineer of the proposed materials at any time before compaction throughout the duration of the project to assure specification compliance. Use Tex-100-E material definitions.

B. Aggregate. Furnish aggregate of the type and grade shown on the plans and conforming to the requirements of Table 1. Each source much meet Table 1 requirements for liquid limit, plasticity index, and wet ball mill for the grade specified. Do not use additives such as but not limited to lime, cement, or fly ash to modify aggregates to meet the requirements of Table 1, unless shown on the plans.

Table 1
Material Requirements

Property	Test Method	Grade 1	Grade 2	Grade 3	Grade 4
Master gradation sieve size (% retained)	Tex-110-E				As shown on the plans
2-1/2 in.		–	0	0	
1-3/4 in.		0	0–10	0–10	
7/8 in.		10–35	–	–	
3/8 in.		30–50	–	–	
No. 4		45–65	45–75	45–75	
No. 40		70–85	60–85	50–85	
Liquid limit, % max.[1]	Tex-104-E	35	40	40	As shown on the plans
Plasticity index, max.[1]	Tex-106-E	10	12	12	As shown on the plans
Plasticity index, min.[1]		As shown on the plans			
Wet ball mill, % max.[2]	Tex-116-E	40	45	–	As shown on the plans
Wet ball mill, % max. increase passing the No. 40 sieve		20	20	–	
Classification[3]	Tex-117-E	1.0	1.1–2.3	–	As shown on the plans
Min. compressive strength[3], psi lateral pressure 0 psi lateral pressure 15 psi		 45 175	 35 175	 – –	As shown on the plans

1. Determine plastic index in accordance with Tex-107-E (linear shrinkage) when liquid limit is unattainable as defined in Tex-104-E.
2. When a soundness value is required by the plans, test material in accordance with Tex-411-A.
3. Meet both the classification and the minimum compressive strength, unless otherwise shown on the plans.

1. Material Tolerances. The Engineer may accept material if no more than 1 of the 5 most recent gradation tests has an individual sieve outside the specified limits of the gradation. When target grading is required by the plans, no single failing test may exceed the master grading by more than 5 percentage points on sieves No. 4 and larger or 3 percentage points on sieves smaller than No. 4.

   The Engineer may accept material if no more than 1 of the 5 most recent plasticity index tests is outside the specified limit. No single failing test may exceed the allowable limit by more than 2 points.

2. Material Types. Do not use fillers or binders unless approved. Furnish the type specified on the plans in accordance with the following.
    a. Type A. Crushed stone produced and graded from oversize quarried aggregate that originates from a single, naturally occurring source. Do not use gravel or multiple sources.
    b. Type B. Crushed or uncrushed gravel. Blending of 2 or more sources is allowed.
    c. Type C. Crushed gravel with a minimum of 60% of the particles retained on a No. 4 sieve with 2 or more crushed faces as determined by Tex-460-A, Part I. Blending of 2 or more sources is allowed.
    d. Type D. Type A material or crushed concrete. Crushed concrete containing gravel will be considered Type D material. Crushed concrete must meet the requirements in Section 247.2.A.3.b, "Recycled Material (Including Crushed Concrete) Requirements," and be managed in a way to provide for uniform quality. The Engineer may require separate dedicated stockpiles in order to verify compliance.
    e. Type E. As shown on the plans.

3. Recycled Material. Recycled asphalt pavement (RAP) and other recycled materials may be used when shown on the plans. Request approval to blend 2 or more sources of recycled materials.
    a. Limits on Percentage. When RAP is allowed, do not exceed 20% RAP by weight unless otherwise shown on the plans. The percentage limitations for other recycled materials will be as shown on the plans.
    b. Recycled Material (Including Crushed Concrete) Requirements.
        1) Contractor Furnished Recycled Materials. When the Contractor furnishes the recycled materials, including crushed concrete, the final product will be subject to the requirements of Table 1 for the grade specified. Certify compliance with DMS-11000, "Evaluating and Using Nonhazardous Recyclable Materials Guidelines," for Contractor furnished recycled materials. In addition, recycled materials must be free from reinforcing steel and other objectionable material and have at most 1.5% deleterious material when tested in accordance with Tex-413-A. For RAP, do not exceed a maximum percent loss from decantation of 5.0% when tested in accordance with Tex-406-A. Test RAP without removing the asphalt.
        2) Department Furnished Required Recycled Materials. When the Department furnishes and requires the use of recycled materials, unless otherwise shown on the plans:
            - Department required recycled material will not be subject to the requirements in Table 1,
            - Contractor furnished materials are subject to the requirements in Table 1 and this Item,
            - the final product, blended, will be subject to the requirements in Table 1, and
            - for final product, unblended (100% Department furnished required recycled material), the liquid limit, plasticity index, wet ball mill, classification, and compressive strength is waived.

        Crush Department-furnished RAP so that 100% passes the 2 in. sieve. The Contractor is responsible for uniformly blending to meet the percentage required.

3) Department Furnished and Allowed Recycled Materials. When the Department furnishes and allows the use of recycled materials or allows the Contractor to furnish recycled materials, the final blended product is subject to the requirements of Table 1 and the plans.

c. Recycled Material Sources. Department-owned recycled material is available to the Contractor only when shown on the plans. Return unused Department-owned recycled materials to the Department stockpile location designated by the Engineer unless otherwise shown on the plans.

The use of Contractor-owned recycled materials is allowed when shown on the plans. Contractor-owned surplus recycled materials remain the property of the Contractor. Remove Contractor-owned recycled materials from the project and dispose of them in accordance with federal, state, and local regulations before project acceptance. Do not intermingle Contractor-owned recycled material with Department-owned recycled material unless approved by the Engineer.

B. Water. Furnish water free of industrial wastes and other objectionable matter.

C. Material Sources. When non-commercial sources are used, expose the vertical faces of all strata of material proposed for use. Secure and process the material by successive vertical cuts extending through all exposed strata, when directed.

2.2 EQUIPMENT

A. Provide machinery, tools, and equipment necessary for proper execution of the work. Provide rollers in accordance with Item 210, “Rolling.” Provide proof rollers in accordance with Item 216, “Proof Rolling,” when required.

PART 3 - EXECUTION

3.1 CONSTRUCTION

A. Construct each layer uniformly, free of loose or segregated areas, and with the required density and moisture content. Provide a smooth surface that conforms to the typical sections, lines, and grades shown on the plans or as directed.

Stockpile base material temporarily at an approved location before delivery to the roadway. Build stockpiles in layers no greater than 2 ft. thick. Stockpiles must have a total height between 10 and 16 ft. unless otherwise shown on the plans. After construction and acceptance of the stockpile, loading from the stockpile for delivery is allowed. Load by making successive vertical cuts through the entire depth of the stockpile.

Do not add or remove material from temporary stockpiles that require sampling and testing before delivery unless otherwise approved. Charges for additional sampling and testing required as a result of adding or removing material will be deducted from the Contractor’s estimates.

Haul approved flexible base in clean trucks. Deliver the required quantity to each 100-ft. station or designated stockpile site as shown on the plans. Prepare stockpile sites as directed. When delivery is to the 100-ft. station, manipulate in accordance with the applicable Items.

B. Preparation of Subgrade or Existing Base. Remove or scarify existing asphalt concrete pavement in accordance with Item 105, “Removing Stabilized Base and Asphalt Pavement,” when shown on

the plans or as directed. Shape the subgrade or existing base to conform to the typical sections shown on the plans or as directed.

When new base is required to be mixed with existing base, deliver, place, and spread the new flexible base in the required amount per station. Manipulate and thoroughly mix the new base with existing material to provide a uniform mixture to the specified depth before shaping.

When shown on the plans or directed, proof roll the roadbed in accordance with Item 216, "Proof Rolling," before pulverizing or scarifying. Correct soft spots as directed.

C. Compaction. Compact using density control unless otherwise shown on the plans. Multiple lifts are permitted when shown on the plans or approved. Bring each layer to the moisture content directed. When necessary, sprinkle the material in accordance with Item 204, "Sprinkling."

Begin rolling longitudinally at the sides and proceed towards the center, overlapping on successive trips by at least 1/2 the width of the roller unit. On superelevated curves, begin rolling at the low side and progress toward the high side. Offset alternate trips of the roller. Operate rollers at a speed between 2 and 6 mph as directed.

Rework, recompact, and refinish material that fails to meet or that loses required moisture, density, stability, or finish before the next course is placed or the project is accepted. Continue work until specification requirements are met. Perform the work at no additional expense to the Department.

1. Ordinary Compaction. Roll with approved compaction equipment as directed. Correct irregularities, depressions, and weak spots immediately by scarifying the areas affected, adding or removing approved material as required, reshaping, and recompacting.

2. Density Control. Compact to at least 100% of the maximum density determined by Tex-113-E unless otherwise shown on the plans. Determine the moisture content of the material at the beginning and during compaction in accordance with Tex-103-E.

   The Engineer will determine roadway density of completed sections in accordance with Tex-115-E. The Engineer may accept the section if no more than 1 of the 5 most recent density tests is below the specified density and the failing test is no more than 3 pcf below the specified density.

D. Finishing. After completing compaction, clip, skin, or tight-blade the surface with a maintainer or subgrade trimmer to a depth of approximately 1/4 in. Remove loosened material and dispose of it at an approved location. Seal the clipped surface immediately by rolling with a pneumatic tire roller until a smooth surface is attained. Add small increments of water as needed during rolling. Shape and maintain the course and surface in conformity with the typical sections, lines, and grades as shown on the plans or as directed.

In areas where surfacing is to be placed, correct grade deviations greater than 1/4 in. in 16 ft. measured longitudinally or greater than 1/4 in. over the entire width of the cross-section. Correct by loosening, adding, or removing material. Reshape and recompact in accordance with Section 247.4.C, "Compaction."

E. Curing. Cure the finished section until the moisture content is at least 2 percentage points below optimum or as directed before applying the next successive course or prime coat.

END OF SECTION 321270

SECTION 321280

PRIME COAT

PART 1 - GENERAL

1.1 GENERAL DESCRIPTION

A. Prepare and treat existing or newly constructed surface with a bituminous material. Apply blotter material as required.

PART 2- PRODUCTS

2.1 MATERIALS

A. Bituminous: Use material of the type and grade shown on the plans in accordance with Item 300, “Asphalts, Oils, and Emulsions.”

B. Blotter: Unless otherwise shown on the plans or approved, use either base course sweepings obtained from cleaning the base or native sand as blotter materials.

2.2 EQUIPMENT

A. Provide applicable equipment in accordance with Article 316.3, “Equipment.”

PART 3 - EXECUTION

3.1 CONSTRUCTION

A. General: Apply the mixture when the air temperature is 60°F and above, or above 50°F and rising. Measure the air temperature in the shade away from artificial heat. The Engineer will determine when weather conditions are suitable for application. Do not permit traffic, hauling, or placement of subsequent courses over freshly constructed prime coats. Maintain the primed surface until placement of subsequent courses or acceptance of the work.

B. Surface Preparation: Prepare the surface by sweeping or other approved methods. When directed, before applying bituminous material, lightly sprinkle the surface with water to control dust and ensure absorption.

C. Application:

1. Bituminous. The Engineer will select the application temperature within the limits recommended in Item 300, “Asphalts, Oils, and Emulsions.” Apply material within 15°F of the selected temperature. Distribute the material smoothly and evenly at the rate selected by the Engineer. When directed, roll the freshly applied prime coat with a pneumatic-tire roller to ensure penetration.

2. Blotter. Spread blotter material before allowing traffic to use a primed surface. When “Prime Coat and Blotter” is shown on the plans as a bid item, apply blotter material to primed surface

at the rate shown in the plans or as directed. When “Prime Coat” is shown on the plans as a bid item, apply blotter to spot locations or as directed to accommodate traffic movement through the work area. Remove blotter material before placing the surface. Dispose of blotter material according to applicable state and federal requirements.

END OF SECTION 321280

SECTION 32 13 13

CONCRETE PAVEMENT

PART 1 - GENERAL

1.1 The General Conditions, Special Provisions and applicable requirements of Division 1 - General Requirements are hereby made a part of this section.

1.2 SCOPE: This work consists of street pavement, sidewalk, curb and gutter or rip rap slope pavement composed of Portland Cement Concrete with or without reinforcement, constructed on subgrade or base courses prepared in accordance with these specifications and to the lines, grades, thicknesses and typical cross-sections shown on the plans. Reinforcement, when required, will be subsidiary to the specified Concrete Pavement.

1.3 Submittals shall be in accordance with Section 01 33 00 - SUBMITTALS, and shall include:

A. Manufacturer's Literature: Descriptive data of installation methods and procedures.
B. Certificates: Manufacturer's certification that materials meet specification requirements.

PART 2 - PRODUCTS

2.1 Portland cement concrete shall conform to the requirements of this section for each type and strength indicated in the plans.

2.2 JOINT FILLER AND SEALER: Joint sealants and expansion joint filler materials shall conform to "Item #433, JOINT SEALANTS & FILLERS" in the 1993 edition of TXDOT Standard Specifications for Construction of Highways, Streets and Bridges.

2.3 STEEL REINFORCEMENT: Reinforcing bars shall conform to the requirements of AASHTO M31 or M53, Grade 60. Fabricated bar mats may be used if they conform to the requirements of AASHTO M54.

2.4 DOWELS AND TIE BARS: Dowels and tie bars shall conform to the requirements of AASHTO M31 or M53, Grade 60 or Grade 40, as specified on the plans. Tie bars shall be deformed meeting the requirements of AASHTO M31 or M53. Dowel and tie bars may conform to the requirements of AASHTO M 42, except that rail steel shall not be used for tie bars that are to be bent or restraightened during construction. Dowel bars shall be plain round bars of the size specified and the ends shall be sawed. Before delivery to the construction site, a minimum of two-thirds of the length of each dowel bar shall be painted with one coat of lead or tar paint. Prior to placement of concrete, the dowels shall be coated with grease if specified on the plans.

2.5 WATER: Water used in mixing or curing shall be as clean and free of oil, salt, acid, alkali, sugar, vegetable, or other substances injurious to the finished product as possible. Water will be tested in accordance with the requirements of AASHTO Method T26. Water known to be of potable quality may be used without testing.

2.6 COVER MATERIALS FOR CURING: Curing materials shall conform to one of the following specifications:

A. "Sheet Materials for Curing Concrete" shall conform to AASHTO M171.

B. "Burlap Cloth Made from Jute or Kenat" shall conform to AASHTO M182, Class 3.

C. "Liquid Membrane - Forming Compounds for Curing Concrete" shall conform to AASHTO M148, Type 2 (all-resin base), or Federal Specification TT-C-800, Type 2. Liquid Membrane shall be delivered and stored in bulk. Bulk storage shall be equipped with an agitator. All membranes shall be pigmented to allow visible inspection of coverage.

2.7 POZZOLANIC ADMIXTURE: The use of fly ash as a partial replacement for cement in pavement mix designs, at the rate specified in this paragraph will be allowed at the Contractor's option. Pozzolanic admixtures shall be fly ash meeting the requirements of ASTM C-618; Type C except loss on ignition shall not exceed three (3) percent. When fly ash is used as a partial replacement for cement, the minimum cement content may be met by considering portland cement plus fly ash as the total cementitious component. The replacement rate should not exceed 15 percent.

PART 3 - EXECUTION

3.1 EQUIPMENT: Equipment and tools necessary for handling materials and performing all parts of the work shall be approved by the Engineer as to design, capacity, and mechanical condition. The equipment shall be at the job site before the start of construction operations for examination and approval.

A. Batching Plant and Equipment.

1. General. The batching plant shall include bins, weighing hoppers, and scales for the fine aggregate and coarse aggregate. If bulk cement is used, a bin, hopper, and a separate scale for cement shall be included. The weighing hoppers shall be properly sealed and vented to preclude dusting during operation.

2. Bins and Hopper. Bins with adequate separate compartments for fine aggregate and coarse aggregate shall be provided in the batching plant. Each compartment shall discharge efficiently and freely into the weighing hopper. Means of control shall be provided so that, as the quantity desired in the weighing hopper is approached, the material may be added slowly and shut off with precision. A port or other opening for removing an overload of any one of the several materials from the hopper shall be provided. Weighing hoppers shall be constructed to eliminate accumulations of materials and to discharge fully.

3. Scales. The scales for weighing aggregates and cement shall be of either the beam or the springless dial type. They shall be accurate within 0.5 percent throughout their range of use. When beam-type scales are used, provisions such as a "telltale" dial shall be made for indicating to the operator that the required load in the weighing hopper is being approached. A device on the weighing beams shall clearly indicate critical position. Poises shall be designed to be locked in any position and to prevent

unauthorized change. The weight beam and "telltale" device shall be in full view of the operator while charging the hopper, and the operator shall have convenient access to all controls.

Scales shall be inspected and sealed as often as the Engineer may deem necessary to assure their continued accuracy. The Contractor shall have on hand not less than ten 50-pound (23 kg) weights for testing of all scales when directed by the Engineer.

B. Mixers.

1. General. Concrete may be mixed at a central plant, or wholly or in part in truck mixers. Each mixer shall have attached in a prominent place a manufacturer's nameplate showing the capacity of the drum in terms of volume of mixed concrete and the speed of rotation of the mixing drum or blades.

A device accurate within 3 percent and satisfactory to the Engineer shall be provided at the mixer for determining the amount of air-entraining agent or other admixture to be added to each batch requiring such admixtures.

Mixers shall be examined daily for the accumulation of hard concrete or mortar and the wear of blades.

2. Central Plant Mixer. Mixing shall be in an approved mixer capable of combining the aggregates, cement, and water into a thoroughly mixed and uniform mass within the specified mixing period, and of discharging the mixture without segregation. Central plant mixers shall be equipped with an acceptable timing device that will not permit the batch to be discharged until the specified mixing time has elapsed. The water system for a central mixer shall be either a calibrated measuring tank or a meter and shall not necessarily be an integral part of the mixer.

The mixers shall be examined daily for changes in condition due to accumulation of hard concrete or mortar or wear of blades. The pickup and throwover blades shall be replaced when they have worn down 3/4-inch (19 mm) or more. The Contractor shall have a copy of the manufacturer's design on hand showing dimensions and arrangement of blades in reference to original height and depth.

3. Truck Mixers and Truck Agitators. Truck mixers used for mixing and hauling concrete and truck agitators used for hauling central-mixed concrete shall conform to the requirements of ASTM C94.

C. Finishing Equipment.

1. Finishing Machine. The finishing machine shall be equipped with one or more oscillating-type transverse screeds.

2. Vibrators. For side-form construction, vibrators may be either the surface pan type for pavements less than 8 inches (20 cm) thick or the internal type
with either immersed tube or multiple spuds, for the full width of the concrete slab. They may be attached to the spreader or the finishing machine, or they may be mounted on a separate carriage. They shall not come in contact with the joint, load-transfer devices, subgrade, or side forms. The frequency of the surface vibrators shall not be less than 3,500 vibrations per minute, and the frequency of the internal type shall not be less than 7,000 vibrations per minute for spud vibrators. When spud-type internal vibrators are used adjacent to the side forms, they shall have a frequency of not less than 3,500 vibrations per minute. Hand vibrators should be used to consolidate the concrete along forms and other isolated areas.

   For slip-form construction, the paver shall vibrate the concrete for the full width and depth of the strip of pavement being placed. Vibration shall be accomplished by internal vibrators with a frequency range variable between 7,000 and 12,000 vibrations per minute. The amplitude of vibration shall be between 0.025 (0.6 mm) and 0.06 (1.5 mm) inches.

   The number, spacing, frequency, and eccentric weights shall be provided as necessary to achieve an acceptable concrete density and finishing quality. Adequate power to operate all vibrators at the weight and frequency required for a satisfactory finish shall be available on the paver. The internal vibrators may be supplemented by vibrating screeds operating on the surface of the concrete. The frequency of surface vibrators shall not be less than 3,500 vibrations per minute. The Contractor shall furnish a tachometer or other suitable device for measuring the frequency of the vibrators. The vibrators and tamping elements shall be automatically controlled so that they shall be stopped as forward motion ceases. Any override switch shall be of the springloaded, momentary contact type.

   For hand placed pavement the contractor shall consolidate concrete with the use of a hand held vibrator regardless of the type of strike off machinery used. Vibration shall be done to sufficiently remove air voids and consolidate concrete around reinforcing steel and side forms. **VIBRATORS SHALL NOT BE USED TO DISTRIBUTE CONCRETE**. The contractor shall limit disturbances of consolidated concrete during strike-off and finishing by using adequately sized floats and straight edges as approved by the Engineer. Vibrators, floats, and finishing tools to be on job site at all times during concrete placement.

3. Concrete Saw. When sawing of joints is specified, the Contractor shall provide sawing equipment adequate in number of units and power to complete the sawing to the required dimensions and at the required rate. The Contractor shall provide at least one standby saw in good working order. An ample supply of saw blades shall be maintained at the site of the work at all times during sawing operations. The Contractor shall provide adequate artificial lighting facilities for night sawing. All of this equipment shall be on the job both before and at all times during concrete placement.

4. Forms. Straight side forms shall be made of steel having a thickness of not less than 7/32 inch (6 mm) and shall be furnished in sections not less than 10 feet (3 m) in length. Forms shall have a depth equal to the prescribed edge thickness of the concrete without horizontal joint, and a base width equal to the depth of the forms. Flexible or curved forms of proper radius shall be used for curves of 100-foot (31 m) radius or less. Flexible or curved forms shall be of a design acceptable to the Engineer. Forms shall be provided with adequate devices for secure settings so that when in place they will withstand, without visible spring or settlement, the impact and vibration of the consolidating and finishing equipment. Flange braces shall extend outward on the base not less than two-thirds the height of the form. Forms with battered top surfaces and bent, twisted, or broken forms shall be removed from the work. Repaired forms shall not be used until inspected and approved. Built-up forms shall not be used, except as approved by the Engineer. The top face of the form shall not vary from a true plane more than 1/8 inch (3 mm) in 10 feet (3 m), and the upstanding leg shall not vary more than 1/4-inch (6 mm). The forms shall contain provisions for locking the ends of abutting sections together tightly for secure setting.

5. Slip-form Pavers. The paver shall be fully energized, self-propelled, and designed for the specific purpose of placing, consolidating, and finishing the concrete pavement, true to grade, tolerances, and cross section. It shall be of sufficient weight and power to construct the maximum specified concrete paving lane width as shown in the plans, at adequate forward speed, without transverse, longitudinal or vertical instability or without displacement. The paver shall be equipped with electronic or hydraulic horizontal and vertical control devices.

3.2 FORM SETTING: Forms shall be set sufficiently in advance of the concrete placement to insure continuous paving operation. After the forms have been set to correct grade, the grade shall be thoroughly tamped, either mechanically or by hand, at both the inside and outside edges of the base of the forms. Forms shall be staked into place with not less than 3 pins for each 10-foot (3 m) section. A pin shall be placed at each side of every joint.

Form sections shall be tightly locked and shall be free from play or movement in any direction. The forms shall not deviate from true line by more than 1/4-inch (6 mm) at any joint. Forms shall be so set that they will withstand, without visible spring or settlement, the impact and vibration of the consolidating and finishing equipment. Forms shall be cleaned and oiled prior to the placing of concrete.

The alignment and grade elevations of the forms shall be checked and corrections made by the Contractor immediately before placing the concrete. When any form has been disturbed or any grade has become unstable, the form shall be reset and rechecked.

CONDITIONING OF UNDERLYING COURSE AND REINFORCING: The prepared grade shall be well moistened with water, without saturating, immediately ahead of concrete placement to prevent rapid loss of moisture from the concrete. Ruts or depressions in the subgrade or subbase caused by hauling or usage of other equipment shall be filled as they develop with suitable material (not with concrete or concrete aggregates) and thoroughly compacted by rolling. If damage occurs to a stabilized

subbase, it shall be corrected full depth by the Contractor, or the damaged areas filled with concrete integral with the pavement. All excess material shall be removed. Low areas may be filled and compacted to a condition similar to that of the surrounding grade, or filled with concrete integral with the pavement. In cold weather, the underlying subbase shall be protected so that it will be entirely free from frost when the concrete is placed. The use of chemicals to eliminate frost in the underlying material will not be permitted. The work described under the foregoing paragraphs does not constitute a regular subgrading operation, but rather a final accurate check of the underlying course.

Reinforcing steel, at the time concrete is placed, shall be free of mud, oil, or other organic matter that may adversely affect or reduce bond. Reinforcing steel with rust, mill scale, or a combination of both will be considered satisfactory, provided the minimum dimensions, weight, and tensile properties of a hand wire-brushed test specimen are not less than the applicable ASTM specification requirements and provided the rust or scale is not loose. Reinforcing bars shall be securely wired together at all intersections and splices and shall be securely wired to each dowel and load transmission unit intersected. All bars shall be installed in their required position as shown on the plans.

3.3 MIXING CONCRETE: The concrete may be mixed at the work site, in a central mix plant or in truck mixers. The mixer shall be of an approved type and capacity. Mixing time shall be measured from the time all materials, except water, are emptied into the drum. Ready-mixed concrete shall be mixed and delivered in accordance with the requirements of ASTM C94, except that the minimum required revolutions of the mixing speed for transit mixed concrete may be reduced to not less than that recommended by the mixer manufacturer. The number of revolutions recommended by the mixer manufacturer shall be indicated on the manufacturer's serial plate attached to the mixer.

When mixed at the work site or in a central mixing plant, the mixing time shall not be less than 50 seconds nor more than 90 seconds. Mixing time ends when the discharge chute opens. Transfer time in multiple drum mixers is included in mixing time. The contents of an individual mixer drum shall be removed before a succeeding batch is emptied therein.

The mixer shall be operated at the drum speed as shown on the manufacturer's nameplate on the approved mixer. Any concrete mixed less than the specified time shall be discarded at the Contractor's expense. The volume of concrete mixed per batch shall not exceed the mixer's nominal capacity in cubic feet (cubic meters), as shown on the manufacturer's standard rating plate on the mixer. An overload up to 10 percent above the mixer's nominal capacity may be permitted provided concrete test data for segregation and uniform consistency are satisfactory, and provided no spillage of concrete takes place. The batch shall be charged into the drum so that a portion of the mixing water shall enter in advance of the cement and aggregates. The flow of water shall be uniform, and all water shall be in the drum by the end of the first 15 seconds of the mixing period. The throat of the drum shall be kept free of such accumulations as may restrict the free flow of materials into the drum.

Mixed concrete from the central mixing plant shall be transported in truck mixers, truck agitators, or nonagitating trucks. The time elapsing from the time water is added to the mix until the concrete is deposited in place at the work site shall not exceed 30 minutes when the concrete is hauled in nonagitating trucks, nor 60 minutes when the concrete is hauled in truck mixers or truck agitators. Retempering concrete by adding water or by other means will not be permitted, except when concrete is delivered in transit mixers. With transit mixers additional water may be added to the batch materials and

additional mixing performed to increase the slump to meet the specified requirements, if permitted by the Engineer. All these operations must be performed within 45 minutes after the initial mixing operations and the water-cement ratio must not be exceeded. Admixtures for increasing the workability or for accelerating the set will be permitted only when specified for in the contract.

3.4 LIMITATIONS OF MIXING: No concrete shall be mixed, placed, or finished when the natural light is insufficient, unless an adequate and approved artificial lighting system is operated.

Unless authorized in writing by the Engineer, mixing and concreting operations shall be discontinued when a descending air temperature in the shade and away from artificial heat reaches 40 degrees F (4 degrees C) and shall not be resumed until an ascending air temperature in the shade and away from artificial heat reaches 35 degrees F (2 degrees C).

When concreting is authorized during cold weather, the aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be arranged to preclude the possible occurrence of overheated areas which might be detrimental to the materials. Unless otherwise authorized, the temperature of the mixed concrete shall not be less than 50 degrees F (10 degrees C) at the time of placement in the forms.

If the air temperature is 35 degrees F (2 degrees C) or less at the time of placing concrete, the Engineer may require the water and/or the aggregates to be heated to not less than 70 degrees F (21 degrees C) nor more than 150 degrees F (66 degrees C). Concrete shall not be placed on frozen subgrade nor shall frozen aggregates be used in the concrete.

During periods of warm weather when the maximum daily air temperature exceeds 85 degrees F (30 degrees C), the following precautions should be taken. The forms and/or the underlying material shall be sprinkled with water immediately before placing the concrete. The concrete shall be placed at the coolest temperature practicable, and in no case shall the temperature of the concrete when placed exceed 90 degrees F (32 degrees C). The aggregate and/or mixing water shall be cooled as necessary to maintain the concrete temperature at or not more than the specified maximum.

3.5 PLACING CONCRETE:

A. Side-form Method: For the side-form method, the concrete shall be deposited on the moistened grade to require as little rehandling as possible. Unless truck mixers, truck agitators, or nonagitating hauling equipment are equipped with means for discharge of concrete without segregation of the materials, the concrete shall be unloaded into an approved spreading device and mechanically spread on the grade to prevent segregation of the materials. Placing shall be continuous between transverse joints without the use of intermediate bulkheads. Necessary hand spreading shall be done with shovels -- **NOT RAKES**. Workmen shall not be allowed to walk in the freshly mixed concrete with boots or shoes coated with earth or foreign substances.

Concrete for side-form construction shall be placed on cement treated base. No concrete shall be placed before the cement treated base has obtained a compressive strength specified at 7 days.

When concrete is to be placed adjoining a previously constructed lane of pavement and when mechanical equipment will be operated upon the existing lane of pavement, the concrete shall be at least 7 days old and at a flexural strength approved by the Engineer. If only finishing equipment is carried on the existing lane, paving in adjoining lanes may be permitted after 3 days, if approved by the Engineer.

Concrete shall be thoroughly consolidated against and along the faces of all forms and along the full length and on both sides of all joint assemblies by means of vibrators inserted in the concrete. Vibrators shall not be permitted to come in contact with a joint assembly, the grade, or a side form. In no case shall the vibrator be operated longer than 15 seconds in any one location, nor shall the vibrators be used to move the concrete. Concrete shall be deposited as near to expansion and contraction joints as possible without disturbing them but shall not be dumped from the discharge bucket or hopper onto a joint assembly unless the hopper is well centered on the joint assembly.

Should any concrete materials fall on or be worked into the surface of a completed slab, they shall be removed immediately by approved methods.

B. Slip Form Method. For the slip-form method, the concrete shall be placed with an approved crawler-mounted, slip-form paver designed to spread, consolidate, and shape the freshly placed concrete in one

Complete pass of the machine so that a minimum of hand finishing will be necessary to provide a dense and homogeneous pavement in conformance with requirements of the plans and specifications. The concrete should be placed directly on top of the joint assemblies to prevent them from moving when the paver moves over them. Side forms and finishing screeds shall be adjustable to the extent required to produce the specified pavement edge and surface tolerance. The side forms shall be of dimensions, shape, and strength to support the concrete laterally for a sufficient length of time so that no appreciable edge slumping will occur. Final finishing shall be accomplished while the concrete is still in the plastic state.

Concrete for slip form construction shall be placed on cement treated base or lime stabilized subgrade. No concrete shall be placed before the cement treated base has obtained the compressive strength specified at 7 days. The Contractor shall set grade stakes and stringline for each lane placement. The stringline shall be supported at intervals of not more than 25 feet. Additional supports shall be installed to prevent sag of the stringline. The horizontal alignment of the stringline shall be within plus or minus 1/4-inch in 10 feet of true alignment. The Contractor shall provide a suitable method of securing the stringline to maintain proper grade where vertical curves are to be constructed.

C. Hand Placement Method. When the hand method of striking off and consolidating is permitted, the concrete, as soon as placed, shall be approximately leveled and then truck off and screeded to such elevation above grade that, when consolidated and finished, the surface of the pavement shall be at the grade elevation shown on the plans. The entire surface shall then be tamped and the concrete consolidated so as to insure maximum compaction and a minimum of voids. For the strike off and consolidation, both a strike template and tamping template shall be provided

on the work. In operation the strike template shall be moved forward with a combined longitudinal and transverse motion and so manipulated that neither end of the template is raised from the forms during the striking-off process. A slight excess of material shall be kept in front of the cutting edge at all times. The straightedging, surfacing and joint finishing shall be as described herein.

3.6 STRIKE-OFF OF CONCRETE: Following the placing of the concrete, it shall be struck off to conform to the cross section shown on the plans and to an elevation such that when the concrete is properly consolidated and finished, the surface of the pavement shall be at the elevation shown on the plans. All reinforcement shall be positioned in advance of concrete placement. All reinforcing bars and bar mats shall be installed in the slab at the required depth below the finished surface and supported by chairs installed on 4-foot centers. After the reinforcing steel is securely installed above the subgrade, as specifically required by plans and as herein prescribed, there shall be no loading imposed upon (or walking upon) the bar mats or individual bars that will cause deformation of reinforcing before or during the placing or finishing of the concrete.

3.7 JOINTS.

A. General:

A. Longitudinal and Transverse Joints. Longitudinal and transverse joints shall be constructed as indicated on the plans and in accordance with these requirements. All joints shall be constructed true to line with their faces perpendicular to the surface of the pavement. Joints shall not vary more than 1/2-inch (13 mm) from a true line or from their designated position. The vertical surface of the pavement adjacent to all expansion joints shall be finished to a true plane and edged to a radius of 1/4-inch (6 mm) or as shown on the plans. The surface across the joints shall be tested with a 10-foot (3 m) straightedge as the joints are finished and any irregularities in excess of 1/4-inch (6 mm) shall be corrected before the concrete has hardened. Longitudinal construction joints that do not meet these requirements or which show significant cracking or planes of weakness shall be sawed-off full depth at the Contractor's expense using the minimum practical width at locations designated by the Engineer. When required, keyways shall be accurately formed with a template of metal or wood. The gauge or thickness of the material in the template shall be such that the full keyway, as specified, is formed and is in the correct location. Transverse joints shall be right

B. Angles to the centerline of the pavement and shall extend the full width of the slab. All joints shall be so prepared, finished, or cut to provide a groove of the width and depth shown on the plans.

B. Tie Bars: Tie bars shall consist of deformed bars installed principally in longitudinal joints as shown on the plans or the bars shall be extensions of the distributed reinforcing steel across the joints. Tie bars shall be placed at right angles to the centerline of the concrete slab. They shall be held in position parallel to the surface and midway between the surfaces of the slab. These bars shall not be painted, greased, or enclosed in sleeves. At all locations where tie bars are specified and where pavement is in place, the tie bars shall be inserted by drilling and grouting

with approved epoxy material. Tie bars in longitudinal construction joints may be installed by bending the bars flush with a keyed joint.

C. Dowel Bars: If used, dowel bars or other load-transfer units of an approved type shall be placed across transverse or other joints in the manner as specified on the plans. They shall be of the dimensions and spacings as shown and held rigidly in the middle of the slab depth in the proper horizontal and vertical alignment by an approved assembly device to be left permanently in place. The dowel or load-transfer and joint devices shall be rigid enough to permit complete assembly as a unit ready to be lifted and placed into position. A metal, or other type, dowel expansion cap or sleeve shall be furnished for each dowel bar used with expansion joints. These caps shall be substantial enough to prevent collapse and shall be placed on the ends of the dowels as shown on the plans. The caps or sleeves shall fit the dowel bar tightly and the closed end shall be watertight.

D. Installation: Joints in concrete pavements shall be cut as shown on the plans. Equipment shall be as described in Paragraph 3.1. The circular cutter shall be capable of cutting a groove in a straight line and shall produce a slot at least 1/8-inch (3 mm) wide and to the depth shown on the plans. When shown on the plans or required by the specifications, the top portion of the slot or groove shall be widened by means of a second shallower cut or by suitable and approved beveling to provide adequate space for joint sealers. Sawing of the joints shall commence as soon as the concrete has hardened sufficiently to permit cutting without chipping, spalling, or tearing. Sawing shall be carried on both during the day and night as required. The joints shall be sawed at the required spacing consecutively in sequence of the concrete placement, unless otherwise approved by the Engineer.

D. Longitudinal Joints.

1. Construction. Longitudinal construction joints shall be formed against suitable side forms (usually made of steel) with or without keyways. Wooden forms may be used under special conditions, when approved by the Engineer. Where butt-type joints with dowels are designated, the dowels for this type shall be painted and greased. The edges of the joint shall be finished with a grooving tool or edging tool, and a space or slot shall be formed along the joint of the dimensions, as indicated, to receive the joint sealing material. Longitudinal construction joints shall be sawed to provide a groove at the top conforming to the details and dimensions indicated on the plans. Provisions shall be made for the installation of tie bars as noted on the plans.

2. Contraction or Weakened-plane type. The longitudinal groove sawed in the top of the slab shall be installed where indicated on the drawings. The groove shall be sawed with approved equipment in the hardened concrete to the dimensions required. The sawed groove shall be straight and of uniform width and depth. The groove shall be clean cut so that spalling will be avoided at intersections with transverse joints. Tie bars or distributed reinforcing steel shall be installed across these joints were indicated on the plans.

3. Expansion. Longitudinal expansion joints shall be installed as indicated on the plans. The premolded filler, of the thickness as shown on the plans, shall extend for the full depth and width of the slab at the joint, except for space for sealant at the top of the slab. The filler shall be securely staked or fastened into position perpendicular to the proposed finished surface. A cap shall be provided to protect the top edge of the filler and to permit the concrete to be placed and finished. After the concrete has been placed and struck off, the cap shall be carefully withdrawn leaving the space over the premolded filler. The edges of the joint shall be finished and tooled while the concrete is still plastic.

E. Transverse Joints.

1. Expansion. Transverse expansion joints shall be installed at the locations and spacing as shown on the plans. The joints shall be installed at right angles to the centerline and perpendicular to the surface of the pavement. The joints shall be installed and finished to insure complete separation of the slabs. Expansion joints shall be of a premolded type conforming to these specifications and with the plans and shall be the full width of the pavement strip.

   All concrete shall be cleaned from the top of the joint material. Before the pavement is opened to traffic, this space shall be swept clean and filled with approved joint sealing material.

   All devices used for the installation of expansion joints shall be approved by the Engineer. They shall be easily removable without disturbing the concrete and held in proper transverse and vertical alignment. Immediately after forms are removed, any concrete bridging the joint space at the ends shall be removed for the full width and depth of the joint.

   When specified, expansion joints shall be equipped with dowels of the dimensions and at the spacing and location indicated on the plans. The dowels shall be firmly supported in place and accurately aligned parallel to the subgrade and the centerline of the pavement by means of a dowel assembly which will remain in the pavement and will ensure that the dowels are not displaced during construction.

   Other types of load-transfer devices may be used, when approved by the Engineer.

2. Contraction. Transverse contraction joints, weakened-plane joints, or both, shall be installed at the locations and spacing as shown on the plans. These joints will be installed by sawing a groove into the concrete surface after the concrete has hardened in the same manner as specified in Paragraph 3.8(c)(2). Dowel bar assemblies shall be installed, when required, as shown on the plans.

3. Construction. Transverse construction joints shall be installed at the end of each day's placing operations and at any other points within a paving lane when concrete placement is interrupted for more than 30 minutes or it appears that the concrete will

obtain its initial set before fresh concrete arrives. When the installation of the joint can be planned in advance, it shall be located at a contraction or expansion joint. The joint shall not be allowed within 8 feet (2.4 m) of a regular spaced transverse joint. If the pouring of the concrete has been stopped, causing a joint to fall within this limit, it shall not be installed, and the fresh placed concrete shall be removed back to the 8 foot (2.4 m) limit.

3.8 FINAL STRIKE-OFF, CONSOLIDATION, AND FINISHING:

A. Sequence. The sequence of operations shall be the strike-off and consolidation, floating and removal of laitance, straightedging, and final surface finish. **The addition of superficial water to the surface of the concrete to assist in finishing operations generally will not be permitted**. If the application of water to the surface is permitted, it shall be applied as a fog spray by means of approved spray equipment.

B. Finishing at Joints. The concrete adjacent to joints shall be compacted or firmly placed without voids or segregation against the joint material; it shall be firmly placed without voids or segregation under and around all load-transfer devices, joint assembly units, and other features designed to extend into the pavement. Concrete adjacent to joints shall be mechanically vibrated. After the concrete has been placed and vibrated adjacent to the joints, the finishing machine shall be operated in a manner to avoid damage or misalignment of joints. If uninterrupted operations of the finishing machine, to, over, and beyond the joints, cause segregation of concrete, damage to, or misalignment of the joints, the finishing machine shall be stopped when the screed is approximately 8 inches (20 cm) from the joint. Segregated concrete shall be removed from the front of and off the joint; the screed shall be lifted and set directly on top of the joint, and the forward motion of the finishing machine shall be resumed. Thereafter, the finishing machine may run over the joint without lifting the screed, provided there is no segregated concrete immediately between the joint and the screed or on top of the joint.

C. Machine Finishing. The concrete shall be spread as soon as it is placed, and it shall be struck off and screeded by an approved finishing machine. The machine shall go over each area as many times and at such intervals as necessary to give the proper consolidation and to leave a surface of uniform texture. Excessive operation over a given area shall be avoided. When side forms are used, the tops of the forms shall be kept clean by an effective device attached to the machine, and the travel of the machine on the forms shall be maintained true without lift, wobbling, or other variation tending to affect the precision finish. During the first pass of the finishing machine, a uniform ridge of concrete shall be maintained ahead of the front screed for its entire length. When in operation, the screed shall be moved forward with a combined longitudinal and transverse shearing motion, always moving in the direction in which the work is progressing, and so manipulated that neither end is raised from the side forms during the striking-off process. If necessary, this shall be repeated until the surface is of uniform texture, true to grade and cross section, and free from porous areas.

D. Hand Finishing. Hand finishing methods will not be permitted, except under the following conditions: In the event of breakdown of the mechanical equipment, hand methods may be used to finish the concrete already deposited on the grade; in areas of narrow widths or of irregular

dimensions where operation of the mechanical equipment is impractical. Concrete, as soon as placed, shall be struck off and screeded. An approved portable screed shall be used.

The screed for the surface shall be at least 2 feet (0.6 m) longer than the maximum width of the slab to be struck off. It shall be of approved design, sufficiently rigid to retain its shape, and shall be constructed either of metal or of other suitable material covered with metal. Wood will not be permitted. Consolidation shall be attained by the use of a suitable vibrator.

E. Floating. After the concrete has been struck off and consolidated, it shall be further smoothed, trued, and consolidated by means of a longitudinal float, using one of the following methods:

1. Hand Method. The hand-operated longitudinal float shall not be less than 12 feet (3.6 m) in length and 6 inches (15 cm) in width, properly stiffened to prevent flexibility and warping. The longitudinal float, operated from foot bridges resting on the side forms and spanning but not touching the concrete, shall be worked with a sawing motion, while held in a floating position parallel to the slab centerline and passing gradually from one side of the slab to the other. Forward movement along the centerline of the slab shall be in successive advances of not more than one-half the length of the float. Any excess water or soup material shall be wasted over the slab edge on each pass.

2. Mechanical Method. The Contractor may use a machine composed of a cutting and smoothing float(s), suspended from and guided by a rigid frame. The frame shall be carried by four or more visible wheels riding on, and constantly in contact with, the side forms or pavement subgrade. If necessary, long-handled floats having blades not less than 5 feet (1.5 m) in length and 6 inches (1.5 cm) in width may be used to smooth and fill in open-textured areas in the slab. Long-handled floats shall not be used to float the entire surface of the slab in lieu of mechanical methods. After floating, any excess water and laitance shall be removed from the surface of the slab by a straightedge 10 feet (3 m) or more in length. Successive drags shall be lapped one-half the length of the blade.

F. Straight-edge Testing and Surface Correction. After the pavement has been struck off and consolidated and while the concrete is still plastic, it shall be tested for trueness with a 16-foot (4.8 m) straightedge. For this purpose the Contractor shall furnish and use an accurate 16-foot (4.8 m) straightedge swung from handles 3 feet (0.4 m) longer than one-half the width of the slab. The straightedge shall be held in contact with the surface in successive positions parallel to the centerline and the whole area gone over from one side of the slab to the other, as necessary. Advancing shall be in successive stages of not more than one-half the length of the straightedge. Any excess water and laitance shall be removed from the surface of the pavement. Any depressions shall be immediately filled with freshly mixed concrete, struck off, consolidated, and refinished. High areas shall be cut down and refinished. Special attention shall be given to assure that the surface across joints meets the requirements for smoothness. Straightedge testing and surface corrections shall continue until the entire surface is found to be free from observable departures from the straightedge and until the slab conforms to the required grade and cross section. The use of long-handled wood floats shall be confined to a

minimum; they may be used only in emergencies and in areas not accessible to finishing equipment.

3.9 SURFACE TEXTURE: A light broom drag shall be used for slab concrete pavements. The direction of the texture device shall be as directed by the Engineer. Contractor to match existing pavement finishes.

3.10 SURFACE TEST: As soon as the concrete has hardened sufficiently, the pavement surface shall be tested with a 16-foot (5 m) straightedge or other specified device to determine its compliance with design grades. Where the departure from correct cross section exceeds ½ inch (13 mm), the pavement shall be ground down with a approved grinding machine to within 1/4 inch of tolerance or removed and replaced at the expense of the Contractor when so directed by the Engineer. Cracked or damaged slabs shall be removed and replaced at the expense of the Contractor when so directed by the Engineer.

Any area or section so removed shall not be less than 20 feet (6 m) in length nor less than the full width of the lane involved. When it is necessary to remove and replace a section of pavement, and remaining portion of a slab adjacent to the joints that is less than 10 feet (3 m) in length shall also be removed and replaced.

3.11 CURING: Immediately after the finishing operations have been completed and marring of the concrete will not occur, the entire surface of the newly placed concrete shall be cured in accordance with one of the methods below. In all cases in which curing requires the use of water, the curing shall have prior right to all water supply or supplies. Failure to provide sufficient cover material of whatever kind the Contractor may elect to use, or lack of water to adequately take care of both curing and other requirements, shall be cause for immediate suspension of concreting operations. The concrete shall not be left exposed for more than 1/2 hour during the curing period. The following are alternate approved methods for curing concrete pavements.

A. Impervious Membrane Method. The entire surface of the pavement shall be sprayed uniformly with white pigmented curing compound immediately after the finishing of the surface and before the set of the concrete has taken place. The curing compound shall not be applied during rainfall. Curing compound shall be applied by mechanical sprayers under pressure at the rate of 1 gallon (4 liters) to not more than 150 square feet (14 square meters). The spraying equipment shall be of the fully atomizing type equipped with a tank agitator. At the time of use, the compound shall be in a thoroughly mixed condition with the pigment uniformly dispersed throughout the vehicle. During application the compound shall be stirred continuously by effective mechanical means. Hand spraying of odd widths or shapes and concrete surfaces exposed by the removal of forms will be permitted. Curing compound shall not be applied to the inside faces of joints to be sealed, but approved means shall be used to insure proper curing for 72 hours. The curing compound shall be of such character that the film will harden within 30 minutes after application. Should the film become damaged from any cause within the required curing period, the damaged portions shall be repaired immediately with additional compound. Upon removal of the side forms, the sides of the exposed slabs shall be protected immediately to provide a curing treatment equal to that provided for the surface. For the Impervious Membrane Method, the Contractor is encouraged to include Polyethylene Film

dispensing equipment in the Paving Train to provide protection to the finished work in case of rainfall.

B. Polyethylene Films. The top surface and sides of the pavement shall be entirely covered with polyethylene sheeting. The units shall be lapped at least 18 inches (457 mm). The sheeting shall be placed and weighted to cause it to remain in contact with the surface covered. The sheeting shall have dimensions that will extend at least twice the thickness of the pavement beyond the edges of the pavement. Unless otherwise specified, the sheeting shall be maintained in place for 72 hours after the concrete has been placed.

C. Waterproof Paper. The top surface and sides of the pavement shall be entirely covered with waterproofed paper. The units shall be lapped at least 18 inches (457 mm). The paper shall be placed and weighted to cause it to remain in contact with the surface covered. The paper shall have dimensions that will extend at least twice the thickness of the pavement beyond the edges of the slab. The surface of the pavement shall be thoroughly wetted prior to placing of the paper. Unless otherwise specified, the paper shall be maintained in place for 72 hours after the concrete has been placed.

D. White Burlap-Polyethylene Sheets. The surface of the pavement shall be entirely covered with sheeting. The sheeting used shall be such length (or width) that it will extend at least twice the thickness of the pavement beyond the edges of the slab. The sheeting shall be placed so that the entire surface and both edges of the slab are completely covered. The sheeting shall be placed and weighted to remain in contact with the surface covered, and the covering shall be maintained fully wetted and in position for 72 hours after the concrete has been placed.

E. Curing in Cold Weather. When the average daily temperature is below 40 degrees F (4 degrees C), curing shall consist of covering the newly laid pavement with not less than 12 inches (30 cm) of loose, dry hay or straw, or equivalent protective curing authorized by the Engineer, which shall be retained in place for 10 days. The hay or straw shall be secured to avoid being blown away. Admixture for curing or temperature control may be used only when authorized by the Engineer.

When concrete is being placed and the air temperature may be expected to drop below 35 degrees F (2 degrees C), a sufficient supply of straw, hay, grass, or other suitable blanketing material such as burlap or polyethylene shall be provided along the work. Any time the temperature may be expected to reach the freezing point during the day or night, the material so provided shall be spread over the pavement to a sufficient depth to prevent freezing of the concrete. The period of time such protection shall be maintained shall not be less than 10 days. A minimum of 3 days is required when high, early strength concrete is used. The Contractor shall be responsible for the quality and strength of the concrete placed during cold weather, and any concrete injured by frost action shall be removed and replaced at the Contractor's expense.

3.12 REMOVING FORMS: Unless otherwise specified, forms shall not be removed from freshly placed concrete until it has set for at least 12 hours, except where auxiliary forms are used temporarily in widened areas. Forms shall be removed carefully to avoid damage to the pavement. After the forms have been removed, the sides of the slab shall be cured as outlined in one of the methods indicated in

Paragraph 3.17. Major honeycombed areas shall be considered as defective work and shall be removed and replaced. Any area or section so removed shall not be less than 20 feet (6 m) in length nor less than the full width of the lane involved. When it is necessary to remove and replace a section of pavement, any remaining portion of the slab adjacent to the joints that is less than 10 feet (3 m) in length shall also be removed and replaced.

3.13 SEALING JOINTS: The joints in the pavement shall be prepared and sealed in strict accordance with the sealant manufacturer's printed recommendations.

3.14 PROTECTION OF PAVEMENT: The Contractor shall protect the pavement and its appurtenances against both public traffic and traffic caused by the Contractor's employees and agents. This shall include watchmen to direct traffic and the erection and maintenance of warning signs, lights, pavement bridges, or crossovers, etc. The plans or special provisions will indicate the location and type of device or facility required to protect the work and provide adequately for traffic. Any damage to the pavement occurring prior to final acceptance shall be repaired or the pavement replaced at the Contractor's expense. In order that the concrete be properly protected against the effects of rain before the concrete is sufficiently hardened, the Contractor is encouraged to have available at all times materials for the protection of edges and surface of the unhardened concrete. Such protective materials shall consist of rolled polyethylene sheeting at least 4 mils (0.1 mm) thick of sufficient length and width to cover the plastic concrete slab and any edges. The sheeting may be mounted on either the paver or a separate movable bridge from which it can be unrolled without dragging over the plastic concrete surface. When rain appears imminent, all paving operations shall stop and all available personnel should begin covering the surface of the unhardened concrete with the protective covering.

3.15 OPENING TO TRAFFIC: The Engineer shall decide when the pavement shall be opened to traffic. The pavement will not be opened to traffic until test specimens molded and cured in accordance with ASTM C31 have attained a flexural strength of 550 pounds per square inch (3792 kPa) when tested in accordance with ASTM C78. If such tests are not conducted, the pavement shall not be opened to traffic until 14 days after the concrete was placed. Prior to opening to traffic, the pavement shall be thoroughly cleaned.

3.16 SURFACE AND THICKNESS TOLERANCES: Extreme care must be exercised in all phases of the operation to assure the pavement will pass the specified tolerances. The following tolerances are applicable:

A. Lateral deviation from established alignment of the pavement edge shall not exceed plus or minus 0.10 foot (30 mm) in any lane.

B. Vertical deviation from established grade shall not exceed plus or minus 0.04 foot (12 mm) at any point.

C. Surface smoothness deviations shall not exceed 3/8 inch (6 mm) from a 16-foot (5 m) straightedge placed in any direction, including placement along and spanning any pavement joint or edge.

No additional payment over the contract unit price shall be made for any pavement of a thickness exceeding that required by plans.

3.17 INTEGRAL CURBS: Where shown on the drawings, integral curbs shall be installed to the dimension shown using identical concrete to the paving mix. Expansion and contraction joints shall extend through curb section. Reinforcing for integral curb, when shown on the plans, shall be supported from the ground with driven stakes or as directed by the Engineer. Once the forms are removed, all voided areas shall be rubbed and filled with non-shrink grout within 24 hours. If the forms are removed within 2 days of placement, the curb shall be treated with a specified curing membrane.

3.18 CONCRETE CURB AND GUTTER: Concrete curb and gutter shall be constructed using concrete of the type and strength specified in the plans. The placement, strike-off consolidation and finishing shall be made using applicable portions of this specification as determined by the Engineer. Contraction joints shall be placed at 20-foot centers with the use of a 1/2" deep grooving tool. Expansion joints shall be placed at a maximum spacing of 400 feet and at all radius points, curb returns and junctions with structures. For curves of 100 feet radius or less, contraction joints shall be tooled at 10-foot centers and expansion joints constructed at 50-foot centers. Expansion joints shall contain a minimum of two smooth dowels a minimum of one bar size larger than the longitudinal reinforcing and 3/4-inch thick expansion joint material of the type specified in the plans. Expansion joints shall be sealed in accordance with the plan details.

3.19 SIDEWALKS AND SLOPE PAVING: Concrete sidewalks and slope paving shall be constructed to use concrete of the type and strength specified in the plans. The placement, strike-off, consolidation and finishing shall be made using applicable portions of this specification as determined by the Engineer. Contraction joints shall be tooled at a depth of 1/2" at a spacing equal to the width of the sidewalk not to exceed six feet. For walks wider than six feet, longitudinal joints shall be tooled at equal spacing, not less than three feet. Edges shall be tooled with a 1/4-inch radius and finish slightly higher than adjacent curbs to ensure proper drainage if some settlement occurs. Expansion joints shall be placed at 100-foot intervals or at intersecting walk locations. Expansion joints shall be 3/4-inch in thickness and contain smooth dowels at not less than 12" spacing. The size of the dowels will be equal to the thickness of the sidewalk in inches. Scoring and tooling for barrier free ramps shall be made in accordance with governing City standards or as directed by the Engineer.

3.20 FIELD TEST SPECIMENS: Concrete samples shall be furnished by the Contractor and shall be taken in the field to determine the consistency, air content, and strength of the concrete. Compressive test cylinders shall be made each day that the concrete is placed.
However, at the start of paving operations and when the aggregate source, aggregate characteristics, or mix design is changed, additional groups of test cylinders may be required until the Engineer is satisfied that the concrete mixture being used complies with the strength requirements of these specifications. Test ages will be 7 days and 28 days.

Test cylinders for compressive strength tests shall be taken and cured in accordance with ASTM C-31 and tested in accordance with ASTM C-39. At least four cylinders (a set) shall be made for each 1,000 cubic yards or fraction thereof placed and tested at 7 days and 28 days. No extra compensation will be allowed for materials and work involved in fulfilling these requirements. Concrete will be accepted on the basis of tests conducted on a "lot" of concrete. A lot will consist of 160 cubic yards and will be divided

into four equal sublots. One set of tests will be made for each sublot. Random samples will be taken from the plastic concrete at the site in accordance with accepted statistical procedures. The concrete shall be sampled in accordance with ASTM C172.

The lot will be accepted without adjustment in payment if the average 28 day compressive strength, based on four acceptance tests, indicates a strength deficiency of not less than 100 psi. The pay factor for 28-day compressive strengths showing a deficiency greater than 100 psi are listed in the table below.

PAY FACTOR SCHEDULE FOR COMPRESSIVE STRENGTH
AT THE SPECIFIED INTERVAL

Strength Deficiency (Based on an Average of 4 Cylinders) psi	Pay Factor (Percent of Contract Unit Price) psi
0 - 100	100
100 - 150	85
151 - 200	75
201 - 250	70
251 - 300	60
301 - 375	55
375 - 500	50
>500	Reject

END OF SECTION 321313

SECTION 321723

PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 GENERAL INFORMATION

A. The following information has been provided as a general guideline for the use and disposal of traffic marking paints. It is also very beneficial to run a small test in a non-critical area in order to ensure the surface preparation; weather conditions, equipment and product are suitable and working properly.

PART 2 – PRODUCTS

DESCRIPTION:	AEXCEL 12W-D195 WHITE REGULAR-DRY ALKYD ZONE MARKING PAINT, OR APROVED EQUAL.
COLOR:	WHITE - FED. STD: 595B 37925
APPLICABLE SPECIFICATION:	TTP-85E & /115F TYPE I / AASHTO M-248 TYPE S/ GSA A-A-2886B
TYPICAL USE:	PARKING LOTS, AIRPORTS, SAFETY ZONES
DRY TIME:	MAXIMUM 30 MINUTES @ 77°F
COVERAGE:	APPROX. 320 LINEAR FEET OF 4" LINE APPLIED @ 15 MILS

PART 3 – EXECUTION

3.1 SURFACE PREPARATION

A. Care should be taken to ensure that the surface is clean, dry and free of loose material. A simple leaf blower is typically sufficient to remove gravel and dust in most instances. When applying over previously coated areas, however, take special care to remove any loose or peeling paint. Other surface conditions, such as areas with large amounts of engine oil buildup or existing epoxy coatings, may require a power-washing procedure or abrading the surface before application of the paint. New concrete and asphalt should be aged for a minimum of 30 days prior to painting. Use caution when striping over a freshly sealed surface. Sealers can affect the adhesion and cure of traffic marking paints. For more information on the surface, please consult with the supplier or applicator of the surface.

3.2 WEATHER CONDITIONS AND APPLICATION

A. Air temperature, surface temperature, humidity and the weather conditions following application are extremely important factors in the success of the products. Aexcel formulates these coatings to be applied without further reduction. They can also be used in conjunction with the application

of glass beads to improve reflectivity without sacrificing other properties. Protect fresh lines from traffic until thoroughly dry. These, as well as all solvent-borne coatings, should not be applied at temperatures below 50°F and/or less than 6 hours before any expected precipitation. Evening and night applications should be avoided whenever possible due to the cooler temperatures. At lower temperatures or when humidity is extremely high, a significant amount of extra time will be needed for the paints to dry.

3.3 EQUIPMENT

A. Tip size, fluid pressure, atomizing air pressure, paint viscosity and paint temperature are all critical to the appearance, consistency and performance of the paint. The equipment must be matched to the paint being applied in order to achieve the proper film thickness and coverage. Typical tip sizes for “airless” machines are .019"-.021", while “air-atomized” machines use .086"-.11" at 60 lbs. pressure. For more information, please consult with the equipment manufacturer.

3.4 PAINT SELECTION AND SAFETY

A. These coatings, as are all solvent-based products, are extremely flammable. Do not smoke or weld while working with these paints. Empty containers that held these products will also contain residual vapors and should be handled in the same manner as those that are full. Use only paint recommended or specified for each application. Shelter the containers when possible and avoid prolonged outside storage. Agitation of the paints by stirring or shaking should be performed in order to ensure uniform consistency, application and performance. When storing partially filled containers, a small amount of solvent may be added and allowed to stand on top in order to avoid “skinning”. Always be sure the containers are sealed tightly during transporting or storing in order to avoid spillage, risk of fire and solvent evaporation. Keep paints away from heat and flame. Consult the MSDS and/or labels for further safety, personal protection, first aid, and spill or leak procedures.

3.5 WASTE DISPOSAL

A. Comply with all regulations regarding handling, storage and disposal of all hazardous materials and waste. Consult local agencies or disposal companies for individual instructions and requirements. Improper disposal of paint and their related materials is illegal and may result in large fines. Please comply with all regulations and minimize waste whenever possible.

NAME: REGULAR-DRY ALKYD ZONE MARKING PAINT

COLOR:	WHITE
CODE:	12W-D195
VISCOSITY @ 77°F, Kreb Units (KU):	85-95
WEIGHT PER GALLON @ 77°F, Lbs.:	12.7 +/- .2
PIGMENT, % By Weight:	54.0 Minimum
TOTAL SOLIDS, % By Weight:	75.0 Minimum

NON-VOL. VEHICLE, % By Weight of Vehicle:	31.0 Minimum
REFLECTANCE, %:	85.0 Minimum
OPACITY, 10 Mils:	0.96 Minimum
DRY TIME TO NO PICKUP, Minutes:	30 Maximum
V.O.C.:	2.94 Lb./Gal. . (352.02 g/Liter)
CLEANUP SOLVENTS:	Toluene, Methyl-Ethyl Ketone or equivalent.

END OF SECTION 321723

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SECTION 32 31 13

FENCING, GATES AND BOLLARDS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following perimeter fencing, gates, bollards and barrier arms:
   1. Chain-link fabric.
   2. Framework.
   3. Barbed wire.
   4. Gates: Swing and horizontal slide.
   5. Bollards: Standard

B. Related Sections for Equipment fencing:
   Division 5 Section 05700 "Ornamental Metals”

1.3 DEFINITIONS

A. CLFMI: Chain Link Fence Manufacturers Institute.

1.4 SUBMITTALS

A. Product Certificates: Signed by manufacturers of chain-link fences and gates certifying that products furnished comply with requirements.

B. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed Projects with Project names and addresses, names and addresses of architects and Governments, and other information specified.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who has completed chain-link fences and gates similar in material, design, and extent to those indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

B. Source Limitations for Chain-Link Fences and Gates: Obtain each color, grade, finish, type, and variety of component for chain-link fences and gates from one source with resources to provide chain-link fences and gates of consistent quality in appearance and physical properties.

1.6 PROJECT CONDITIONS

A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be submitted for approval.

2.2 CHAIN-LINK FENCE FABRIC

A. Steel Chain-Link Fence Fabric: Provide fabric fabricated in one-piece widths for fencing in height of 7 feet. Comply with CLFMI's "Product Manual" and with requirements indicated below:
   1. Mesh and Wire Size: No 9 gauge, 2-inch mesh, 0.148-inch diameter.
   2. Zinc-Coated Fabric: ASTM A 392, with zinc coating applied to steel wire with the following minimum coating weight: Class 1: Not less than 1.2 oz./sq. ft. of uncoated wire surface or as required by local ordinances.
   3. Coat selvage ends of fabric that is metallic coated during the weaving process with manufacturer's standard clear protective coating.
   4. Extend fabric a minimum of 2” of firm ground.

B. Selvage: Twisted at top selvage and knuckled at bottom.

2.3 INDUSTRIAL FENCE FRAMING

A. Round Steel Pipe: Standard weight, Schedule 40, galvanized steel pipe complying with ASTM F 1083. Comply with ASTM F 1043, Material Design Group IA, external and internal coating Type A, consisting of not less than 1.8-oz./sq. ft. zinc; and the following strength and stiffness requirements:
   1. Line, End, Corner, and Pull Posts and Top Rail: Per requirements for Light Industrial Fence.

B. Post Brace Rails: Provide brace rail with truss rod assembly for each gate, end, and pull post. Provide two brace rails extending in opposing directions, each with truss rod assembly, for each corner post and for pull posts. Provide rail ends and clamps for attaching rails to posts.

2.4 TENSION WIRE

A. General: Provide horizontal tension wire at the following locations:
   1. Location: Extended along top of barbed wire arms and top of fence fabric for supporting barbed tape.
   2. Location: Extended along bottom of fence fabric.

B. Metallic-Coated Steel Wire: 0.177-inch diameter, marcelled tension wire complying with ASTM A 824 and the following:
   1. Coating: Type II, zinc coated (galvanized) by the hot-dip process, with the following minimum coating weight:
      a. Matching chain-link fabric coating weight.

2.5 INDUSTRIAL SWING GATES

A. General: Comply with ASTM F 900 for the following swing-gate types:
   1. Single gate.
   2. Double gate

B. Metal Pipe and Tubing: Galvanized steel. Comply with ASTM F 1083 and ASTM F 1043 for materials and protective coatings.

C. Frames and Bracing: Fabricate members from round, galvanized steel tubing with outside dimension and weight according to ASTM F 900 for the following gate fabric height:
   1. Gate Fabric Height: 7 feet or less.

D. Frame Corner Construction: As follows:
   1. Welded or assembled with corner fittings.
   2. Welded or assembled with corner fittings and 5/16-inch diameter, adjustable truss rods for panels 5 feet wide or wider.

E. Gate Posts: Fabricate members from round galvanized steel pipe with outside dimension and weight according to ASTM F 900 for the gate fabric heights and leaf widths:

F. Hardware: Latches permitting operation from both sides of gate, hinges, center gate stops and, for each gate leaf more than 5 feet wide, keepers. Fabricate latches with integral eye openings for padlocking; padlock accessible from both sides of gate.

2.6 INDUSTRIAL HORIZONTAL SLIDE GATES

A. General: Comply with ASTM F 1184 for the following slide-gate types:
   1. Single gate.
   2. Classification: Type II Cantilever Slide, Class 2 with internal roller assemblies.

B. Metal Pipe and Tubing: Galvanized steel. Comply with ASTM F 1083 and ASTM F 1043 for materials and protective coatings.

C. Frames and Bracing: Fabricate from round, galvanized steel tubing with outside dimension and weight according to ASTM F 1184 for the following gate characteristics:
   1. Gate Fabric Height by Opening Width: All fabric heights by over 4 feet.

D. Frame Corner Construction: As follows:
   1. Type II Cantilever Slide Gates: Welded.

E. Gate Posts: Fabricate members from round galvanized steel pipe with outside dimension and minimum weight according to ASTM F 1184 for the following gate characteristics:
   1. Type II Gate Opening Width: Over 12 feet but not over 30 feet.

2.7 FITTINGS

A. General: Provide fittings for a complete fence installation, including special fittings for corners. Comply with ASTM F 626.

B. Rail and Brace Ends: Hot-dip galvanized pressed steel or hot-dip galvanized cast iron. Provide rail ends or other means for attaching rails securely to each gate, corner, pull, and end post.

C. Tension and Brace Bands: Hot-dip galvanized pressed steel.

D. Tension Bars: Hot-dip galvanized steel, length not less than 2 inches shorter than full height of chain-link fabric. Provide one bar for each gate and end post, and two for each corner and pull post, unless fabric is integrally woven into post.

E. Truss Rod Assemblies: Hot-dip galvanized steel rod and turnbuckle or other means of adjustment.

F. Barbed Wire Arms: Hot-dip galvanized pressed steel or hot-dip galvanized cast iron. Provide the following type, according to ASTM F 626, with clips, slots, or other means for attaching strands of barbed wire, and means for attaching to posts, one for each post, unless otherwise indicated. Provide line posts with arms designed with opening to accommodate or tension wire. Provide corner arms at fence corner posts.
   1. Type I, single slanted arm (45 degree).

G. Tie Wires, Clips, and Fasteners: Provide the following types according to ASTM F 626:
   1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, complying with the following:

      a. Hot-Dip Galvanized Steel: 0.148-inch diameter wire; galvanized coating thickness matching coating thickness of chain-link fence fabric.

   2. Power-driven fasteners.
   3. Round Wire Hog Rings: Hot-dip galvanized steel or aluminum for attaching chain-link fabric to horizontal tension wires.

2.8 BARBED WIRE

A. Zinc-Coated Steel Barbed Wire complying with ASTM A 121 or Aluminum Alloy or Coated and comply with ASTM A-585, Type 1, Double stranded twisted barbed wire, 12-gauge, with four pointed barbs spaced 4 inches apart.

2.9 BOLLARDS:

A. Standard Bollard shall be designed to stop a 15,000 pound vehicle.

2.10 CAST-IN-PLACE CONCRETE

A. General: Comply with ACI 301 for cast-in-place concrete.

B. Materials: Portland cement complying with ASTM C 150, aggregates complying with ASTM C 33, and potable water for ready-mixed concrete complying with ASTM C 94.
   1. Concrete Mixes: Normal-weight concrete with not less than 3000-psi compressive strength (28 days), 3-inchslump, and 1-inch maximum size aggregate.

2.11 GROUT AND ANCHORING CEMENT

A. Non-shrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout, recommended in writing by manufacturer, for exterior applications.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 INSTALLATION, GENERAL

A. General: Install chain-link fencing to comply with ASTM F 567 and more stringent requirements specified.

B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed or compacted soil.

C. Post Setting: Hand-excavate holes for post foundations in firm, undisturbed or compacted soil. Set terminal line gate posts in concrete footing. Protect portion of posts aboveground from concrete splatter. Place concrete around posts and vibrate or tamp for consolidation. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during placement and finishing operations until concrete is sufficiently cured.
   1. Exposed Concrete Footings: Extend concrete 2 inches above grade, smooth, and shape to shed water.
   2. Concealed Concrete Footings: Stop footings 3 inches below grade to allow covering with surface material.
   3. Posts Set into Concrete in Voids: Form or core drill holes not less than 5 inches deep and 3/4 inch larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with non-shrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions, and finished sloped to drain water away from post.

3.4 CHAIN-LINK FENCE INSTALLATION

A. Terminal Posts: Locate terminal end, corner, and gate posts per ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of 30 degrees or more.

B. Line Posts: Space line posts uniformly at 10 feet o.c.

C. Post Bracing Assemblies: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Install braces at end and gate posts and at both sides of corner and pull posts. Locate horizontal braces at mid-height of fabric on fences with top rail and at two-thirds fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.

D. Tension Wire: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Pull wire taut, without sags. Fasten fabric to tension wire with 0.120-inch diameter hog rings of same material and finish as fabric wire, spaced a maximum of 24 inches o.c. Install tension wire in locations indicated before stretching fabric.
   1. Top Tension Wire: Install tension wire through post cap loops.
   2. Bottom Tension Wire: Install tension wire within 6 inches of bottom of fabric and tie to each post with not less than same gage and type of wire.

E. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 2 inches between finish grade or surface and bottom selvage, unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.

F. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts with tension bands spaced not more than 15 inches o.c.

G. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other

end to chain-link fabric per ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing.

1. Maximum Spacing: Tie fabric to line posts 12 inches o.c. and to braces 24 inches o.c.

H. Fasteners: Install nuts for tension bands and carriage bolts on the side of the fence opposite the fabric side. Peen ends of bolts or score threads to prevent removal of nuts.

I. Barbed Wire: Install barbed wire uniformly spaced angled toward security side of fence. Pull wire taut and install securely to extension arms and secure to end post or terminal arms.

3.5 GATE INSTALLATION

A. General: Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

3.6 ADJUSTING

A. Gate: Adjust gate to operate smoothly, easily, and quietly, free from binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

B. Lubricate hardware, gate operator, and other moving parts.

END OF SECTION 323113

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SECTION 331313

CONCRETE REINFORCEMENT

PART 1 - GENERAL

1.1 RELATED WORK SPECIFIED ELSEWHERE

A. Section 321313 - Concrete Pavement.

1.2 QUALITY ASSURANCE

A. Reference Standards:

1. ACI 315, Manual of Standard Practice for Detailing Reinforced Concrete Structures.
2. ASTM A615, Specification for Deformed Billet Steel Bars for concrete.
3. ASTM A185, Specifications for Welded Steel Wire Fabric for Concrete Reinforcement.
4. Concrete Reinforcing Steel Institute, Manual of Standard Practice.

B. Allowable Tolerances:

1. Fabricating: (per ACI 117-90)
   a. Saw cut length to: Plus or minus 1". (Remove all burrs).
   b. Stirrups and ties: Plus or minus 1/2".
   c. All other bends: Plus or minus 1".
2. Placing:
   a. Concrete cover to formed surfaces: Plus or minus 1/4".
   b. Minimum spacing between bars: Plus or minus 1/4".
   c. Top bars in slabs and beams:
      (1) Members 8" deep or less: Plus or minus 1/4".
      (2) Members more than 8" but not over 2'-0" deep: Plus or minus 1/2".
      (3) Members more than 2'-0" deep: Plus or minus 1".
      (4) Crosswise of members: Space evenly within 2" of stated separation.
      (5) Lengthwise of members: Plus or minus 2".
3. Maximum bar relocation to avoid interference with other reinforcing steel, conduits, or other embedded item: 1 bar diameter.

1.3 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver reinforcement to project site in bundles marked with tags indicating bar size, length and mark.

B. Unload reinforcing carefully to prevent damage. Store above ground in dry, well drained area; protect from mud, dirt and corrosion.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Reinforcing Bars: ASTM A615, deformed billet steel bars, domestic manufacture, Grades 40 and/or 60 as indicated on structural drawings.

B. Welded Wire Fabric Reinforcing: ASTM A185, steel wire spot welded at intersections and of size indicated.

C. Metal Accessories: Include spacers, chairs, bolsters, ties and other devices necessary for properly placing, spacing, supporting and fastening reinforcement in place, conforming to requirements to CRSI "Manual of Standard practice for Detailing Reinforced Concrete Structures." Metal accessories shall be galvanized or plastic coated where legs will be exposed in finished concrete surfaces.

D. Tie Wire: FS QQ-W-461, black annealed steel, 16 ga. min.

2.2 FABRICATION:

A. In accordance with CRSI "Manual of Standard Practice."

PART 3 - EXECUTION

3.1 PREPARATION

A. Cleaning: Before placing in work, thoroughly clean reinforcement of loose rust, mill, scale, dirt, oil, and other coating which might tend to reduce bonding. Reinspect reinforcing left protruding for future bonding, or following delay in work, and reclean if necessary.

3.2 INSTALLATION

A. Bar Placement: In accordance with CRSI "Recommended Practice for Placing Reinforcing Bars" and "Recommended Practice for Placing Bar Supports."

1. Bending: Bend bars cold; do not heat reinforcing or bend by make-shift methods. Discard bent, kinked or otherwise damaged bars.
2. Splices: In accordance with ACI 315.
3. Placing: Accurately position reinforcement; securely saddle tie at intersections.
4. Supports: In accordance with ACI 315 for number, type, spacing and placing.

END OF SECTION 331313

Certification
Regarding Debarment, Suspension and Ineligibility

As is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 76, Government-wide Debarment and Suspension, the applicant certifies, to the best of his or her knowledge and belief, that both it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency;

b. Have not within a three-year period preceding this bid proposal and/or application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction, violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a government entity with commission of any of the offenses enumerated herein; and

d. Have not within a three-year period preceding this bid proposal and/or application had one or more public transactions terminated for cause or default.

Signature:_____
Print Name:_____
Title:_____
Telephone Number:_____
Date:_____

If the bidder is unable to certify to all of the statements in this Certification, such bidder should attach an explanation to this proposal.

Form **W-9**
(Rev. January 2011)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification (required): ☐ Individual/sole proprietor ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶

☐ Other (see instructions) ▶

☐ Exempt payee

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number

			–			–				

Employer identification number

		–						

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here | **Signature of U.S. person ▶** | **Date ▶**

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,
- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of $50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a $500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA) name" on the "Business name/disregarded entity name" line.

Disregarded entity. Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

Note. Check the appropriate box for the federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

Other entities. Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/ disregarded entity name" line.

Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the "Business name/ disregarded entity name," sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),

2. The United States or any of its agencies or instrumentalities,

3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,

4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or

5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

6. A corporation,

7. A foreign central bank of issue,

8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,

9. A futures commission merchant registered with the Commodity Futures Trading Commission,

10. A real estate investment trust,

11. An entity registered at all times during the tax year under the Investment Company Act of 1940,

12. A common trust fund operated by a bank under section 584(a),

13. A financial institution,

14. A middleman known in the investment community as a nominee or custodian, or

15. A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 5 and 7 through 13. Also, C corporations.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over $600 required to be reported and direct sales over $5,000 [1]	Generally, exempt payees 1 through 7 [2]

[1] See Form 1099-MISC, Miscellaneous Income, and its instructions.

[2] However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at *www.ssa.gov*. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: *A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.*

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, below, and items 4 and 5 on page 4 indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt Payee* on page 3.

Signature requirements. Complete the certification as indicated in items 1 through 3, below, and items 4 and 5 on page 4.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account [1]
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor [2]
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee [1]
b. So-called trust account that is not a legal or valid trust under state law	The actual owner [1]
5. Sole proprietorship or disregarded entity owned by an individual	The owner [3]
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	**Give name and EIN of:**
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity [4]
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

[1] List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

[2] Circle the minor's name and furnish the minor's SSN.

[3] You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

[4] List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

*Note. Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: *spam@uce.gov* or contact them at *www.ftc.gov/idtheft* or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

HIDALGO COUNTY
PURCHASING DEPARTMENT
Bidder/Vendor Application

Complete in print or type. Please return this application to the Hidalgo County Purchasing Department thru Facsimile: (956) 318-2629 or (956) 292-7612 in person or regular mail to: 2812 S. Business Hwy. 281 , Edinburg, Texas 78539 or e-mail: purchasing@co.hidalgo.tx.us

Company Name: **Telephone No. ( )**
dba Name:
Legal Name:
Mailing Address: **Fax No. ( )**
Physical Address:
City, State, Zip **Tax I.D. No.**
Remit to Address : **City, State, Zip**
E-Mail Address:
Representative(s) Name(s) & Title(s)
Type of Organization (check one): _____ Individual _____ Partnership _____ Corporation _____ Non-Profit _____ LLC _____ Sole Proprietor _____ Other, Specify **State Identification No._____ (Please attached completed W-9 form with this application)** **Federal Identification No. or (if individual) SS No.**
State of Incorporation: _____ Date:_____ Other:
Type of Business (check one): _____ Manufacturer _____ Wholesaler _____ Retailer _____ Broker _____ Distributor _____ Service Organization _____ Other, Specify
Name & Title of Person(s) Authorized to Sign Bids, Proposals, and/or Contracts:
Small and/or Disadvantaged Business Information (check application criteria) **Small Business:** **Disadvantaged Business (At Least 51% Ownership)** ☐ Less than 125,000 annual gross receipt ☐ Black American ☐ Native American ☐ Less than 250,000 annual gross receipt ☐ Hispanic American ☐ Women ☐ Less than 499,000 annual gross receipt ☐ Asian Pacific American ☐ Other ☐ More than 500,000 annual gross receipt **Have you been certified as a HUB or an MBE/WBE source?:** ☐ Yes ☐ No **Indicate Certification No.(s):_____ or are Certificate(s) attached?:** ☐ Yes ☐ No
What type of product(s) is/are solicited by your company?: **Would you like to be provided with specifications for procurements of such products?:** ☐ Yes ☐ No
To Be Completed by the County: Rec'd by (Purchasing):_____ Date Rec'd by (Purchasing): **Date Forwarded Information to Auditor's Office:_____Entry Date: _____ Vendor No.:**

HISTORICALLY UNDERUTILIZED BUSINESS (HUB) DECLARATION

The primary objective of the Hidalgo County HUB Program is to ensure Historically Underutilized Businesses receive a fair and equal opportunity for participation in the County's procurement process. This fact holds true for Services (Professional & Non-Professional), Commodities, and Construction contracts and any subcontracts thereto. The program strongly encourages Prime Contractors to provide subcontracting opportunities to Certified Hub Contractors/Vendors. Our goal for HUB contractor/vendor participation, as well as HUB subcontractor participation is 30%. To be considered as a "Certified HUB Contractor/Vendor" the contractor/vendor must have been certified by, and hold a current and valid certification with any of the three agencies listed below.

Have you been Certified as a HUB or an MBE/WBE source?: □Yes □ No

If yes, by whom?: □ Texas Building & Procurement Commission □ Other_____

Indicate Certification No(s).:_____ or Are Certificate(s) Attached?: □ Yes □ No

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LIST OF CERTIFIED HUB SUBCONTRACTORS

(Attach additional pages if necessary)

What percentage of the Bid, RFP, or RFQ is to be subcontracted with Certified HUB sources?: _____%
(List HUB Subcontractor information below).

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): □Texas Building & Procurement Commission □ Other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): □Texas Building & Procurement Commission □ Other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): □Texas Building & Procurement Commission □ Other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

_____

Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

_____ _____

Signature of vendor doing business with the governmental entity Date

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

SALES TAX AND LOCAL SALES TAX
EXEMPTION CERTIFICATE FOR CONTRACTORS

This Contract is to be performed for an exempt organization as defined by Article 20.04 (H) (4) of the Texas Limited Sales, Excise, and Use Tax Act and the undersigned hereby claims an exemption from payment of taxes under Chapter 20, title 122A, revised hereby claims an exemption from payment of taxes under Chapter 20, title 122A, revised civil statues of Texas, and Article 1066 ©, entitle Local Sales and Use Tax, revised civil statues of Texas.

The Contractor performing this Contract may purchase, rent, or lease all materials, supplies, equipment used for consumed in the performance of this Contract by issuing to his retailer an exemption certificate in lieu of the tax, said exemption certificate complying with State Comptroller's Ruling No 95-9.07. Any such exemption certificate issue by the Contractor in lieu of the tax shall be subject to the provisions of the State Comptroller's Ruling No. 95.0.09 as amended to be effective October 2, 1968.

EXECUTED this the _____ day of _____, 20_____.

_____

Contractor

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GOVERNMENT CODE

CHAPTER 2258. PREVAILING WAGE RATES

SUBCHAPTER A. GENERAL PROVISIONS

§Sec. 2258.001. DEFINITIONS. In this chapter:

(1) "Locality in which the work is performed" means:

(A) for a contract for a public work awarded by the state, the political subdivision of the state in which the public work is located:

(i) which may include a county, municipality, county and municipality, or district, except as provided by Subparagraph (ii); and

(ii) which, in a municipality with a population of 500,000 or more, may only include the geographic limits of the municipality; or

(B) for a contract for a public work awarded by a political subdivision of the state, the geographical limits of the political subdivision.

(2) "Public body" means a public body awarding a contract for a public work on behalf of the state or a political subdivision of the state.

(3) "Worker" includes a laborer or mechanic.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995. Amended by Acts 2001, 77th Leg., ch. 1422, Sec. 14.04, eff. Sept. 1, 2001.

§Sec. 2258.002. APPLICABILITY OF CHAPTER TO PUBLIC WORKS. (a) This chapter applies only to the construction of a public work, including a building, highway, road, excavation, and repair work or other project development or improvement, paid for in whole or in part from public funds, without regard to whether the work is done under public supervision or direction.

(b) This chapter does not apply to work done directly by a public utility company under an order of a public authority.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.003. LIABILITY. An officer, agent, or employee of a public body is not liable in a civil action for any act or omission implementing or enforcing this chapter unless the action was made in bad faith.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

SUBCHAPTER B. PAYMENT OF PREVAILING WAGE RATES

§Sec. 2258.021. RIGHT TO BE PAID PREVAILING WAGE RATES. (a) A worker employed on a public work by or on behalf of the state or a political subdivision of the state shall be paid:

(1) not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed; and

(2) not less than the general prevailing rate of per diem wages for legal holiday and overtime work.

(b) Subsection (a) does not apply to maintenance work.

(c) A worker is employed on a public work for the purposes of this section if the worker is employed by a contractor or subcontractor in the execution of a contract for the public work with the state, a political subdivision of the state, or any officer or public body of the state or a political subdivision of the state.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 165, Sec. 18.01, eff. Sept. 1, 1997.

§Sec. 2258.022. DETERMINATION OF PREVAILING WAGE RATES.

(a) For a contract for a public work awarded by a political subdivision of the state, the public body shall determine the general prevailing rate of per diem wages in the locality in which the public work is to be performed for each craft or type of worker needed to execute the contract and the prevailing rate for legal holiday and overtime work by:

(1) conducting a survey of the wages received by classes of workers employed on projects of a character similar to the contract work in the political subdivision of the state in which the public work is to be performed; or

(2) using the prevailing wage rate as determined by the United States Department of Labor in accordance with the Davis-Bacon Act (40 U.S.C. Section 276a et seq.), and its subsequent amendments.

(b) This subsection applies only to a public work located in a county bordering the United Mexican States or in a county adjacent to a county bordering the United Mexican States. For a contract for a public work awarded by the state, the public body shall determine the general prevailing rate of per diem wages in the locality in which the public work is to be performed for each craft or type of worker needed to execute the contract and the prevailing rate for legal holiday and overtime work as follows. The public body shall conduct a survey of the wages received by classes of workers employed on projects of a character similar to the contract work both statewide and in the political subdivision of the state in which the public work is to be performed. The public body shall also consider the prevailing wage rate as determined by the United States Department of Labor in accordance with the Davis-Bacon Act (40 U.S.C. Section 276a et seq.), and its subsequent amendments, but only if the survey used to determine that rate was conducted within a three-year period preceding the date the public body calls for bids for the public work. The public body shall determine the general prevailing rate of per diem wages in the locality based on the higher of:

(1) the rate determined from the survey conducted in the political subdivision;

(2) the arithmetic mean between the rate determined from the survey conducted in the political subdivision and the rate determined from the statewide survey; and

(3) if applicable, the arithmetic mean between the rate determined from the survey conducted in the political subdivision and the rate determined by the United States Department of

Labor.

(c) The public body shall determine the general prevailing rate of per diem wages as a sum certain, expressed in dollars and cents.

(d) A public body shall specify in the call for bids for the contract and in the contract itself the wage rates determined under this section.

(e) The public body's determination of the general prevailing rate of per diem wages is final.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995. Amended by Acts 1997, 75th Leg., ch. 165, Sec. 18.02, eff. Sept. 1, 1997; Acts 2001, 77th Leg., ch. 1422, Sec. 14.05, eff. Sept. 1, 2001.
Amended by: Acts 2007, 80th Leg., R.S., Ch. 728, Sec. 1, eff. September 1, 2007.

§Sec. 2258.023. PREVAILING WAGE RATES TO BE PAID BY CONTRACTOR AND SUBCONTRACTOR; PENALTY.

(a) The contractor who is awarded a contract by a public body or a subcontractor of the contractor shall pay not less than the rates determined under Section 2258.022 to a worker employed by it in the execution of the contract.

(b) A contractor or subcontractor who violates this section shall pay to the state or a political subdivision of the state on whose behalf the contract is made, $60 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the contract. A public body awarding a contract shall specify this penalty in the contract.

(c) A contractor or subcontractor does not violate this section if a public body awarding a contract does not determine the prevailing wage rates and specify the rates in the contract as provided by Section 2258.022.

(d) The public body shall use any money collected under this section to offset the costs incurred in the administration of this chapter.

(e) A municipality is entitled to collect a penalty under this section only if the municipality has a population of more than 10,000.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.024. RECORDS.

(a) A contractor and subcontractor shall keep a record showing:

(1) the name and occupation of each worker employed by the contractor or subcontractor in the construction of the public work; and

(2) the actual per diem wages paid to each worker.

(b) The record shall be open at all reasonable hours to inspection by the officers and agents of the public body.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.025. PAYMENT GREATER THAN PREVAILING RATE NOT PROHIBITED. This chapter does not prohibit the payment to a worker employed on a public work an amount

greater than the general prevailing rate of per diem wages.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.026. RELIANCE ON CERTIFICATE OF SUBCONTRACTOR. A contractor is entitled to rely on a certificate by a subcontractor regarding the payment of all sums due those working for the subcontractor until the contrary has been determined.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

SUBCHAPTER C. ENFORCEMENT; CIVIL AND CRIMINAL PENALTIES

§Sec. 2258.051. DUTY OF PUBLIC BODY TO HEAR COMPLAINTS AND WITHHOLD PAYMENT. A public body awarding a contract, and an agent or officer of the public body, shall:

(1) take cognizance of complaints of all violations of this chapter committed in the execution of the contract; and

(2) withhold money forfeited or required to be withheld under this chapter from the payments to the contractor under the contract, except that the public body may not withhold money from other than the final payment without a determination by the public body that there is good cause to believe that the contractor has violated this chapter.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.052. COMPLAINT; INITIAL DETERMINATION.

(a) On receipt of information, including a complaint by a worker, concerning an alleged violation of Section 2258.023 by a contractor or subcontractor, a public body shall make an initial determination as to whether good cause exists to believe that the violation occurred.

(b) A public body must make its determination under Subsection (a) before the 31st day after the date the public body receives the information.

(c) A public body shall notify in writing the contractor or subcontractor and any affected worker of its initial determination.

(d) A public body shall retain any amount due under the contract pending a final determination of the violation.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.053. ARBITRATION REQUIRED FOR UNRESOLVED ISSUE.

(a) An issue relating to an alleged violation of Section 2258.023, including a penalty owed to a public body or an affected worker, shall be submitted to binding arbitration in accordance with the Texas General Arbitration Act (Article 224 et seq., Revised Statutes) if the contractor or subcontractor and any affected worker do not resolve the issue by agreement before the 15th day after the date the public body makes its initial determination under Section 2258.052.

(b) If the persons required to arbitrate under this section do not agree on an arbitrator

before the 11th day after the date that arbitration is required under Subsection (a), a district court shall appoint an arbitrator on the petition of any of the persons.

(c) A public body is not a party in the arbitration.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.054. ARBITRATION AWARD; COSTS. (a) If an arbitrator determines that Section 2258.023 has been violated, the arbitrator shall assess and award against the contractor or subcontractor:

(1) penalties as provided by Section 2258.023 and this section; and

(2) all amounts owed to the affected worker.

(b) An arbitrator shall assess and award all reasonable costs, including the arbitrator's fee, against the party who does not prevail. Costs may be assessed against the worker only if the arbitrator finds that the claim is frivolous. If the arbitrator does not find that the claim is frivolous and does not make an award to the worker, costs are shared equally by the parties.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.055. ARBITRATION DECISION AND AWARD FINAL. The decision and award of the arbitrator is final and binding on all parties and may be enforced in any court of competent jurisdiction.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.056. PAYMENT BY PUBLIC BODY TO WORKER; ACTION TO RECOVER PAYMENT.

(a) A public body shall use any amounts retained under this chapter to pay the worker the difference between the amount the worker received in wages for labor on the public work at the rate paid by the contractor or subcontractor and the amount the worker would have received at the general prevailing wage rate as provided in the arbitrator's award.

(b) The public body may adopt rules, orders, or ordinances relating to the manner in which a reimbursement is made.

(c) If the amounts retained by a public body under this chapter are not sufficient for the public body to pay the worker the full amount owed, the worker has a right of action against the contractor or subcontractor and the surety of the contractor or subcontractor to recover the amount owed, reasonable attorney's fees, and court costs.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.057. WITHHOLDING BY CONTRACTOR.

(a) A contractor may withhold from a subcontractor sufficient money to cover an amount withheld from the contractor by a public body because the subcontractor violated this chapter.

(b) If the contractor has made a payment to the subcontractor, the contractor may withhold

money from any future payments owed to the subcontractor or sue the subcontractor or the subcontractor's surety for the amount withheld from the contractor by a public body because of the subcontractor's violation.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

§Sec. 2258.058. CRIMINAL OFFENSE.

(a) An officer, agent, or representative of the state or of a political subdivision of the state commits an offense if the person wilfully violates or does not comply with a provision of this chapter.

(b) A contractor or subcontractor of a public work under this chapter, or an agent or representative of the contractor or subcontractor, commits an offense if the person violates Section 2258.024.

(c) An offense under this section is punishable by:

(1) a fine not to exceed $500;

(2) confinement in jail for a term not to exceed six months; or

(3) both a fine and confinement.

Added by Acts 1995, 74th Leg., ch. 76, Sec. 5.49(a), eff. Sept. 1, 1995.

Prevailing Wage Rates
Certification Statement

Date _____

Project Name _____ **CSJ#** _____

Contractor _____ **Application#** _____

I, _____ **do hereby state:**
(Name of Project Director)

1. That a payroll (form WH-347 or similar form) was submitted for contract work Performed for the period covered by the attached application.
2. That a statement of compliance(form WH-347 or similar form) was submitted with the payroll.
3. The certified payroll complies with the classifications and minimum wage rates Stipulated in the contract.
4. That a minimum of one interview was conducted with laborers using Form HUD-11 or similar.

_____
Signature

U.S. Department of Labor
Employment Standards Administration
Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions, Form WH-347 Inst.)

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number

OMB No.: 1215-0149
Expires: 03/31/2006

NAME OF CONTRACTOR ☐ OR SUBCONTRACTOR ☐ ADDRESS

PAYROLL NO. FOR WEEK ENDING PROJECT AND LOCATION PROJECT OR CONTRACT NO.

(1) NAME, ADDRESS, AND SOCIAL SECURITY NUMBER OF EMPLOYEE	(2) NO. OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	OT OR ST	(4) DAY AND DATE — HOURS WORKED EACH DAY	(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS: FICA	WITHHOLDING TAX			OTHER	TOTAL DEDUCTIONS	(9) NET WAGES PAID FOR WEEK
			O											
			S											
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We estimate that it will take an average of 56 minutes to complete this collection of information, including time for reviewing instructions searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection of information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, ESA, U. S. Department of Labor, Room S3502, 200 Constitution Avenue, N. W., Washington, D. C. 20210.

FORM WH-347, Revised Nov. 1998 - FORMERLY SOL 184 - *PURCHASE THIS FORM DIRECTLY FROM THE SUPT. OF DOCUMENTS*

Exhibit E-L

Date _____

I _____ _____
(Name of Signatory Party) (Title)

do hereby state

(1) That I pay or supervise the payment of the persons employed by

_____ on the
(Contractor or Subcontractor)

_____ that during the payroll period commencing on the
(Building or Work)

_____ day of _____, _____, and ending the _____ day of _____, _____,

all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said

_____ from the full
(Contractor or Subcontractor)

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967, 76 Stat. 357, 40 U.S.C. 276c), and described below

_____

_____

_____

_____

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ – In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in Section 4(c) below

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ – Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in Section 4(c) below

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE

Exhibit E-L

General Decision Number: TX160305 01/08/2016 TX305

Superseded General Decision Number: TX20150305

State: Texas

Construction Type: Building

County: Hidalgo County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016

BOIL0074-003 01/01/2014

	Rates	Fringes
BOILERMAKER	$ 23.14	21.55

ENGI0178-005 06/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(1) Tower Crane	$ 29.00	10.60
(2) Cranes with Pile Driving or Caisson Attachment and Hydraulic Crane 60 tons and above	$ 28.75	10.60
(3) Hydraulic cranes 59 Tons and under	$ 27.50	10.60

* IRON0084-011 06/01/2015

	Rates	Fringes
IRONWORKER, ORNAMENTAL	$ 23.02	6.35

PLUM0412-004 04/01/2013

	Rates	Fringes

PLUMBER.....$ 31.14 12.43

SUTX2014-031 07/21/2014

	Rates	Fringes
BRICKLAYER	$ 16.17	0.00
CARPENTER	$ 14.21	2.22
CEMENT MASON/CONCRETE FINISHER	$ 12.46	0.00
ELECTRICIAN	$ 18.44	4.53
INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation)	$ 11.54	2.17
IRONWORKER, REINFORCING	$ 12.01	0.00
IRONWORKER, STRUCTURAL	$ 15.04	4.34
LABORER: Common or General	$ 8.00	0.00
LABORER: Mason Tender - Brick	$ 10.00	0.00
LABORER: Mason Tender - Cement/Concrete	$ 10.89	0.96
LABORER: Pipelayer	$ 11.00	3.47
LABORER: Roof Tearoff	$ 10.06	0.00
OPERATOR: Backhoe/Excavator/Trackhoe	$ 14.04	1.01
OPERATOR: Bobcat/Skid Steer/Skid Loader	$ 13.93	0.00
OPERATOR: Bulldozer	$ 18.29	1.31
OPERATOR: Drill	$ 16.22	0.34
OPERATOR: Forklift	$ 14.83	0.00
OPERATOR: Grader/Blade	$ 10.00	0.00
OPERATOR: Loader	$ 12.87	0.70
OPERATOR: Mechanic	$ 17.00	0.00
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	$ 16.03	0.00
OPERATOR: Roller	$ 12.70	0.00
PAINTER (Brush, Roller, and Spray)	$ 11.27	0.00
PIPEFITTER	$ 15.22	3.16

ROOFER	$ 11.42	0.00
SHEET METAL WORKER (HVAC Duct Installation Only)	$ 18.40	2.12
SHEET METAL WORKER, Excludes HVAC Duct Installation	$ 21.13	6.53
TILE FINISHER	$ 11.22	0.00
TILE SETTER	$ 12.15	0.00
TRUCK DRIVER: Dump Truck	$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck	$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck	$ 12.50	0.00
TRUCK DRIVER: Water Truck	$ 12.00	4.11

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

==========

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the

most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests

for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

==========

END OF GENERAL DECISION

CHANGE ORDER NUMBER ONE(1)

Project: _____

DATE OF ISSUANCE: _____ EFFECTIVE DATE: _____

OWNER: _____
OWNER'S CONTRACT NO: _____

CONTRACTOR: _____ ENGINEER: _____

_____ _____

_____ _____

You ar directed to make the following changes in the Contract Documents.

Description:
1.
2.
3.
4.
5.
6.

Reason for Change Order:
1.
2.
3.
4.
5.
6.

Attachments:

CHANGE IN CONTRACT PRICE:		CHANGE IN CONTRACT TIME:
Original Contract Price $ 0.00		Original Contract Time for Substantial Completion: 0 calendar days or dates
Net Changes from previous Change Order $ 0.00		Net Change from previous Change Orders 0 calendar days
Contract Price prior to this Change Order $ 0.00		Contract Time prior to this Change Order Substantial Completion: 0 calendar days or dates
Net Increase(decrease) of this Change Order $ 0.00		Net Increase(decrease) of this Change Order 0 calendar days
Contract Price with all approved Change Orders $ 0.00	Net % increase(decrease)from original contract price. #DIV/O! %	Contract Time with all approved Change Orders Substantial Completion: 0 calendar days or dates

RECOMMENDED:

By: _____
Enigineer (Authorized Signature)

Date: _____

APPROVED:

By: _____
Owner (Authorized Signature)

Date: _____

ACCEPTED:

By: _____
Contractor (Authorized Signature)

Date: _____

Exhibit E-B

APPLICATION FOR PAYMENT NO.

To: _____ (OWNER)
From: _____ (CONTRACTOR)
Contract: _____
Project: _____
Owner's Contract No. _____ Engineer's Project No. _____
For Work accomplished through the date of: _____

1. Original Contract Price:	
2. Net change by Change Order and Written Agreements(+or-):	
3. Current Contract Price (1 plus 2):	
4. Total completed and stored to date:	
5. Retainage (per Agreement):	
10% of completed Work:	
_____ of stored material	
Total Retainage:	
6. Total completed and stored to date less retainage (4 minus 5)	
7. Less previous Application for Payments:	
8. AMOUNT DUE THIS APPLICATION (6 MINUS 7)	

Accompanying Documentation:

CONTRACTOR'S Certification:

The undersigned CONTRACTOR certifies that (1) all previous progress payments received from OWNER on account of Work done under the Contract referred to above have been applied on account to discharge CONTRACTOR'S legitimate obligations incurred in connection with Work covered by prior Applications for Payment numbered 1 through 2 inclusive: (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to OWNER at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to OWNER indemnifying OWNER against any such Lien, security interest or encumbrance); and (3) all Work covered by this Application for Payments is in accordance with the Contract Documents and not defective.

Date _____

_____
CONTRACTOR

State of _____
County of _____
Subscribed and sworn to before me this _____
day of _____

By: _____

_____
Notary Public
My Commission expires: _____

Payment of the above AMOUNT DUE THIS APPLICATION is recommended.

Date _____

_____
ENGINEER

By: _____

Exhibit E-C

Contractor Name
Starting Date
Project Ending Date
Retainage Percent

Application No.
Application Date:
Period To:
Engineer Firm

Summary

CSJ#	PROJECT NAME	Original Schedule Value	Revised Schedule Value	Payment Application No 1	Payment Application No 2	Payment Application No 3	Payment Application No 4	Total To Date	Balance To Finish	Retainage	Net	Payment To Date	Payment Due

Contractor Name
Starting Date
Project Ending Date
Retainage Percent

Application No.
Application Date:
Period To:
Engineer Firm

Summary

CSJ#	PROJECT NAME	Original Schedule Value	Revised Schedule Value	Payment Application No 1	Payment Application No 2	Payment Application No 3	Total To Date	Balance To Finish	Retainage	Net	Payment To Date	Payment Due

_____ Contractor Name
_____ Starting Date
_____ Project Ending Date
_____ Retainage Percent

Application No.: _____
Application Date: _____
Period To: _____
Engineer Firm: _____

Summary

CSJ#	PROJECT NAME	Original Schedule Value	Revised Schedule Value	Payment Application No 1	Payment Application No 2	Payment Application No 3	Total To Date	Balance To Finish	Retainage	Net	Payment To Date	Payment Due
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Exhibit E-E

Contractor Name
Starting Date
Project Ending Date
Retainage Percent

Application No.
Application Date:
Period To:
Engineer Firm

Summary

CSJ#	PROJECT NAME	Original Schedule Value	Revised Schedule Value	Payment Application No 1	Payment Application No 2	Payment Application No 3	Payment Application No 4	Retainage Release	Total To Date	Balance To Finish	Retainage	Net	Payment To Date	Payment Due

PARTIAL/FINAL WAIVER OF LEIN

THE STATE OF TEXAS

COUNTY OF_____

The undersigned contracted with _____
_____to furnish_____
in connection with certain improvements to real property located in_____
County, Texas, and owned by_____
Which improvements are described as follows:

_____
_____
_____

In consideration of Pay Estimate No _____in the amount of_____
_____DOLLAR($_____)and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and confessed, the undersigned does hereby waive and release any mechanic's lien or materialmen's lien or claims of lien that the undersigned has or hereafter has on the above mentioned real property on account of any labor performed or materials furnished or to be furnished or labor performed and materials furnished by the undersigned pursuant to the above-mentioned contract or any constitutional lien that the undersigned may have.

Undersigned hereby guarantees that all bids for labor performed and/or materials furnished in the erection and construction of such improvements on the Property have been fully paid and satisfied and Undersigned does further guarantee that if for any reason a lien or liens are filed for material or labor against said Property arising out of any bills for material or labor in connection with the erection or construction of said improvements thereon, Undersigned will obtain a settlement of such lien or liens and a proper release thereof shall be obtained.

_____
CONTRACTOR

BY:_____
TITLE

SWORN TO AND SUBSCRIBED BEFORE ME, on this the_____day of_____,20__to certify which witness my hand and seal of office.

_____
NOTARY PUBLIC in and for the State of Texas

My Commission Expires: _____

Exhibit E-I

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CONTRACTOR'S AFFIDAVIT OF PAYMENTS OF DEBTS AND CLAIMS

PROJECT: **PROJECT NO.**
OWNER:
CONTRACTOR:
ENGINEER:

The Contactor in accordance with the Contract Documents, hereby certifies that, except as listed below, all obligations for all materials and equipment furnished, for all work labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or his property might in any way be held responsible have been paid in full or have otherwisse been satisfied in full.

EXCEPTIONS: (If none, write "NONE". The Contractor shall furnish a bond acceptable to the Owner for each exception.)

CONTRACTOR

By

Title

Subscribed and sworn to before me this day of

Notary Public:

My Commission Expires:

Prevailing Wage Rates
Certification Statement

Date _____

Project Name _____ **CSJ# _____**

Contractor _____ **Application# _____**

I, _____ do hereby state:
(Name of Project Director)

1. That a payroll (form WH-347 or similar form) was submitted for contract work Performed for the period covered by the attached application.
2. That a statement of compliance (form WH-347 or similar form) was submitted with the payroll.
3. The certified payroll complies with the classifications and minimum wage rates Stipulated in the contract.
4. That a minimum of one interview was conducted with laborers using Form HUD-11 or similar.

_____
Signature

Exhibit E-L

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CERTIFICATE OF CONSTRUCTION COMPETION

THIS IS TO CERTIFY THAT ON _____ DAY OF _____ ,20____A FINAL INSPECTION was made of the project herein described.

CONTRACT

CONTRACT DATE: _____
OWNER: _____
CONSTRUCTION CONTRACTOR: _____
OF THE CITY OF _____ STATE OF _____

PROJECT DESCRIPTION

CONSTRUCTION OF _____

CONTRACT NO: _____
Located in or near the City/Precinct Of _____

THIS IS TO CERTIFY"

1. That the work has been completed in accordance with the plans and specifications and all addenda, change orders, supplemental agreements thereto, and with the following exceptions:
   _____

2. That the sum of _____, deducted from the final payment of the Contractor is a fair and equitable settlement for the foregoing except work.

3. That the contractor has presented a "Certificate of Release" starting under oath, that all claims arising out of the performance of work have been fulfilled, and the Owner is released from all claims arising under or by virtue of said contract.

4. That the CONTRACTOR has presented in behalf of itself and its sureties, satisfactory evidence that it is bound to repair, replace, and make good any faulty workmanship and/or materials discovered in the work within a period of one year from this date, as provided in said contract.

5. Amount of Original Contract _____
   Present Amount of Contract _____
   Total Amount of earned to Date _____
   Less: previous payments _____
   Balance _____
   Authorized deductions _____
   AMOUNTY OF FINAL PAYMENT _____

6. That the final payment in the amount of _____

_____ is now due and payable.

_____
Engineer's Signature & License #

CONCURRED BY:

_____
Contractor's Name

By:_____

Title: _____

CONCURRED BY:

_____
City/Precinct

By:_____

Title: _____

CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

PROJECT: **PROJECT NO.**
OWNER:
CONTRACTOR:
ENGINEER:

The Contractor, in accordance with the Contract Documents, and in consideration for the full and final payment to the Contractor for all services in connection with the project, does hereby waive and release any and all liens, or any and all claims to liens which the Contractor may have on or affecting the project as a result of its contract(s) for the Project or for performing labor and/or furnishing materials in any way connected with the construction of any aspect of the project. The Contractor further certifies and warrants that all subcontractors of labor and/or materials for the Project, except as listed below, have been paid in full for all labor and/or materials supplied to, for through or at the direct or indirect request of the Contractor prior to, through and including the date of this affidavit.

EXCEPTIONS: (If none, write "NONE". The Contractor shall furnish a bond acceptable to the Owner for each exception.)

CONTRACTOR

By

Title

Subscribed and sworn to before me this day of

Notary Public:

My Commission Expires:

Form L

Contractor Name

Starting Date

Project Ending Date

Engineer's / County Project Description

Application No.:

Application Date:

Period To:

Engineer's / County Project No.:

					Original Schedule Value			Value		First Month			Second Month			Third Month				Balance To Finish	
No.	Item Code	Description	Unit	Original Rates	Quan	Dollars	Revised Rates	Quan	Dollars	Monthly Quan	QTY to Date	Item Cost (Monthly)	Monthly Quan	QTY to Date	Item Cost (Monthly)	Monthly Quan	QTY to Date	Item Cost (Monthly)	Total to Date	Quan	Dollars
		(905) ROADWAY																			
1	100	Preparation of Right-of-Way	Sta	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
2	152	6" road Grader Work(Dens Cont.) Subgrade	SY	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
3	247	6" FL BS(Compl in Plac)	S.Y.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
4	310	Asph. Matrl. (MC-30)	Gal	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
5	340	Asph. Conc. Ty D	S.Y.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
6	500	Mobilization	L.S.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
7	502	Barricades, Signs and Traffic Handling	Mo	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
8	530	Turnouts	Ea	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
9	5249	Tem Sedmt Cont Fence (Installed)	L.F.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
10	5249	Tem Sedmt Cont Fence Handling (Removed)	L.F.	$ -	0.0	-	$ -	0.0	-	0	0	-		0	-	-	-	-	-	0.0	0.0
		Total Roadway				**-**			**-**			**-**			**-**			**-**	**-**	0.0	0.0
		(906) DRAINAGE																			
11	530	Drvwys (Asph Conc Pav) (PRB)	S.Y.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
12	247	Drvwys Flexible Base	S.Y.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
13	556	8" Storm Drain	L.F.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
14	556	18" RCP Storm Drain	L.F.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
15	465	Ty "A" Inlets	Ea.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
16	465	Concrete Manhole	Ea.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
17		15" R.C.P.	L.F.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
18		Ty "A" Inlets	Ea.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
19		Manhole	Ea	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
20		6.0" Valley Gutter	L.F.	$ -	0.0	-	$ -	0.0	-	0	0	-	0	0	-	-	-	-	-	0.0	0.0
		Total Drainage				**-**						**-**			**-**			**-**	**-**		
		TOTAL BASE AMOUNTS:				**-**			**-**			**-**			**-**			**-**	**-**	0.0	0.0

_____ Print Name

_____ Date

_____ Signature

Exhibit E-D

Exhibit E-D

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-166243

Date Filed:
02/13/2017

Date Acknowledged:
02/28/2017

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Synergy Builders of Texas
Edinburg, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

County of Hidalgo

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

81-1618964
Recovery and Motor Pool Improvements

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-166243

Date Filed:
02/13/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Synergy Builders of Texas
Edinburg, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
County of Hidalgo

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
81-1618964
Recovery and Motor Pool Improvements

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

ELIBERTO AYALA JR
Notary Public, State of Texas
My Commission Expires
December 06, 2019

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Dagoberto Perez Jr, this the 14 day of Feb., 20 17, to certify which, witness my hand and seal of office.

Signature of officer administering oath	Printed name of officer administering oath	Title of officer administering oath
Eliberto Ayala Jr	Eliberto Ayala Jr	P. Notary.

Halff Associates

5000 West Military, Suite 100
McAllen, Texas 78503
(956) 664-0286
Fax: (956) 664-0282

Plan holders list

Project: Hidalgo County Precinct 4 Recovery and Motor Pool Improvement

	Name	Company	Phone/Fax	Email
1.	Dagoberto Perez Jr.	Synergy Builders of Texas	956-222-6624	estimating@synergybuildersoftexas.com
2.	Connie Bearden	Tri Gen Construction	956 447. 1048	cbearden@tri-gen.com
3.	Rosie	Rigney Construction	956·381-6916	rigneyconstruction@gmail.com
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

HIDALGO COUNTY PURCHASING DEPARTMENT
BID TABULATION SHEET

DEPARTMENT NAME: HIDALGO COUNTY PRECINCT No. 4

BID OPENING DATE: February 15, 2017	**BID OPENING TIME: 9:30 A.M.**

DESCRIPTION OF BID: "Recovery of Motor Pool Improvements"

BID NO: 2017-067-02-15-TDL

RFB No.	NAME OF COMPANY	TOTAL BID AMOUNT	ADDENDUM	BID BOND / CASHIER'S CHECK
1.	Rigney Construction	~~123,795.00~~ 437,065.00	✓	✓ 1 orig 3 copies
2.	Synergy Builders of TX	395,000.00	✓	✓ 1 orig 3 copies
3.	Trigen Construction	519,000.00	✓	✓ 1 orig 3 copies
4.				
5.				
6.				
7.				
8.				
9.				

February 16, 2017
AVO 31806

Maria Lucio
Hidalgo County Precinct 4
1051 N. Doolittle Road
Edinburg, Texas 78542

Ms. Lucio,

I have reviewed the bid tabulation from the "Recovery and Motor Pool Improvements for Pct. 4" project. The base bid amount of $395,000 aligns very closely with my adjusted estimate for this component of the work, which was $365,000. Further, the second lowest bidder was within 10% which is relatively close for a smaller project like this. I have previously worked with Synergy Builders of Texas and have no negative experiences.

I recommend that the low bid be accepted.

Should you have any questions or further requirements, please let me know.

Respectfully,
Halff Associates, Inc.



Menton J. Murray, III, P.E., LEED AP
Vice - President

HALFF ASSOCIATES, INC.
5000 WEST MILITARY HIGHWAY, SUITE 100
McALLEN, TX 78503-7446
TEL (956) 664-0286
FAX (956) 664-0282
WWW.HALFF.COM

Zimbra **tanya.delira@co.hidalgo.tx.us**

Re: Bid Responses for 2017-067-02-15-TDL

From : Maria Lucio <maria.lucio@co.hidalgo.tx.us> Tue, Feb 21, 2017 11:16 AM
Subject : Re: Bid Responses for 2017-067-02-15-TDL 1 attachment
To : Tanya De Lira <tanya.delira@co.hidalgo.tx.us>
Cc : Honorable Joseph Palacios <joseph.palacios@co.hidalgo.tx.us>, Nick Perez <nick.perez@co.hidalgo.tx.us>, Martha Salazar <martha.salazar@co.hidalgo.tx.us>, Trey Murray <tmurray@halff.com>, Alma Galvan <agalvan@halff.com>, steven cruz <steven.cruz@co.hidalgo.tx.us>

External images are not displayed. Display images below

Good Morning Tanya,

The Precinct has reviewed the recommendation from Mr. Murray and would like to proceed in awarding the bid to the lowest and most responsible bidder, Synergy Builders of Texas. Please place this item on the next agenda, I have also requested Budget's assistance with the funding source for the project.

Thank you for all your help, have a great day!

Respectfully,

Lulu Lucio, CPM
Executive Assistant
Hidalgo County Precinct #4
Ph: 956- 292-7000 Ext. 4026
Fax:956-381-5905
maria.lucio@co.hidalgo.tx.us

From: "Alma Galvan" <AGalvan@Halff.com>
To: "Tanya De Lira" <tanya.delira@co.hidalgo.tx.us>
Cc: "Maria Lucio" <maria.lucio@co.hidalgo.tx.us>, "Trey Murray" <TMurray@Halff.com>
Sent: Tuesday, February 21, 2017 11:01:02 AM
Subject: RE: Bid Responses for 2017-067-02-15-TDL

Tanya,

Attached is the revised recommendation letter.

Thank you

Alma A. Galvan
Administrative Assistant

O: (956) 445-5234

HALFF ASSOCIATES, INC.
5000 West Military, Suite 100
McAllen, TX 78503-7446

Halff.com | Facebook | Twitter | LinkedIn | YouTube

From: Tanya De Lira [mailto:tanya.delira@co.hidalgo.tx.us]
Sent: Tuesday, February 21, 2017 10:38 AM
To: Galvan, Alma <AGalvan@Halff.com>
Cc: Maria Lucio <maria.lucio@co.hidalgo.tx.us>
Subject: Re: Bid Responses for 2017-067-02-15-TDL

Ms. Alma,

Can you please send me a revised Recommendation Letter with recommended bidder Synergy Builders of Texas.

Thank you.

Tanya De Lira, Buyer III

Hidalgo County Purchasing Department
2812 S. Business Hwy 281
Edinburg, Texas 78539
O 956 292 7000 x 4878
F 956 292 7612

From: "Alma Galvan" <AGalvan@Halff.com>
To: "Maria Lucio" <maria.lucio@co.hidalgo.tx.us>, "Tanya De Lira" <tanya.delira@co.hidalgo.tx.us>
Cc: "Trey Murray" <TMurray@Halff.com>, "Juan de Dios Chávez" <jchavez@Halff.com>
Sent: Thursday, February 16, 2017 10:25:58 AM
Subject: RE: Bid Responses for 2017-067-02-15-TDL

Good Morning,

Attached is the recommendation letter for the Recovery and Motor Pool Improvements project.

Thank you

Alma A. Galvan
Administrative Assistant

O: (956) 445-5234

HALFF ASSOCIATES, INC.
5000 West Military, Suite 100
McAllen, TX 78503-7446

Halff.com | Facebook | Twitter | LinkedIn | YouTube

From: Maria Lucio [mailto:maria.lucio@co.hidalgo.tx.us]
Sent: Wednesday, February 15, 2017 9:01 PM
To: Murray, Trey <TMurray@Halff.com>
Cc: Tanya De Lira <tanya.delira@co.hidalgo.tx.us>; Galvan, Alma <AGalvan@Halff.com>
Subject: Re: Bid Responses for 2017-067-02-15-TDL

If it's possible, the sooner the better.

Thank you!

Sent from my iPhone

On Feb 15, 2017, at 8:31 PM, Murray, Trey <TMurray@Halff.com> wrote:

Do you need it by tomorrow to put on the agenda for next week?

tm

Menton J. "Trey" Murray, III, PE, LEED AP
Vice President
Operations Manager, McAllen

O: (956) 445-5210
C: (956) 522-0398

HALFF ASSOCIATES, INC.
5000 West Military, Suite 100
McAllen, TX 78503-7446

Halff.com | Facebook | Twitter | LinkedIn | YouTube

From: Maria Lucio [mailto:maria.lucio@co.hidalgo.tx.us]
Sent: Wednesday, February 15, 2017 4:45 PM
To: Tanya De Lira <tanya.delira@co.hidalgo.tx.us>
Cc: Murray, Trey <TMurray@Halff.com>; Galvan, Alma <AGalvan@Halff.com>
Subject: Re: Bid Responses for 2017-067-02-15-TDL

Thank you Tanya!

Mr. Murray, if you could please assist us in providing a recommendation at your earliest convenience, we would greatly appreciate it.

Thank you for all your help!

Respectfully,

Lulu Lucio, CPM

Executive Assistant
Hidalgo County Precinct #4
Ph: 956- 292-7000 Ext. 4026
Fax:956-381-5905
maria.lucio@co.hidalgo.tx.us

From: "Tanya De Lira" <tanya.delira@co.hidalgo.tx.us>
To: "Trey Murray" <tmurray@halff.com>

Cc: "Maria Lucio" <maria.lucio@co.hidalgo.tx.us>, "Alma Galvan" <agalvan@halff.com>
Sent: Wednesday, February 15, 2017 4:11:45 PM
Subject: Bid Responses for 2017-067-02-15-TDL

Mr. Murray,

Attached, please find the bids submitted for project # 2017-067-02-15-TDL for the Recovery and Motor Pool Improvements for Pct. 4. for your review and recommendation.

Thank you.

Tanya De Lira, Buyer III

Hidalgo County Purchasing Department
2812 S. Business Hwy 281
Edinburg, Texas 78539
O 956 292 7000 x 4878
F 956 292 7612

Ltr_20170216 Recommendation_tm - R.pdf
113 KB

AI-58887 **Purchasing Department** **23. D. 3.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Marty Salazar, PURCHASING DEPT.

Submitted By: Sandy Suarez, PURCHASING DEPT.

Department: PURCHASING DEPT.

Information

CAPTION

Presentation & Award to the sole responsible vendor submitting the lowest and best [and as further detailed in tabulation sheet contained herein] and meeting all specifications/requirements, including the approval of contract [but in no event to exceed $50K] for the Request for Sealed Quotes titled: Hidalgo County Pct 4-"Garbage Collection at New San Carlos CRC" through project No.: 2017-097-03-06-SGS.

BACKGROUND

Award to Republic Services Contract will commence upon approval of Commissioner's Court.

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-466-00-124-186-0-421

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:** N

BUDGETARY IMPACT:

Pct 4 - $ 1,259.00 as of 03/17/17

Attachments

Recommendation-Tabulation sheet
Participation Log
Form 1295
Legal Approval
Contract

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/10/2017 01:36 PM
Budget & Management	Veronica Ortiz	03/10/2017 02:57 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Sandy Suarez		Started On: 03/08/2017 04:47 PM
Final Approval Date: 03/17/2017		

Hidalgo County Purchasing Office
2812 S. Business Highway 281
New Administration Building
Edinburg, Texas 78539
(956) 318-2626/ Fax: (956) 318-2629

MEMORANDUM

TO: **Joseph Palacios, Commissioner**
Hidalgo County Precinct No. 4

ATTN: Nick Perez/Joe Ochoa

FROM: Sandy Suarez, Buyer II
Hidalgo County Purchasing Dept.

DATE: March 7, 2017

RE: **BID AWARD RECOMMENDATION REQUEST**
Bid No. 2017-097-03-06-SGS-Hidalgo County Precinct No. 4-
"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"

We have received **One (1) response** to the above mentioned project. Enclosed you will find a copy of the tabulation sheet along with copies of the bid responses for your review and recommendation.

We would like to present your recommendation to Commissioner's Count therefore; we need your response as soon as possible. but by no later than: **March 10, 2017 by 10:00 A.M**. **Please indicate your Recommendation and/or any concerns on the space provided below** and reply to the Purchasing Department. Via **fax to (956)-318-2629 or via email to: sandy.suarez@co.hidalgo.tx.us.**

Should you have any questions or require further information please do not hesitate to call me at 318-2626- ext. 4860. Thank you for your attention and cooperation to this matter.

AWARD TO VENDOR(S):	RECOMMENDATION/REJECTION (BASIS) (i.e. low & best bid, sole bidder etc.)
1. Republic Services	Sole Bidder
2.	
3.	

Please include the budget account number(s) for the above reference project.

Budget Acct No.: 7-1100-466-00-124-186-0-421

AUTHORIZED SIGNATURE	PRINTED NAME	DEPARTMENT	DATE
Maria D. Lucio	Maria D. Lucio	PCT 4	3-8-17

Enclosures

TABULATION SHEET
HIDALGO COUNTY PRECINCT NO. 4
"GARBAGE COLLECTION AT THE NEW SAN CARLOS CRC BLDG"
RFSQ NO.: 2017-097-03-06-SGS
Extended Opening date- March 07, 2017 @ 11:00

TABULATION SHEET

Internal Use Only: Commodity Code: 910-27

LOCATION SITE: SAN CARLOS COMMUNITY RESOURCE CENTER - HIDALGO COUNTY PRECINT # 4			
	COST		
Charges for One (1) day per Week Collection service	Total Monthly Cost	$ 93.50	
Additional Charges – Delivery fee - one time charge		$ 137.00	
Container – slant top -dimensions as per Specs		Yes	No
		√	

LANDFILL SITE ADDRESS/LOCATION:

La Gloria Ranch Landfill, 23485 N. Moorefield Rd. Edinburg, TX. 78541

HIDALGO COUNTY PURCHASING DEPARTMENT
PARTICIPATING BIDDER'S LOG
SPECIFICATIONS/BID PACKETS
RFB-RFP-RFSQ

RFSQ OPENING DATE: March 06, 2017 **EXTENDED DATE: March 07, 2017 @ 11:00 A.M.**
RFSQ OPENING TIME: 11:00A.M.
DEPARTMENT/BID DESCRIPTION: "HIDALGO COUNTY PRCT NO. 4–GARBAGE COLLECTION AT NEW SAN CARLOS CRC"
RFSQ NO: 2017-097-03-06-SGS

Name Of Bidder: Company/Firm	Bid Request *Via	Signature (If Applicable) Or Initials Of Staff Addressing Mail out	Date	Address E-Mail & Phone No
1. Waste Management Farrah D.	BLM	Sandy Suarez	02/23/17	On-Line Google find fderosie@wm.com 1-877-494-8811 1-602-766-1656 direct
2. Waste Connection of Texas Attn: Greg	E-mail	Sandy Suarez	02/23/17	1222 N. Closner Blvd. Edinburg, Texas 78541 956-383-9174 c#648-2024 gregtro@wcnx.org
3. Allied Waste(BFI) Service Attn: Rey Alegria	E-mail	Sandy Suarez	02/23/17	9402 W. Expressway 83, Harlingen, Texas 78552 956-423-7316 ralegria@republicservices.com
4. All Valley Waste Attn: Paula Lopez	E-mail	Sandy Suarez	02/23/17	402 W Mile 10 N. Rd. Weslaco, Tx 78596 956-376-6022 paulalopezvillanueva@msn.com
5. Waste Solutions 123 Attn: Stephen	BLM	Sandy Suarez	02/23/17	On-Line Google find 888-261-1146 Stephen@wastesolutions123.com

***VIA:**
IN PERSON (IP)
E-MAIL (EM)
TELEPHONE REQUEST (TR)
BIDDER LIST MAIL OUT (BLM)
FACSIMILE (FAX)

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-175144

Date Filed:
03/06/2017

Date Acknowledged:
03/07/2017

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Republic Services
Harlingen, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
RFSQ NO.: 2017-097-03-06-SGS
Solid waste removal and disposal

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Republic Services	Harlingen, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-175144

Date Filed:
03/06/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Republic Services
Harlingen, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
RFSQ NO.: 2017-097-03-06-SGS
Solid waste removal and disposal

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Republic Services	Harlingen, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

Signature of authorized agent of contracting business entity

HECTOR CANTU
Notary ID # 10974895
My Commission Expires
March 9, 2020

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Maribel Nieto, this the 6th day of March, 20 17, to certify which, witness my hand and seal of office.

Signature of officer administering oath	Printed name of officer administering oath	Title of officer administering oath
	Hector Cantu	Driver Trainee

Zimbra **leticia.saenz@co.hidalgo.tx.us**

RE: Review & Approve as to form-Contract # C-17-097-03-21-Republic Service Inc-(Collection at CRC)-Pct 4

From : Steve Crain <scrain@atlashall.com> Thu, Mar 09, 2017 11:46 AM

Subject : RE: Review & Approve as to form-Contract # C-17-097-03-21-Republic Service Inc-(Collection at CRC)-Pct 4

1 attachment

To : 'Leticia H. Saenz' <leticia.saenz@co.hidalgo.tx.us>

The contract is fine.

From: Leticia H. Saenz [mailto:leticia.saenz@co.hidalgo.tx.us]
Sent: Thursday, March 09, 2017 10:51 AM
To: Steve Crain <scrain@atlashall.com>
Cc: Marynel Trevino <mntrevino@atlashall.com>; Martha Salazar <martha.salazar@co.hidalgo.tx.us>; Sandy Suarez <sandy.suarez@co.hidalgo.tx.us>
Subject: Re: Review & Approve as to form-Contract # C-17-097-03-21-Republic Service Inc-(Collection at CRC)-Pct 4

Good morning, Mr. Crain-
Please review attached email of previously approved *"draft"* for the *procurement process*. Prior years were researched on expenditure and commodity code for this service and it was approved to proceed.

Therefore, attached, agreement is now to final form for review and approval for the purpose of awarding the proposed quote/contract with Republic Services Inc. for Pct. 4.

Please advise if you still require further information.

Respectfully,

Leticia H. Saenz, CPPB/Contracts Manager
Hidalgo County Purchasing Department
2812 South Business Highway 281
Edinburg, Texas 78539
P(956) 318-2626 **F**(956) 318-2629
Email: leticia.saenz@co.hidalgo.tx.us

...DON'T WORRY...BE HAPPY...

From: "Steve Crain" <scrain@atlashall.com>
To: "Leticia H. Saenz" <leticia.saenz@co.hidalgo.tx.us>
Sent: Wednesday, March 8, 2017 4:34:39 PM
Subject: RE: Review & Approve as to form-Contract # C-17-097-03-21-Republic Service Inc-(Collection at CRC)-Pct 4

Since this is a quote do we have any other agreements within this product code?

From: Leticia H. Saenz [mailto:leticia.saenz@co.hidalgo.tx.us]
Sent: Wednesday, March 08, 2017 4:01 PM
To: Steve Crain <scrain@atlashall.com>
Cc: Marynel Trevino <mntrevino@atlashall.com>; Sandy Suarez <sandy.suarez@co.hidalgo.tx.us>; Martha Salazar <martha.salazar@co.hidalgo.tx.us>; dina trevino <dina.trevino@co.hidalgo.tx.us>
Subject: Review & Approve as to form-Contract # C-17-097-03-21-Republic Service Inc-(Collection at CRC)-Pct 4

Good afternoon, Mr. Crain-

Please review and approve as to form contract ***#C-17-097-03-21*** (attached hereto) for the purposes of awarding bid/contract on the next CC agenda for *Project*: ***Garbage Collection at CRC*** located in ***Precinct 4.***

Please advise.

Respectfully,

Leticia H. Saenz, CPPB/Contracts Manager
Hidalgo County Purchasing Department
2812 South Business Highway 281
Edinburg, Texas 78539
P(956) 318-2626 **F**(956) 318-2629
Email: leticia.saenz@co.hidalgo.tx.us

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SERVICE CONTRACT
C-17-097-03-21

THIS CONTRACT is made and entered into this **21st** day of **March, 2017** by and between the **County of Hidalgo, Texas** ("County") and **Republic Services, Inc.** ("Company").

WHEREAS, Company responded to notices for Request for Sealed Quotes (RFSQ) for **"Garbage Collection at New San Carlos CRC" (on an as needed basis)** (the "Services"); and

WHEREAS, Company submitted a sealed quote to provide services in accordance with Exhibit "A" Request for Sealed Quotes (RFSQ) Procurement Packet attached hereto respectively, and incorporated herein for all purposes of (the "RFSQ"); and;

WHEREAS, in recognition of and in consideration of Company's agreement to perform the Services in accordance with Specifications within Exhibit "A" Request for Sealed Quotes (RFSQ) Procurement Packet, the Commissioners Court of County awarded the sealed quote to Company.

NOW, THEREFORE, in mutual consideration of the foregoing and the further consideration of the following, the parties hereto agree as follows:

1. County and Company hereby agrees that this Contract is entered into in order to provide the Services to **Hidalgo County**. This Contract does not extend to any third parties any duties or benefits conferred in any manner hereunder or otherwise.

2. Company hereby promises and agrees to render and provide, during the term of this Contract, and shall be obligated to render and provide the services in accordance with the specifications contained in Exhibit "A" Request for Sealed Quotes (RFSQ) Procurement Packet within **Hidalgo County** following a request for Services by the **Hidalgo County Precinct No. 4**.

Company agrees in performing the Services that it will use proper professional standards, comply with any and all appropriate laws and regulations in providing the Services, and devote such time as is necessary to safely and efficiently provide the Services. Further Hidalgo County reserves the right to request these services from other sources other than the successful vendor and shall not be in violation of any terms or conditions of said contract.

3. This Contract shall be for a period of **one (1) year**, commencing on **March 21, 2017** and expiring on **March 20, 2018.** Hidalgo County also reserves the right to continue this sealed quote for an additional sixty (60) day grace period at the end of the contract term for unforeseen delay of award for the next term and contingent upon cost remaining unchanged.

4. As a condition of this Contract, Company shall hold and maintain throughout the term of this Contract all licenses and permits required, or which may be required by any authority during the term hereof to provide the Services.

5. All trucks or vehicles operated by the Company to perform the Services shall contain all equipment required by any authority to operate on streets and roads and all persons in the employ of Company who operate such trucks or vehicles shall have the required licenses, qualifications, skill and expertise to perform such Services and shall comply with all laws, rules and regulations prescribed by any agency or authority having jurisdiction with regard to the operation of such trucks or vehicles in providing the Services.

6. As consideration for rendering the Service provided for in this Contract, the County agrees to pay Company the amounts specified in Exhibit "B" attached hereto payable against written invoice submitted by Company.

7. Company shall provide insurance in force on all its vehicles and all persons connected with providing services under this Contract naming County as an additional insured (with the

coverages and in the amounts described on Exhibit "C" attached hereto and incorporated herein at this point for all purposes), and shall furnish to County certificates of such insurance coverage.

8. Company shall provide a sufficient number of trucks, vehicles, personnel and equipment available to safely and efficiently provide the Services.

9. Company shall indemnify and hold harmless County, its elected officials, employees and agents from any and all claims, damages, losses, and expenses including attorney's fees for the defense of any action against County arising out of, resulting from, or connected with the provision of the Service by Company under this Contract. Said indemnity shall cover any act or failure to act by the Company, its agents or employees.

10. This Contract shall not be assignable in whole or in part by either party without prior written consent of the other party.

11. It is expressly agreed that this Contract and the performance by the parties hereunder does not create any agency relationship or master-servant relationship that County has no supervision of the performance of the Services provided by Company, and that Company is an independent contractor under this Contract.

12. Any notice required or permitted to be given hereunder shall be in writing and shall be delivered personally or sent by certified mail, postage prepaid, as set forth below:

If to County: County of Hidalgo
Attn: County Judge
100 East Cano, 2nd Floor (Admin. Bldg.)
Edinburg, Texas 78539

If to Company: **Republic Services, Inc.**
Attn: Maribel Nieto
9402 West Expressway 83
Harlingen, Texas 78552

13. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

14. This Agreement may be terminated by County without cause upon thirty (30) days written notice.

15. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective heirs, executors, administrators, legal representatives, successors, and assigns where permitted by this Agreement.

16. This Agreement shall be governed by and construed in accordance with the laws of the State of Texas and shall be performable in Hidalgo County.

17. **Commitment of Current Revenues Only**. In the event that, during any term hereof, the Commissioners Court does not appropriate sufficient funds to meet the obligations of County under this Agreement, County may terminate this Agreement upon ninety (90) days written notice to Company. County agrees, however, to use reasonable efforts to secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of County pursuant to the provisions of Tex. Loc. Govt. Code Ann. ' 271.903 (Vernon Supp. 1996).

18. **Entire Agreement**. This Agreement contains the entire contract between the parties hereto, and each party acknowledges that neither has made (either directly or through any agent or representative) any representation or agreement in connection with this Agreement not specifically set forth herein. This Agreement may be modified or amended only by agreement in writing executed by the parties hereto, and not otherwise.

19. **Immunities.** Nothing in this Agreement is intended to and County does not hereby waive, release or relinquish any right to assert any of the defenses County enjoys by virtue of the state or federal constitution, laws, rules or regulations, and any sovereign, official or qualified immunity available to County as to any claim or action of any person, entity, or individual against County.

WITNESS our hands in duplicate originals this ____day of _____, 2017.

Approved by Commissioner's Court: _____, 2017.

APPROVED AS TO FORM
Atlas, Hall & Rodriguez, L.L.P.

By:_____
Stephen L. Crain, Attorney

COUNTY OF HIDALGO

ATTEST:

By: _____
Ramon Garcia, County Judge

By: _____
Arturo Guajardo, Jr., County Clerk

COMPANY: REPUBLIC SERVICES, INC.

By:_____

Printed Name: Maribel Nieto

Title: Inside Sales Representative

EXHIBIT "A"

REQUEST FOR SEALED QUOTES (RFSQ) PROCUREMENT PACKET

Hidalgo County Purchasing Office
2812 S. Business Highway 281
New Administration Building
Edinburg, Texas 78539
(956) 318-2626/ Fax: (956) 292-7612

February 23, 2017

Bidder's name

Address

City

State, Zip Code

Re: **HIDALGO COUNTY PRECINCT NO. 4**
Request for Sealed Quotes -**"Garbage Collection at New San Carlos CRC"**
RFSQ No: 2017-097-03-06-SGS

Dear Gentleman/Ladies:

Enclosed, please find the Request for Sealed Quotes (RFSQ) packet. **Modifications and new requirements** have been added and implemented. Carefully read and review all instructions, Requirements and Specifications.

Hidalgo County Purchasing Department welcomes and appreciates your participation in the Request for Sealed Quotes process.

If any further assistance is required, please do not hesitate to call the Purchasing Department 956/318-2626 x 4860.

Sincerely,

Sandy Suarez, Buyer II
Hidalgo County Purchasing Department

sgs
Enclosures

HIDALGO COUNTY PURCHASING
2812 S. Business Highway 281
Edinburg, Texas 78539
(956) 381-2626/ Fax: (956) 292-7612

REQUEST FOR SEALED QUOTES (RFSQ)
HIDALGO COUNTY PRECINCT NO. 4
"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"
RFSQ NO: 2017-097-03-06-SGS

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10.	**RFSQ Submittal Checklist**	1
11.	Draft Agreement	9

The above mentioned items shall be found in this Request for Sealed Quotes-(RFSQ) - packet that is attached herewith. Should you find that any of the listed items are not attached in its entirety, please contact The Purchasing Dept. by calling (956) 318-2626, to advise us of the missing documentation, and Purchasing will forward information either through facsimile, e-mail or by U.S. Mail.

Thank you.

Sandy Suarez, Buyer II

February 23, 2017
Date

RFSQ: 2017-097-03-06-SGS	Name: Sandy Suarez, Buyer II	Tel. No: (956) 318-2626 ext 4860

REQUEST FOR SEALED QUOTES

HIDALGO COUNTY PRECINCT NO. 4

"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"

RFSQ NO.: 2017-097-03-06-SGS

DUE DATE:
MARCH 06, 2017
At 11:00 A.M.

Contact Person:
Sandy. Suarez, Buyer II
Hidalgo County Purchasing Department
Physical Address: 2802 S. Business Hwy. 281 - Administration Building
Mailing/Postal Address: 2812 S. Business Hwy. 281
Edinburg, Texas 78539

Form HCPD-03

1. Sealed quotes will be received for **HIDALGO COUNTY PRECINCT NO. 4– "GARBAGE COLLECTION AT NEW SAN CARLOS CRC"** in accordance with the specifications attached as Exhibit "A" hereto. RFSQs should address all specifications set forth. Participants may suggest substitutions of features which they feel would be in the best interest of Hidalgo County ("County"). Strong rationale must be presented for any deviation from the specifications. Hidalgo County reserves the right to reject the deviation and its effect on the overall RFSQ.

2. All RFSQs are required with the Participants name and return address clearly typed/printed on upper left hand corner and the proper notation clearly typed/printed on the lower left hand corner of the envelope and/or package: **RFSQ No: 2017-097-03-06-SGS - HIDALGO COUNTY PRECINCT NO. 4–"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"** and in County's Purchasing Department, physical address: 2802 S. Business 281 and a mailing address: 2812 S. Business Hwy 281, Administration Building, Edinburg, Texas, **ON OR BEFORE MONDAY, MARCH 06, 2017 at 11:00 A.M. FACSIMILES, EMAILS OR LATE ARRIVALS WILL NOT BE ACCEPTED. ANY RFSQ RECEIVED AFTER THAT TIME WILL NOT BE OPENED AND WILL BE RETURNED. OVERNIGHT MAIL MUST ALSO BE PROPERLY LABELED ON THE OUTSIDE OF EXPRESS ENVELOPE OR PACKAGE IN REFERENCE TO RFSQ No: 2017-097-03-06-SGS, HIDALGO COUNTY PRECINCT NO. 4 –"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"** Hidalgo County reserves the right to refuse and reject any/all RFSQs and to waive any/all formalities or technicalities, or to accept the RFSQ considered the best and most advantageous to Hidalgo County.

   Additionally, all forms listed below must be properly executed and included with your quote:

   1. **Legal Notice (See page 9);**
   2. **Quote Page – Procurement Form – Areas of Specialization (See Exhibit "B");**
   3. **Insurance pages with Acknowledgment Forms (See Exhibit "C");**
   4. **Form CIQ-Conflict of interest Questionnaire (See Exhibit "D");**
   5. **Vendor Bidder Application & W-9 forms (See Exhibit "E");**
   6. **Certification Regarding Debarment (See Exhibit "F"); and**
   7. **SAMS.gov Registration Acknowledgement (See Number 18 below).**

3. Hidalgo County reserves the right to: A.) separate and accept, or eliminate any item(s) listed under this RFSQ that it deems necessary to accommodate budgetary and/or operational requirements; B.) reject any or all RFSQs submitted and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best RFSQ for approval; and C.) award the RFSQ to one Participant or to multiple Participants if the County determines it is in its best interest to do so. D. award the contract to the responsible bidder who submits the lowest and best bid. "Lowest and best" means a bid or offer providing the best value considering associated direct and indirect costs, including transport, maintenance, reliability, life cycle, warranties, and customer service after a sale.

4. The Participant shall not substitute items named in the RFSQ without the express written consent of Hidalgo County. Failure of the delivered item to perform as specified or failure to meet the stated delivery schedule shall release Hidalgo County from all obligations to the contracting party with regard to the item(s) in question. In such event, County may elect to award the contract to the next-lowest responsible Participant, or to reject all RFSQs and re-advertise.

5. For work to be performed at a County owned or operated location, each Participant shall, in its sole discretion, visit the job site before preparing the RFSQ and thoroughly familiarize himself/herself with existing conditions. Participant should take field dimensions and note all circumstances which affect the dollar amount of the RFSQ.

6. Descriptive specifications are referenced in this document to indicate the general kind and quality of equipment desired by Hidalgo County. Due to various styles and models of equipment, Participants are required to include illustrations, specifications, explanation of warranties, and service data with their RFSQ including catalogue numbers and any necessary references.

7. No RFSQ may be withdrawn within thirty (30) days from the scheduled time to open RFSQs.

8. Proposed prices are to remain firm for a minimum of ninety (90) days after RFSQ opening.

9. Any interpretations, amendments, corrections or changes to this RFSQ document must be in a written addendum and signed by the County Judge or his designee. Addenda will be mailed to all who are known to have received a copy of the Request for RFSQs. Participants shall acknowledge receipt of all addenda as a part of their RFSQ.

10. County reserves the right to accept or reject any or all RFSQs.

11. Costs are to be net F.O.B., County Prepaid.

12. County is exempt from Federal Excise Tax, State Tax and Local Tax. Do Not include tax in cost figure. If it is determined that tax was included in the cost figures it will not be included in the tabulation of any awards. Tax exemption certificates will be furnished upon request.

13. Funds for this procurement have been provided through the County budget for this fiscal year only. County, on an annual basis, has the right to reconsider a contract during the budget process for ensuing years if financial resources of County are insufficient to meet the liabilities of said contract. The award of a RFSQ or contract hereunder will not be construed to create a debt of the County which is payable out of funds beyond the current fiscal year.

14. Upon award and prior to execution of a contract, Sole Proprietorships are required to submit a copy of their social security card to the Hidalgo County Auditors Office in order to establish an account with the County. All awarded vendors must submit a completed W-9 and a copy of their Federal ID Number Certificate.

15. **DELIVERY INSTRUCTIONS:**

- No deliveries accepted after 3:00 P.M., Monday-Friday.

- At least seventy two (72) hours prior notice of delivery must be given to Martha L. Salazar, Purchasing Agent before delivery will be accepted.

- If you need additional information call the office listed below:

Hidalgo County Purchasing Department
Sandy Suarez, Buyer II
(956) 318-2616 Ext.4860

16. **BILLING AND PAYMENT INSTRUCTIONS:**

- Invoices must include:
  a) Name and address of successful Participant
  b) Name and address of receiving department or official
  c) Purchase Order Number (if any)
  d) Notation - **HIDALGO COUNTY PRECINCT NO. 4–"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"** Descriptive information as to the items or services delivered, including product code, item number, quantity, etc.
  e) Contract number must be indicated on all invoices

- Discount payments will be considered when offered.

- Contact person for Billing and Payment questions:

Hidalgo County Pct. No. 4 Administration Office
1051 N. Doolittle Rd.
Edinburg, TX. 78542
(956) 383-3112

17. **Schedule of Events**

Sealed Quote Opening, 11:00 AM	**MARCH 06, 2017**
Award of Contract	**_____, 2017**
Commence Work or Deliver Products	**_____, 2017**

18. ~~RFSQ or Performance Bond; Payment under Contract. : if applicable for public works projects):~~.

~~If the contract proposed is for the construction of public works or is for a contract exceeding $100,000, all Participants shall furnish a good and sufficient RFSQ bond in the amount of five percent of the total contract price. A RFSQ bond must be executed with a surety company authorized to do business in Texas.~~ All Participants are also required to furnish a certification or acknowledgment stating that the contractor or vendor is free from suspension or debarment pursuant to federal regulation 45CFR Part 76. **Register at SAMs System for Award Management @ www.sam.gov**.

- ~~Together with the signing of a contract or issuance of a purchase order following the acceptance of a RFSQ, and prior to commencement of the actual work, the Participant shall furnish a performance bond to the County for the full amount of the contract, if that contract exceeds $50,000.~~
- ~~If the contract is for $50,000 or less, no money will be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County, and, if applicable, the receipt by County of satisfactory evidence that all subcontractors and material men have been paid.~~

- ~~If a contract is for the construction, alteration or repair of public buildings or public works, the contractor *shall* provide a payment bond for a contract in excess of Twenty Five Thousand Dollars ($25,000.00), as required by Tex. Govt. Code Ch. 2253.~~

- ~~For requirements contracts, bond requirements are determined by applying the proposed unit price to the estimated quantities included in the specifications.~~

19. TITLE VI NOTICE/ NONDISCRIMATION

a. "The County of Hidalgo, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat.252, 42 U.S.C. §§2000d to 2000d-4) and the Regulations, hereby notifies all
bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."

b. The appropriate clauses of Appendices "A" through "E" as delineated in the USDOT Standard Title VI/Nondiscrimination Assurances - Specific Assurances are hereby incorporated by reference as applicable. Title VI Appendices "A" through "E" are attached as **Exhibit "G.**

c. Bidder will attach all applicable notices to which it is obligated to provide or submit as part of the bid, including Form FHWA 1273 to be submitted by all contractors and subcontractors in relation to construction contracts.

20. **ETHICAL STANDARDS:**

- It shall be a breach of ethics to offer, give or agree to give any elected official, department head or employee, or former elected official, department head or employee, of the County, or for any elected official, department head or employee or former elected official, department head or employee of the County, to solicit, demand, accept or agree to accept from another person, entity or organization, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore pending before any department or agency of the County.

- It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for the County, or any person associated therewith, as an inducement for the award of a subcontract or order.

- No public official shall have an interest in a contract awarded hereunder except in accordance with Tex. Loc. Govt. Code Chapter 171.

NOTICE:
ALL COMMUNICATIONS BY A VENDOR TO THE COUNTY, ITS OFFICIALS, AND DEPARTMENT HEADS REGARDING THIS PROCUREMENT SHALL BE DONE THROUGH THE HIDALGO COUNTY PURCHASING DEPARTMENT.

21. Disclosure of Conflict of Interest

- Effective January 1, 2016, Chapter 176 of the Texas Local Government Code requires that any vendor, person, consultant or contractor considering doing business with Hidalgo County ("the County") to disclose in the Conflict of Interest Questionnaire (the "CIQ") attached as Exhibit D, the vendor, person, consultant or contractor's affiliation or business relationship that might cause a conflict of interest with the County. By law, the CIQ must be filed with the Hidalgo County Clerk's Office no later than the seventh business day after the date the person becomes aware of facts that require that statement to be filed. The disclosure requirement applies to a person or business who contracts or seeks to contract with Hidalgo County for the sale or purchase of property, goods or service. Any purchase order or contract resulting from this process shall be considered null and void if the successful participant fails to comply with Texas Local Government Code Chapter 176. Vendors, consultants, contractors and others who desire to conduct business with Hidalgo County are encouraged to refer to Texas Local Government Code Chapter 176 for the details of this law. An offense under Texas Local Government Code Chapter 176 is a Class C Misdemeanor

Completed Form CIQ must be submitted to the Hidalgo County Clerk's Office located at 100 N. Closner, Edinburg, Texas 78539 - Hidalgo County Courthouse.

COMPLETION AND SUBMISSION OF FORM CIQ IS THE SOLE RESPONSIBILITY OF THE PROSPECTIVE RESPONDENT. QUESTIONS REGARDING COMPLIANCE SHOULD BE DIRECTED TO YOUR LEGAL COUNSEL

22. **CERTIFICATE OF INTERESTED PARTIES (FORM HB1295)**

As of January 1, 2016, to comply with Texas Government Code Section §2252.908, and the rules issued by the Texas Ethics Commission found in Title 1, Section 46.1, 46.3 and 46.5 of the Texas Administrative Code, we have updated and revised our RFSQ packet. In accordance with these requirements, business must submit a completed Certificate of interested Parties Form 1295 to the County before the County may enter into a contract with the business entity. In box 3 of Form 1295, you will provide the RFSQ No.: 2017-097, as shown on the packet. Once completed and filed with the Texas Ethics Commission, Form 1295 must be printed and signed in the presence of a notary and submitted to our office either by facsimile transmission to (956) 292-7612 or via email to sandy.suarez@co.hidalgo.tx.us. Hidalgo County cannot enter into a contract until Form 1295 is submitted. Therefore, failure to timely submit Form 1295 signed and notarized may result in delay of award. Full instructions for completion and submittal of Form 1295 may be found on the Texas Ethics Commission website:

https://www.ethics.state.tx.us/tec/1295-Info.htm

THE AWARDED VENDOR WILL HAVE THIRTY (30) DAYS TO SUBMIT THE SIGNED NOTARIZED FORM 1295. HIDALGO COUNTY CANNOT ENTER INTO A CONTRACT UNTIL FORM 1295 IS SUBMITTED.

23. If during the life of any contract or RFSQ awarded, the successful Participant's net prices generally available to other customers for items awarded herein are reduced below the contracted price, it is understood and agreed that the benefits of such reduction shall be extended to County.

24. RFSQs, and all goods and services provided there under, shall comply with all federal, state and local laws concerning this type(s) of goods and/or services.

25. Minimum Standards For Responsible Prospective Participants: A prospective Participant must affirmatively demonstrate Participant's responsibility. A prospective Participant, by submitting a RFSQ, represents to County that it meets the following requirements:

- Possess or is able to obtain adequate financial resources as required to perform under the RFSQ;
- Be able to comply with the required or proposed delivery schedule;
- Have a satisfactory record of performance;
- Have a satisfactory record of integrity and ethics;
- Be otherwise qualified and eligible to receive an award.

26. Successful Participant will pay or cause to be paid, without cost or expenses to County, all FICA, FUTA/SUTA and Federal Income Withholding Taxes of all employees, and all wages

and benefits as required by Federal or State law. Successful Participant's officers, agents and/or employees will not be entitled to any benefits of an employee or elected official of County, including, but not limited to, benefits associated with County's civil service system.

27. Any contract award to a successful Participant will be in effect until (a) the contract expires, (b) delivery and acceptance of products, and/or performance of services ordered, or (c) terminated by County with thirty day's written notice prior to cancellation.

28. County reserves the right to enforce performance of any contract awarded hereunder in any manner prescribed by law or deemed to be in the best interest of the County in the event of breach or default by successful Participant; County reserves the right to terminate any contract immediately in the event a successful Participant fails to:

    A. Meet schedules;
    B. Pay any required fees or taxes; or
    C. Otherwise perform in accordance with the specifications.

29. Successful Participant shall defend, indemnify and save harmless County and all its elected officials, officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful Participant, or of any agent, employee, subcontractor or supplier of successful Participant in the execution of, or performance under, any contract which may result from RFSQ award or which arises from any event or casualty happening on or within County premises themselves or happening upon or in any halls, elevators, entrances, stairways or approaches of or to such County facilities. Successful Participant shall pay any judgment with costs which may be obtained against County growing out of such injury or damages, and shall, upon request, provide a defense to County by counsel reasonably acceptable to County. Successful Participant=s indemnity hereunder shall include, but is not limited to, claims relating to patent, copyright or trademark infringement, and the like, arising out of the goods and services provided by successful Participant.

30. Successful Participant shall warrant that all items/services shall conform with the specifications and/or all warranties provided under the Uniform Commercial Code and be free from all defects in material, workmanship and the like. Items supplied under a contract pursuant to this Request for RFSQs shall be subject to County's approval. Items found to be defective or not meeting specifications shall be replaced by successful Participant within two business days at no expense to County. Items not picked up within one (1) week after notification shall be deemed a donation to County and may be used or disposed of at County's discretion and without waiver of any other rights of County as to the item's nonconformity.

31. This document and any disputes arising hereunder shall be governed and construed according to the laws of the State of Texas, and will be performable exclusively in Hidalgo County, Texas.

32. The successful Participant shall not assign, sell, transfer or convey its rights under any awarded contract, in whole or in part, without the prior written consent of County.

RFSQ
for
HIDALGO COUNTY PRECINCT NO. 4
"GARBAGE COLLECTION AT THE NEW SAN CARLOS CRC BLDG"
RFSQ No: 2017-097-03-06-SGS

To: Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department
Sandy Suarez, Buyer II
Physical Address: 2802 S. Business Hwy. 281 - Administration Building
Mailing/Postal Address: 2812 S. Business Hwy. 281
Edinburg, Texas 78539

In accordance with the Specifications, and subject to all laws and regulations of the United States and state and local laws, the undersigned Participant proposes and commits to furnish all labor, equipment, material, software and services as set forth in the documents hereinbefore mentioned. The undersigned Participant further agrees, upon acceptance of its RFSQ, to execute a contract and/or Purchase Order issued by Hidalgo County for performing and completing the work described in the Specifications within the time stated and for the prices proposed in the documents attached hereto and made a part hereof.

Participant acknowledges receipt of all of the pages of the documents referenced in the Invitation to RFSQ Checklist presented in connection with this procurement. Participant understands that Hidalgo County reserves the right to reject any or all RFSQs and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best RFSQ.

Participant agrees that this RFSQ shall be good and may not be withdrawn for a period of thirty (30) calendar days after the scheduled closing time for receiving RFSQs, as contained in the Specifications.

Respectfully submitted,

Participant:	
Address:	
By:	
Printed Name:	
Title:	

Must be submitted with the quote

SPECIFICATIONS
EXHIBIT "A"
HIDALGO COUNTY PRECINCT 4
"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"
RFSQ NO.: 2017-097-03-06-SGS

PROJECT OVERVIEW:

Hidalgo County Precinct No. 4, is requesting sealed quotes for the service of "Garbage Collection & disposal" services from certified, licensed Vendors, on an "as needed basis". Vendor will be required to collect; transport and dispose of solid waste (garbage,) **one** (1) day per week, generated by "Hidalgo County Precinct No. 4- San Carlos Community Resource Center", but in no event to exceed the $50,000.00 (per year) statutory bid limit including, but not limited to the following:

SPECIFICATIONS/REQUIREMENTS:

In accordance with the specifications/requirements specified herein and including, but not limited to all provisions set forth in the accompanying documentation. Any Response that does not meet the minimum requirements and/or specifications may be rejected.

1. Vendor will be required to provide one (1) waste container - four (4) cubic yard solid (front load) - **slanted top, with lid.
    - Approximate dimensions of container: 5'6"L x 6' W x 5'H or equal 4 cubic yds.
    - Container will be in a fenced **Holding Area** that is approximately: 10' L x 10' x 12' W. (See Attachment A-1)

    **Slant top preferred, but a four (4) cubic yard container, with flat top, will be taken into consideration, must fit in Holding Area. Indicate dimensions, on Exhibit "B".

2. Participant must provide the name and location of landfill site to which the solid waste will be delivered and disposed of.

3. **If** Participant(s) is not the owner or operator of the landfill site, Vendor must provide copies of documents authorizing Vendor to properly dispose of solid waste is such landfill.

4. Participant shall provide a copy of current permit for the landfill size issued by the Texas Natural Resource Conservation Commission (TNRCC) evidencing authorization for the disposal of solid waste. Awarded Participant must be in compliance throughout the term of contract.

5. The successful Vendor agrees to abide by all applicable state laws, regulations, and be incompliance with all OSHA and TXDOT's regulations and requirements for the transportation of solid waste materials throughout the term of the contract.

6. Awarded Vendor must present evidence that it possesses all federal, state and local permits necessary to properly conduct and operate a waste collection and disposal business.

7. Participant will provide all labor, machinery and equipment, tools and materials required to render services.

8. Participant must indicate on the Quote page (Exhibit "B") of any additional fees.

9. Any spillage of waste at any stage of the collection and transportation shall immediately be cleaned and removed by awarded contractor.

10. Upon award, Vendor shall provide a Schedule of Collection days to the Department, so that they may chose the day most convenient for them. Collection time **shall be** between the hours of **7:00 A.M. and 10:00 A.M.** County personnel will be available to open the premises.

DELAYS

A minimum of **one** (1) delay per month will be acceptable. Awarded Contractor **must** notify Hidalgo County Pct. 4, of any delay(s) with the scheduled pick up time. A Point of Contact and telephone number shall be provided to the awarded Vendor.

LOCATION OF SERVICES:

Hidalgo County Precinct No. 4
San Carlos Community Resource Center
107 North Sunflower
La Blanca, TX. 78558

BILLING STATEMENT:

Awarded Vendor will bill the County on a "monthly basis." The monthly bill and/or statement will be sent to: Hidalgo County Pct. No. 4 Administration Office
1051 N. Doolittle Rd.
Edinburg, TX. 78542
(956) 383-3112

STANDARD TERMS & CONDITION:

1. Contract will commence upon the completion of the San Carlos CRC and upon the

approval of Hidalgo County Commissioner's Court.

2. Term of contract is for a **one** (1) year period.

3. County reserves the right to continue this bid for an additional sixty (60) day grace period at the end of the contract term for unforeseen delay in award of new bid for next contract term.

4. County reserves the right to award the contract to the responsible participant (s) who summits the lowest and best bid or may reject all bids and issue a new solicitation. If two responsible participants summit the lowest and best; bid will be made to the responsible participant(s) submitting the lowest bid prices for the item(s) as specified.

5. Hidalgo County reserves the right to hold quotes/bids for a period of ninety (90) days without taking any action.

6. County will seek purchases from State awarded vendors whenever it is, its best interest to do so.

7. After bid is awarded and low bidder(s) default(s) in meeting the general instructions to bidders and/or comply with contract agreement, Hidalgo County reserves the right to seek services from the next low bidder. In such event, County shall charge the successful bidder the difference for any additional cost of such item.

8. Any contract awarded to a successful bidder will be in effect until;
   a) The contract expires
   b) Delivery acceptance of products and/or performance of services ordered, or
   c) Terminated by County with thirty (30) days written notice prior to be cancellation.

9. Hidalgo County reserves the right to award the bid to ONE or to MULTIPLE bidders if the County determines it is in its best interest to do so.

10. Hidalgo County reserves the right to add or delete the number of containers and/or increase the size of container, during the term of the contract under the same terms, rates and conditions

11. Have been in business for at least two years.

12. The Participant awarded the contract **shall not engage** the service of a subcontractor

without prior written consent of Hidalgo County. When requesting written consent from Hidalgo County to retain a subcontractor to perform services hereunder the successful bidder must present evidence and submit to the County that the successful bidder and the proposed subcontractor possess all necessary licenses and permits to perform the services described herein and that the successful bidder and the proposed subcontractor have obtained and submitted the required insurance coverage and policies as required by Hidalgo County.

13. Insurance requirements for this project to be maintained throughout the contract term (Refer to limits on the Exhibit "C" for limits).

14. Hidalgo County reserves the right to reject any/all quotes/bids, to waive any/all formalities or
technicalities, or to accept the quote/bid considered the best and most advantage to the County.

15. Vendors(s) agrees that to the extent an item(s) and/or service is unavailable from Vendor(s) own inventory, Vendor(s) will be Responsible for locating an alternative supplier and for providing the product and/or service to Hidalgo County at Bidder's expense.

16. **All costs and expenses associated with the preparation and submission of (bids, proposals, statement of qualifications and/or quotes) shall be responsibility of the bidder and no reimbursements for such charges or expenses shall be passed on to HIDALGO COUNTY.**

MARKET VOLATILITY AND UNIT PRICE ADJUSTMENTS:
Hidalgo County recognizes that during periods of national crisis and unstable economic conditions, unforeseen price increases might affect costs for goods and services contracted on an annual basis. The following procedure may be employed to mediate price volatility:

1) **Requesting Price Adjustment**: Upon written request of the Vendor to the County Purchasing Agent, the County may review evidence of prevailing industry-wide market conditions that warrant an adjustment in bid prices contained in the contract.

   - A Vendor must tie any price change clause to an industry-wide or otherwise nationally recognized index, or some other form of verifiable document. Such written request must be accompanied by a certified copy of the supplier's advisory or notification to the vendor of the price changes.

- The Vendor must put the Purchasing Agent on the mailing lists for such publications so that the Purchasing Agent can monitor said changes. Such membership shall be at no cost to the County.
- The County Purchasing Agent retains the right to determine whether or not such proposed price changes are in the best interest of the County.
- No price escalation will be authorized in excess of the amount of the increase referred to in the supplier's notice.
- The County may only grant a price increase if the evidence presented is deemed reliable. Should the County allow a price increase, the approved price change shall be honored for all orders received by the vendor or contractor after the effective date of such price change. Approved price changes are not applicable to orders already issued and in process at time of price change.

2) **Price Reduction**: Vendor shall notify the County at the time when the Vendor's costs for items and/or supplies reduce due to stabilization in the market at which time prices for items on this contract shall be reduced accordingly. Failure by the Vendor to notify the County of a decrease in costs for items and/or supplies for which the Vendor was granted a price adjustment, may result in immediate termination of this contract and the County shall not be obligated to pay the Vendor the difference between the contract price and the price adjustment.

3) **Timeframe for Adjusted Price Increases:** Price increases are only valid for the quarter in which they are requested and approved. Prices shall return to the original contract price at the beginning of the following quarter unless a Vendor notifies the County in writing within ten (10) days of expiration of the quarter in which the price increase is in effect, that it desires to have the price increase continue or that the Vendor is requesting a different price increase for the following quarter. Such request must be supplemented with sufficient justification to demonstrate that the price increase remains necessary. The County Purchasing Department shall have sole discretion whether to grant the price increase extension. The County too, shall have discretion to unilaterally reduce, eliminate or extend a price adjustment to the Vendor at any time upon written notice from the County to the Vendor demonstrating justification for such reduction, elimination or extension of the price adjustment.

4) **Allowable Review Periods**: Price adjustment reviews may only be requested by the Vendor on a quarterly basis. However, the County may at its own discretion, conduct temporary price adjustment reviews at any time. The County Purchasing Agent and/or

the County Auditor reserve the right to audit and/or examine any pertinent books, documents, papers, records or invoices relating directly to the contract transaction in question after reasonable notice and during normal business hours.

5) **Dollar Limit to Price Changes**: The total increase in contract price shall not exceed twenty-five percent (25%) of the original contract price during the contract term.

ADDITIONAL INFORMATION:

Information regarding this project can be addressed in writing, to the Hidalgo County Purchasing Department. Hidalgo County is also requesting that any and all questions, inquiries and clarifications regarding quotes, bids, proposal or statement of qualifications be addressed to Martha L. Salazar, CPPB, Purchasing Agent, **Attention Sandy Suarez: 2802 SOUTH BUSINESS HWY 281, EDINBURG, TEXAS 78539.**

TELEPHONE INQUIRIES WILL NOT BE ACCEPTED.

INQUIRIES & RESPONSES:

All Written Inquiries will be accepted Via Email to sandy.suarez@co.hidalgo.tx.us, No later than, Monday, March 27, 2017 at 5:00 P.M., at (956) 292-7612. Responses to said Inquiries will be sent to all Participants via Email by No Later than 5:00 P.M Tuesday, March 28, 2017.

Hidalgo County Pct 4
"Garbage Collection at New San Carlos CRC"
RFSQ NO.: 2017-097-03-06-SGS

Attachment A-1

Holding Area

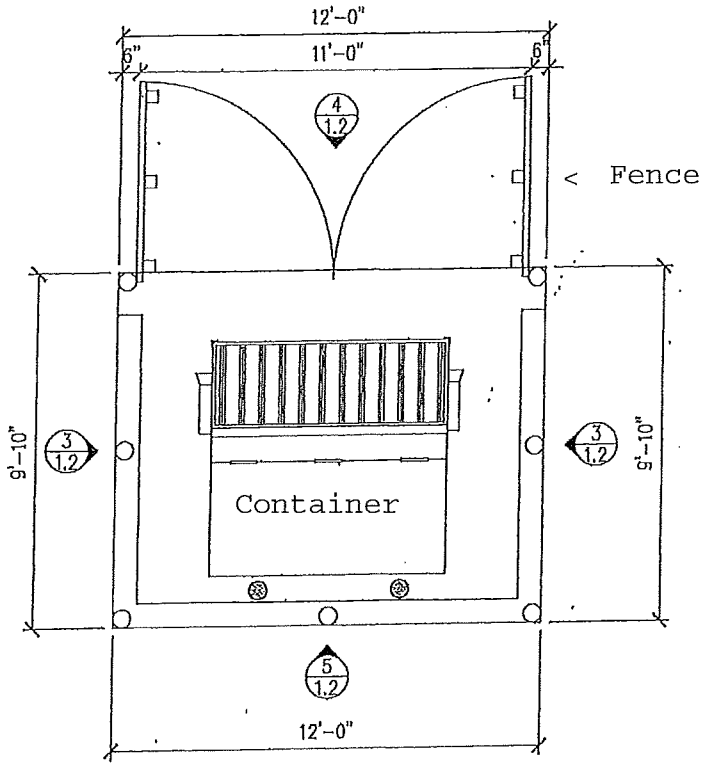


EXHIBIT "B"
HIDALGO COUNTY PRECINCT NO. 4
"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"
RFSQ NO.: 2017-097-03-06-SGS

QUOTE PAGE

PART I

AWARD WILL BE BASED ON THE LOWEST & BEST BID MEETING ALL SPECIFICATIONS / REQUIREMENTS.
Internal Use Only: Commodity Code: 910-27

LOCATION SITE: **SAN CARLOS COMMUNITY RESOURCE CENTER - HIDALGO COUNTY PRECINT # 4**		
	COST	
Charges for <u>One (1) day</u> per Week Collection Service	Total Monthly Cost $ _____	
Additional Charges – (specify below)	$ _____	
Specify Additional Fee: _____		
CONTAINER TO BE PROVICED BY VENDOR	Container **As per Specifications**	
<u>Slant top</u>-Container - (1) with lid (as per Specs- <u>5'6"L x 6' W x 5'H or equal 4 cubic yds.</u>	Yes - √	
	No - X	
<u>Flat top</u>-Container - (1) with lid **Indicate Dimensions–(must be 4 cubic yards-fit in Holding Area)**		
Copies of Documents authorizing Vendor to dispose of solid waste in Landfill, as per Exhibit A-Specifications - (if applicable)	**Enclosed (√)**	

<u>LANDFILL SITE ADDRESS/LOCATION:</u>

ACKNOWLEDGMENT FORM

PART II

I/We the undersigned hereby certify that I/We am/are a duly authorized official of the company and have the authority to sign on behalf of the company and assure that all statements made in the bid are true. I/We agree to furnish and deliver the specified items/services at the prices stated herein, and have read, understand, and agree to the terms and conditions contained herein and on all of the attachments.

BIDDER/COMPANY NAME:_____

ADDRESS:_____

CITY/STATE/ZIP CODE:_____

PHONE & FAX NUMBER:_____

E-MAIL ADDRESS:_____

CELLULAR NUMBER:_____

AUTHORIZED SIGNATURE:_____

PRINTED NAME:_____

TITLE:_____

DATE:_____

(Must be submitted with Bid Packet)

EXHIBIT "C"

Insurance Requirements
Applicable to the Acquisition of Goods and /or Services
(other than Professional Services)

The Bidder awarded the contract shall furnish proof of insurance, which will also include any subcontractor that is subcontracted by the bidder in at least the following limits, to be in place prior to providing any services under this Contract and to continue at all times in force in effect during the term of this Contract:

1. A Five Hundred Thousand Dollar ($500,000.00) Comprehensive General Liability insurance policy providing additional coverage to all underlying liabilities of County.

2. Automobile liability insurance policy with limits of at least Three Hundred Thousand Dollars ($300,000.00) per person and Five Hundred Thousand Dollars ($500,000.00) per occurrence. Coverage should include injury to or death of persons and property damage claims with limits up to Five Hundred Thousand ($500,000.00) arising out of the services provided to County hereunder.

3. Uninsured/Underinsured motorist coverage in an amount equal to the bodily injury limits set forth immediately above;

4. Workers compensation insurance in amounts established by Texas law, unless the Bidder is specifically exempted from the Texas Workers Compensation Act, Texas Labor Code Chapter 401, et. seq.

Hidalgo County will only accept certificates of insurance on an Acord form (as attached hereto). Certificates of insurance naming County as an **additional insured** shall be submitted to County for approval prior to any services being performed by Contractor. Each policy of insurance required hereunder shall extend for a period equivalent to, or longer than the term of the Contract, and any insurer hereunder shall be required to give at least thirty (30) days written notice to the County prior to the cancellation of any such coverage on the termination date, or otherwise. This Contract shall be automatically suspended upon the cancellation, or other termination, of any required policy of insurance hereunder, and such suspension shall continue until evidence adequate replacement coverage is provided to County. If replacement coverage is not provided within thirty (30) days following suspension of the Contract, this Contract shall automatically terminate.

ACORD

CERTIFICATE OF INSURANCE

DATE (MM/DD/YY)

PRODUCER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
	INSURERS AFFORDING COVERAGE
INSURED	INSURER A:
	INSURER B:
	INSURER C:
	INSURER D:
	INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THER TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	**GENERAL LIABILITY** ☐ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS MADE ☐ OCCUR ☐ OWNER'S & CONT. PROT ☐ OWNER'S PROTECTIVE LIABILITY GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PROJECT ☐ LOC				EACH OCCURRENCE	$
					FIRE DAMAGE (Any one fire)	$
					MED (Any one person)	$
					PERS & ADV INJURY	$
					GENERAL AGGREGATE	$
					PRODUCTS – COMP/OP AGG	$
B	**AUTOMOBILE LIABILITY** ☐ ANY AUTO ☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ☐ NON-OWNED AUTOS				COMBINED SINGLE LIMIT (Ea accident)	$
					BODILY INJURY (Per person)	$
					BODILY INJURY (Per accident)	$
					PROPERTY DAMAGE (Per accident)	$
	GARAGE LIABILITY ☐ ANY AUTO				AUTO ONLY-EA ACCIDENT	$
					OTHER THAN AUTO ONLY EA ACC	$
					AGG	$
C	**EXCESS LIABILITY** ☐ OCCUR ☐ CLAIMS MADE ☐ DEDUCTIBLE ☐ RETENTION $				EACH OCCURENCE	$
					AGGREGATE	$
						$
						$
						$
D	**WORKERS COMPENSATION AND EMPLOYER'S LIABILITY**				WC STATU- TORY LIMITS ☐ OTHER	
					E.L. EACH ACCIDENT	$
					E.L. DISEASE-EA EMPLOYEE	$
					E.L. DISEASE-POLICY LIMIT	$
	OTHER					

DESCRIPTION OF OPERATIONS / LOCATION / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

County of Hidalgo shall be named as additional insured on all Commercial General Liability policies.

CERTIFICATE HOLDER	ADDITIONAL INSURED; INSURER LETTER: _____ CANCELLATION
Hidalgo County **Attn: Purchasing Department** **2812 S Highway Bus. 281** **Edinburg, Texas 78539**	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BY CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL ***30*** DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE

SAMPLE

Insurance Requirement Acknowledgment

I, _____, authorized representative for _____,
Company/Vendor

hereby acknowledge receipt of the County's required insurance limits. Said requirements:

- will be acquired within 10 working days after notification from Purchasing Department of bid awarded by the Hidalgo County Commissioners' Court;
- will acquire additional amounts required to meet the County's requirements within 10 working days after notification from Purchasing Department of bid award by the Hidalgo County Commissioners' Court; currently carry the following:

  Automobile Liability: $_____ General Liability: $_____
- have already been met, see attached copy of insurance certificate.

_____ _____.
Authorized Representative Date

Notice to Bidder:
A certificate of insurance for the required insurance limits shall be provided to the Purchasing Department's Contract Managers in order to qualify for award of bid and to execute a contract between your Company and the County

Failure to provide Certificates of Insurance to the Purchasing Department's Contract Managers will cause the bid award to be rescinded and re-awarded to next lowest bidder. Certificates of Insurance will be monitored and verified on a **quarterly basis** to ensure coverage policy is in place. It is the Company's obligation to maintain the appropriate insurance coverage throughout the term of the contract.

THIS FORM MUST ACCOMPANY BID PACKET

PROJECT REQUIREMENTS ACKNOWLEDGMENT

This is to certify that I, _____, possess all of the APPLICABLE:

1. Licenses: _____.
2. Bond (if applicable)_____
3. Certificates: _____.
4. Permits: _____.
5. Other: _____.

necessary to carry out the required project. Furthermore, I am providing copies of the required documentation so that, if my company is awarded this bid, I may be eligible to enter into a contract with Hidalgo County and proceed to complete the project in a timely manner.

* Any licenses, bonds (if applicable),certificates, permits, etc. which are required must be presented as part of the bid packet in order to expedite the bid evaluation process.

_____ _____.
Authorized Signature Date

_____.
Company

_____.
Address

_____.
City, State, Zip

THIS FORM MUST ACCOMPANY BID PACKET

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information is being disclosed.**

_____

Name of Officer

4 **Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 **Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

_____ _____

Signature of vendor doing business with the governmental entity Date

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

(A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;

(B) a transaction conducted at a price and subject to terms available to the public; or

(C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

***

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:

(i) a contract between the local governmental entity and vendor has been executed; or

(ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

HIDALGO COUNTY
PURCHASING DEPARTMENT
Bidder/Vendor Application

Complete in print or type. Please return this application to the Hidalgo County Purchasing Department thru Facsimile: (956) 318-2629 or (956) 292-7612 in person or regular mail to: 2812 S. Business Hwy. 281 , Edinburg, Texas 78539 or email: purchasing@co.hidalgo.tx.us

Company Name: **Telephone No. ( )**
dba Name:
Legal Name:
Mailing Address : **Fax No. ( )**
Physical Address:
City, State, Zip **Tax I.D. No.**
Remit to Address : **City, State, Zip**
E-Mail Address:
Representative(s) Name(s) & Title(s)
Type of Organization (check one): _____ Individual _____ Partnership _____ Corporation _____Non-Profit _____ LLC _____ Sole Proprietor _____ Other, Specify **State Identification No._____ (Please attached completed W-9 form with this application)** **Federal Identification No. or (if individual) SS No.**
State of Incorporation: _____ Date:_____ Other:
Type of Business (check one): _____ Manufacturer _____ Wholesaler _____ Retailer _____ Broker _____ Distributor _____ Service Organization _____ Other, Specify
Name & Title of Person(s) Authorized to Sign Bids, Proposals, and/or Contracts:
Small and/or Disadvantaged Business Information (check application criteria) **Small Business:** **Disadvantaged Business (At Least 51% Ownership)** ☐ Less than 125,000 annual gross receipt ☐ Black American ☐ Native American ☐ Less than 250,000 annual gross receipt ☐ Hispanic American ☐ Women ☐ Less than 499,000 annual gross receipt ☐ Asian Pacific American ☐ Other ☐ More than 500,000 annual gross receipt **Have you been certified as a HUB or an MBE/WBE source?:** ☐ Yes ☐ No **Indicate Certification No.(s):_____ or are Certificate(s) attached?:** ☐ Yes ☐ No
What type of product(s) is/are solicited by your company?: **Would you like to be provided with specifications for procurements of such products?:** ☐ Yes ☐ No
To Be Completed by the County: Rec'd by (Purchasing):_____ Date Rec'd by (Purchasing): **Date Forwarded Information to Auditor's Office:_____Entry Date: _____ Vendor No.:**

Revised12/14/06

HISTORICALLY UNDERUTILIZED BUSINESS (HUB) DECLARATION

The primary objective of the Hidalgo County HUB Program is to ensure Historically Underutilized Businesses receive a fair and equal opportunity for participation in the County's procurement process. This fact holds true for Services (Professional & Non-Professional), Commodities, and Construction contracts and any subcontracts thereto. The program strongly encourages Prime Contractors to provide subcontracting opportunities to Certified Hub Contractors/Vendors. Our goal for HUB contractor/vendor participation, as well as HUB subcontractor participation is 30%. To be considered as a "Certified HUB Contractor/Vendor" the contractor/vendor must have been certified by, and hold a current and valid certification with any of the three agencies listed below.

Have you been Certified as a HUB or an MBE/WBE source?: ☐Yes ☐ No

If yes, by whom?: ☐ Texas Building & Procurement Commission ☐ Other_____

Indicate Certification No(s).:_____ or Are Certificate(s) Attached?: ☐ Yes ☐ No

---

LIST OF CERTIFIED HUB SUBCONTRACTORS

(Attach additional pages if necessary)

What percentage of the Bid, RFP,or RFQ is to be subcontracted with Certified HUB sources?: _____%
(List HUB Subcontractor information below).

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): ☐Texas Building & Procurement Commission ☐ Other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): ☐Texas Building & Procurement Commission ☐ Other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

HUB Subcontractor Name: _____ HUB Status:
Certifying Agency (Check all applicable): ☐Texas Building & Procurement Commission ☐ Other
Address: _____ City: _____ State: _____ Zip:
Contact Person: _____ Title: _____ Phone No.: ( )
Subcontract Amount: $_____ Description of Work to be Performed:

Form **W-9**
(Rev. December 2014)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification; check only one of the following seven boxes:
☐ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate
☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____
Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner.
☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
Exempt payee code (if any) _____
Exemption from FATCA reporting code (if any) _____
(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number
___ – ___ – ____

or

Employer identification number
__ – _____

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here | Signature of U.S. person ▶ | Date ▶

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at *www.irs.gov/fw9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

Note. If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of $50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a $500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note. ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

Limited Liability Company (LLC). If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2—The United States or any of its agencies or instrumentalities

3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

4—A foreign government or any of its political subdivisions, agencies, or instrumentalities

5—A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

7—A futures commission merchant registered with the Commodity Futures Trading Commission

8—A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10—A common trust fund operated by a bank under section 584(a)

11—A financial institution

12—A middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over $600 required to be reported and direct sales over $5,000[1]	Generally, exempt payees 1 through 5[2]
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

[1] See Form 1099-MISC, Miscellaneous Income, and its instructions.

[2] However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note. You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.ssa.gov*. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: *A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.*

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account[1]
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor[2]
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee[1] The actual owner[1]
5. Sole proprietorship or disregarded entity owned by an individual	The owner[3]
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	**Give name and EIN of:**
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity[4]
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

[1] List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

[2] Circle the minor's name and furnish the minor's SSN.

[3] You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

[4] List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

*Note. Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: *spam@uce.gov* or contact them at *www.ftc.gov/idtheft* or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

Certification
Regarding Debarment, Suspension and Ineligibility

As is required by the Federal Regulations Implementing Executive Order 12549, Debarment and Suspension, 45 CFR Part 76, Government-wide Debarment and Suspension, the applicant certifies, to the best of his or her knowledge and belief, that both it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency;

b. Have not within a three-year period preceding this bid proposal and/or application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction, violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a government entity with commission of any of the offenses enumerated herein; and

d. Have not within a three-year period preceding this bid proposal and/or application had one or more public transactions terminated for cause or default.

Signature:_____
Print Name:_____
Title:_____
Telephone Number:_____
Date:_____

If the bidder is unable to certify to all of the statements in this Certification, such bidder should attach an explanation to this proposal.

EXHIBIT "G"

APPENDICES

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations**: The contractor (hereinafter includes consultants)will comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Nondiscrimination**: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of49 CFR Part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment**: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

4. **Information and Reports**: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance**: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

   a. withholding payments to the contractor under the contract until the contractor complies; and/or
   b. cancelling, terminating, or suspending contract, in whole or in part.

6. **Incorporation of Provisions**: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX B

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the **COUNTY OF HIDALGO** will accept title to the lands and maintain the project constructed thereon in accordance with all applicable federal statutes, the Regulations for the Administration of all Department of Transportation programs, and the policies and procedures prescribed by the Federal Highway Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the **COUNTY OF HIDALGO** all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit 1 attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto **COUNTY OF HIDALGO** and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the **COUNTY OF HIDALGO**, its successors and assigns.

The **COUNTY OF HIDALGO**, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over ,or under such lands hereby conveyed [,] [and]* (2) that the **COUNTY OF HIDALGO** will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and(3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land ,and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverted clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX C

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the **COUNTY OF HIDALGO** pursuant to the provisions of Assurance 7(a):

A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:

1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permitted, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended)such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, **COUNTY OF HIDALGO** will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*

C. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the **COUNTY OF HIDALGO** will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the **COUNTY OF HIDALGO** and its assigns.*

(*Reverted clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX D

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by **COUNTY OF HIDALGO** pursuant to the provisions of Assurance 7(b):

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color ,or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.

B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Nondiscrimination covenants, **COUNTY OF HIDALGO** will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said(license, permit, etc., as appropriate) had never been made or issued.*

C. With respect to deeds, in the event of breach of any of the above Nondiscrimination covenants, **COUNTY OF HIDALGO** will there upon revert to and vest in and become the absolute property of **COUNTY OF HIDALGO** and its assigns.*

(*Reverted clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

Pertinent Nondiscrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of1970, (42U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23U.S.C. § 324et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49CFRPart 27;
- The Age Discrimination Act of 1975, as amended,(42U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49U.S.C. § 4 71, Section 4 7123),as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987,(PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189)as implemented by Department of Transportation regulations at 49C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U .S.C. 1681 et seq).

HIDALGO COUNTY
(Including all funding sources, programs, and entities)

REQUEST FOR SEALED QUOTES
"GARBAGE COLLECTION FOR NEW SAN CARLOS CRC"
RFSQ No.: 2017-097-03-06-SGS

RFSQ SUBMITTAL CHECK LIST

All forms listed below must be included in the RFSQ response.

Indicate with a check mark (✓) the Forms completed and included in this response:

_____ Page 9 of Legal Notice

_____ Exhibit "B" Quote Page

_____ Exhibit "C" Insurance and Project Acknowledgement forms

_____ Exhibit "D" CIQ Form -Copy of Co. Clerk Recording fee receipt (if applicable)

_____ Exhibit "E" Vendor Bidder Applications and IRS form W-9

_____ Exhibit "F" Certification Regarding Debarment

_____ SAMS.gov Registration Acknowledgement www.sam.gov (provide DUNS Number)

_____ Copy of required Permits/Certificates , as per Exhibit "A"

EXHIBIT "B"

VENDOR'S BID PRICE

EXHIBIT "B"
HIDALGO COUNTY PRECINCT NO. 4
"GARBAGE COLLECTION AT NEW SAN CARLOS CRC"
RFSQ NO.: 2017-097-03-06-SGS

QUOTE PAGE

PART I

AWARD WILL BE BASED ON THE LOWEST & BEST BID MEETING ALL SPECIFICATIONS / REQUIREMENTS.
Internal Use Only: Commodity Code: 910-27

LOCATION SITE: SAN CARLOS COMMUNITY RESOURCE CENTER - HIDALGO COUNTY PRECINT # 4		
	COST	
Charges for One (1) day per Week Collection Service	Total Monthly Cost $ 93.50	
Additional Charges – (specify below)	$ 137.00	
Specify Additional Fee: DELIVERY FEE (ONE TIME CHARGE)		
CONTAINER TO BE PROVICED BY VENDOR	Container **As per Specifications**	
Slant top-Container - (1) with lid (as per Specs- 5'6"L x 6' W x 5'H or equal 4 cubic yds.	Yes - √	X
	No - X	
Flat top-Container - (1) with lid **Indicate Dimensions–(must be 4 cubic yards-fit in Holding Area)**		
Copies of Documents authorizing Vendor to dispose of solid waste in Landfill, as per Exhibit A-Specifications - (if applicable)	**Enclosed (√)**	
	YES	

LANDFILL SITE ADDRESS/LOCATION:

LA GLORIA RANCH LANDFILL, 23485 N MOOREFIELD RD, EDINBURG TX 78541

RFSQ
for
HIDALGO COUNTY PRECINCT NO. 4
"GARBAGE COLLECTION AT THE NEW SAN CARLOS CRC BLDG"
RFSQ No: 2017-097-03-06-SGS

To: Martha L. Salazar, CPPB, Purchasing Agent
Hidalgo County Purchasing Department
Sandy Suarez, Buyer II
Physical Address: 2802 S. Business Hwy. 281 - Administration Building
Mailing/Postal Address: 2812 S. Business Hwy. 281
Edinburg, Texas 78539

In accordance with the Specifications, and subject to all laws and regulations of the United States and state and local laws, the undersigned Participant proposes and commits to furnish all labor, equipment, material, software and services as set forth in the documents hereinbefore mentioned. The undersigned Participant further agrees, upon acceptance of its RFSQ, to execute a contract and/or Purchase Order issued by Hidalgo County for performing and completing the work described in the Specifications within the time stated and for the prices proposed in the documents attached hereto and made a part hereof.

Participant acknowledges receipt of all of the pages of the documents referenced in the Invitation to RFSQ Checklist presented in connection with this procurement. Participant understands that Hidalgo County reserves the right to reject any or all RFSQs and further reserves the right to design the evaluation criteria to be used in selecting the lowest and best RFSQ.

Participant agrees that this RFSQ shall be good and may not be withdrawn for a period of thirty (30) calendar days after the scheduled closing time for receiving RFSQs, as contained in the Specifications.

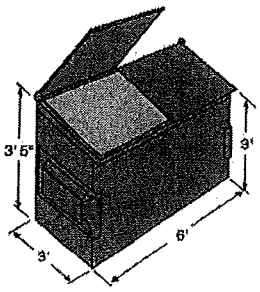
Respectfully submitted,

Participant:	REPUBLIC SERVICES
Address:	9402 W EXPRESSWAY 83
By:	Maribel Nieto
Printed Name:	MARIBEL NIETO
Title:	INSIDE SALES REPRESENTATIVE

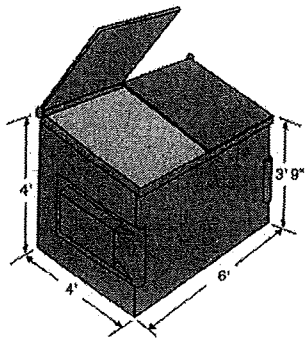
Must be submitted with the quote

Front Loading Container Specifications

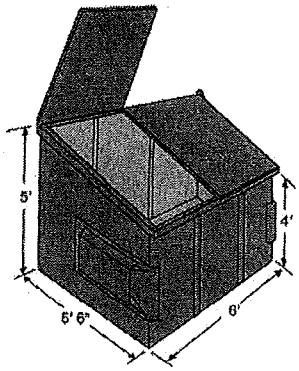
REPUBLIC SERVICES



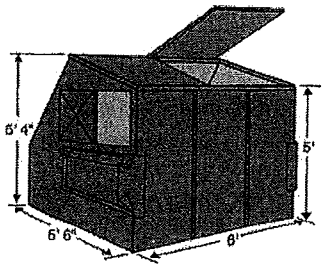
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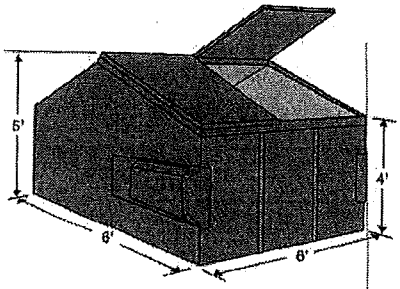
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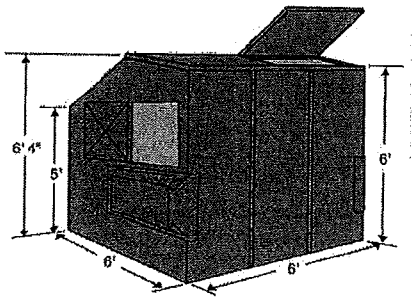
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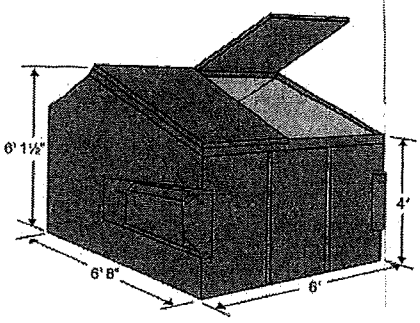
6 YARD



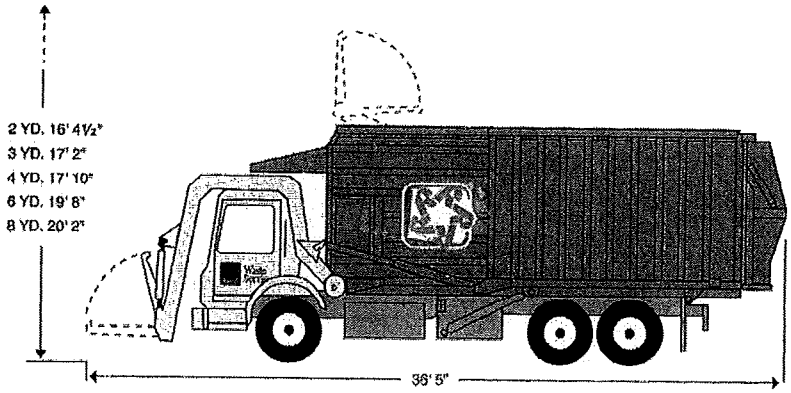
6 YARD SLANT



8 YARD



8 YARD SLANT



COLLECTION VEHICLE CONFIGURATION

Note: Approximate specifications subject to change without notice.

©2002 BFI An Allied Waste Industries Company John Mantove Advertising 7402 7/25/02 1054

EXHIBIT "C"

INSURANCE REQUIREMENTS

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 06/17/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
CANNON COCHRAN MANAGEMENT SERVICES, INC.
17015 N. SCOTTSDALE RD.
SCOTTSDALE, AZ 85255

CONTACT NAME:
PHONE (A/C No.Ext): | **FAX (A/C No.Ext):**
E-MAIL ADDRESS:certificateteam@ccmsi.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: ACE American Insurance Company	22667
INSURER B: Indemnity Insurance Company of NA	43575
INSURER C: ACE Fire Underwriters	20702
INSURER D: Illinois Union Insurance Company	27960
INSURER E:	
INSURER F:	

INSURED
REPUBLIC SERVICES, INC.
18500 N. ALLIED WAY
PHOENIX, AZ 85054

COVERAGES **CERTIFICATE NUMBER: 1052252** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	**GENERAL LIABILITY** [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [ ] PROJECT [ ] LOC			HDO G27853420	06/30/2016	06/30/2017	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS -COMP/OP AGG	$ 5,000,000 $ 5,000,000 $ 5,000,000 $ 5,000,000 $ 5,000,000
A	**AUTOMOBILE LIABILITY** [X] ANY AUTO [X] ALL OWNED AUTOS [X] SCHEDULED AUTOS [X] HIRED AUTOS [X] NON-OWNED AUTOS			ISA H09043585	06/30/2016	06/30/2017	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY(Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 5,000,000
	[ ] **UMBRELLA LIAB** [ ] OCCUR [ ] **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE	
B A C A D	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [N] **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WLR C48608115 - AOS WLR C48608127 - CA/MA/OR SCF C48608139 - WI WCU C48608140 - OH XS TNS C48612763 TX NS XS	06/30/2016 06/30/2016 06/30/2016 06/30/2016 06/30/2016	06/30/2017 06/30/2017 06/30/2017 06/30/2017 06/30/2017	[X] WC STATU-TORY LIMITS [ ] OTHER E.L. EACH ACCIDENT E.L. DISEASE -EA EMPLOYEE E.L. DISEASE -POLICY LIMIT	 $ 3,000,000 $ 3,000,000 $ 3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Division Number: 4863 - Named Insured Includes: BFI Waste Services of Texas, LP - Dba: Allied Waste Services of Rio Grande Valley - Brownsville Satellite

CERTIFICATE HOLDER

HIDALGO COUNTY PURCHASING DEPARTMENT
2802 S BUSINESS HIGHWAY 281
EDINBURG, TX 78539
United States

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-175144

Date Filed:
03/06/2017

Date Acknowledged:
03/07/2017

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
Republic Services
Harlingen, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
RFSQ NO.: 2017-097-03-06-SGS
Solid waste removal and disposal

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Republic Services	Harlingen, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

_____
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
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Hidalgo County

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.
RFSQ NO.: 2017-097-03-06-SGS
Solid waste removal and disposal

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary
Republic Services	Harlingen, TX United States	X	

5 Check only if there is NO Interested Party. ☐

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

Signature of authorized agent of contracting business entity

HECTOR CANTU
Notary ID # 10974895
My Commission Expires
March 9, 2020

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Maribel Nieto, this the 6th day of March, 20 17, to certify which, witness my hand and seal of office.

Signature of officer administering oath	Printed name of officer administering oath	Title of officer administering oath
	Hector Cantu	Driver Trainee

AI-58867 **Purchasing Department** **23. D. 4.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Marty Salazar, PURCHASING DEPT.

Submitted By: Letty Saenz, PURCHASING DEPT.

Department: PURCHASING DEPT.

Information

CAPTION

a. Requesting exemption from competitive bidding requirements under the Texas Local Government Code, Section 262.024 (A) (4) for a "professional service";

b. Presentation of the scoring grid (for the purposes of ranking by CC) the firm graded & evaluated through the County's approved "pool" of Architectural Firms for the purposes of [Repairs/Renovations/Remodeling, Additions/Alterations and/or Building Review/Assessment Related Services on a [per project basis] for County-owned Buildings/Structures] located within Hidalgo County Precinct No. 4;

ARCHITECTURAL FIRMS

Totals	The Warren Group Architects, Inc.	Gomez, Mendez & Saenz, Inc.	HDR Architecture, Inc.
Scores	98	95	93
Ranking			

c. Authority for the Purchasing Department to negotiate an "on call" professional Architectural Services Agreement for the purposes of [Repairs/Renovations/Remodeling, Additions/Alterations and/or Building Review/Assessment Related Services on a [per project basis] for County-owned Buildings/Structures] located within Hidalgo County Precinct No. 4, with the No.1 ranked firm _____ for Architectural Services.

BACKGROUND

GRID-(on call) --Architectural Services-Precinct 4

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** dept. 124

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

*Budget impact to be identified on a [per project basis] under the form of an AIA.

Attachments

GRID-(on call) Arch Svcs-Pct 4
FORM

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/09/2017 11:16 AM
Budget & Management	Veronica Ortiz	03/09/2017 11:17 AM
Ivan Cantu	Ivan Cantu	03/10/2017 11:13 AM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Letty Saenz		Started On: 03/06/2017 12:16 PM
Final Approval Date: 03/17/2017		

PROFESSIONAL ARCHITECTURAL SERVICES

"On Call"

"Repairs/Renovations/Remodeling, Additions/Alterations and/or Building Review/Assessment Related Services on a "per project basis" for County-owned Buildings/Structures"

within..

HIDALGO COUNTY PRECINCT No. 4

Scoring & Evaluation GRID

Architectural Firms

Total Scores	The Warren Group Architects, Inc.	Gomez, Mendez & Saenz, Inc.	HDR Architecture, Inc.
Evaluator 1	98	95	93
RANKING			

Scoring/Evaluation-completed by HC Precinct No. 4-Maria "Lulu" Lucio

NO CONFLICT DISCLOSURE FORM

Name of Government Officer/Employee: Maria D. Lucio

Title/Position: Executive Assitant

Contract for Goods/Services: On Call Architectural Services

Name of Vendors contracting with OR seeking to contract with Hidalgo County:

1. HDR Architecture Inc.
2. Gomez Mendez Saenz Inc.
3. The Warren Group Architects, Inc.
4. _____

In my review, grading, selection or approval of the above identified vendors, I hereby affirm that I have no conflicts to disclose (employment/business, family or gifts exceeding $100) in connection with the above identified vendor(s) as required by section 176 of the Texas Local Government Code.

Signed: Maria D. Lucio

Date: 3-3-17

AI-58988 **Purchasing Department** **23. E. 1.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Marty Salazar, PURCHASING DEPT.

Submitted By: Darlene Betancourt, PURCHASING DEPT.

Department: PURCHASING DEPT.

Information

CAPTION

Pursuant to current contract #C-10-243-07-06 [holdover status & on an "as needed basis"] for the provision of Autopsy Facility and Related Services between Hidalgo County and Ceballos Funeral Home, we request approval to issue and send written notice of termination effective March 31, 2017.

BACKGROUND

As per DA office, no bodies or specimens will be at the premises [Ceballos Funeral Home] after March 17, 2017.

Fiscal Impact

FISCAL YEAR: 2017 **ACCT. #:** 7-1100-421-00-080-003-0-340

FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

PO #755297 for Ceballos Funeral Home, Inc, funds available as of 3-16-17; there will be No fiscal impact after payment of any outstanding invoices prior to March 17, 2017.

Attachments

Current agreement

Form Review

Inbox	Reviewed By	Date
Purchasing - Internal	Marty Salazar	03/16/2017 02:15 PM
Budget & Management	Veronica Ortiz	03/16/2017 02:21 PM
Ivan Cantu	Ivan Cantu	03/16/2017 04:16 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Darlene Betancourt Started On: 03/16/2017 10:47 AM

Final Approval Date: 03/17/2017

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SERVICE CONTRACT
C-10-243-07-06

THIS CONTRACT is made and entered into this **6th Day** of **July, 2010** by and between the **COUNTY OF HIDALGO, TEXAS** ("County"),**CEBALLOS FUNERAL HOME, INC.** ("Company").

WHEREAS, County exempted from competitive bidding requirements under Texas Local Government Code, Chapter 262, Section 024(a)(2) for an **"Autopsy Facility"** the ("Services");

WHEREAS, in recognition of the statutory requirement for an "Autopsy Facility" the ("Services"), the Commissioners Court of County approved the exemption and authority to negotiate a service contract.

WHEREAS, pursuant to the negotiations, Company has requested for County to provide a 10,000 Kw Generator on an "as needed" basis during a declaration of disaster by County to support the Company's air conditioning/cooling system where the tissue and blood specimens and dead bodies are contained; and

WHEREAS, Company will bear the obligation, responsibility and cost for the electrical system transfer switch for connection of the power generator as well as any other costs required for the operation of such power generator.

NOW, THEREFORE, in mutual consideration of the foregoing and the further

consideration of the following, the parties hereto agree as follows:

1. County and Company hereby agree that this Contract is entered into in order to provide the Services to Hidalgo County for **"Autopsy Facility"**. This Contract does not extend to any third parties any duties or benefits conferred in any manner hereunder or otherwise.

2. Company hereby promises and agrees to render and provide, during the term of this Contract, and shall be obligated to render and provide the Services in accordance with the scope of services, described in Exhibit "A", within **Hidalgo County** on request by the Commissioners Court or their designated agent. Company agrees in performing the Services that it will use proper professional standards, comply with any and all appropriate laws and regulations in providing the Services, and devote such time as is necessary to safely and efficiently provide the Services.

3. County agrees upon a Declaration of Emergency declared by County to provide Company on an as needed basis one (1) 10,000kw power generator to support company's air conditioning/cooling system for Company's premises housing tissues blood specimens and dead bodies. Company agrees to pay for or reimburse County for all costs in operating such power generator.

4. This Contract shall be for a period of six (6) months, commencing upon finalization and acceptance of negotiated terms with Company on July 6, 2010 and ending on January 5, 2011. If County holds over and continues in possession of the Premises after expiration of the term of this contract, Hidalgo County will be deemed to

be occupying the premises on the basis of a month to month tenancy subject to all of the terms and conditions of this contract

5. As a condition of this Contract, Company shall hold and maintain throughout the term of this Contract all licenses and permits required, or which may be required by any authority during the term hereof to provide the Services.

6. All trucks or vehicles operated by the Company to perform the Services shall contain all equipment required by any authority to operate on streets and roads and all persons in the employ of Company who operate such trucks or vehicles shall have the required licenses, qualifications, skill and expertise to perform such Services and shall comply with all laws, rules and regulations prescribed by any agency or authority having jurisdiction with regard to the operation of such trucks or vehicles in providing the Services.

7. As consideration for rendering the Service provided for in this Contract, the County agrees to pay Company the amounts specified in Exhibit "B" attached hereto payable against written invoice submitted by Company.

8. Company shall provide insurance in force on all its vehicles and all persons connected with providing services under this Contract naming County as an additional insured (with the coverages and in the amounts described on Exhibit "C" attached hereto and incorporated herein at this point for all purposes), and shall furnish to County certificates of such insurance coverage.

9. Company shall provide a sufficient number of trucks, vehicles, personnel

and equipment available to safely and efficiently provide the Services.

10. Company shall indemnify and hold harmless County, its elected officials, employees and agents from any and all claims, damages, losses, and expenses including attorney's fees for the defense of any action against County arising out of, resulting from, or connected with the provision of the Service by Company under this Contract. Said indemnity shall cover any act or failure to act by the Company, its agents or employees.

11. This Contract shall not be assignable in whole or in part by either party without prior written consent of the other party.

12. It is expressly agreed that this Contract and the performance by the parties hereunder does not create any agency relationship or master-servant relationship, that County has no supervision of the performance of the Services provided by Company, and that Company is an independent contractor under this Contract.

13. Any notice required or permitted to be given hereunder shall be in writing and shall be delivered personally or sent by certified mail, postage prepaid, as set forth below:

If to County:	**The County of Hidalgo** **Attn: County Judge** **100 E. Cano** **Edinburg, Texas 78539**
If to Company	**Ceballos Funeral Home, Inc.** **Attn: Linda Ceballos** **1023 North 23rd.** **McAllen, Texas 78501-7451**

14. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

15. Any contract award to a successful bidder will be in effect until (a) the contract expires, (b) delivery and acceptance of products, and/or performance of services ordered, or (c) terminated without cause by County with sixty (60) day's written notice prior to cancellation.

16. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective heirs, executors, administrators, legal representatives, successors, and assigns where permitted by this Agreement.

1. This Agreement shall be governed by and construed in accordance with the laws of the State of Texas and shall be performable in Hidalgo County.

WITNESS our hands in duplicate originals this_____ day of _____, 2010.

COUNTY OF HIDALGO

By:_____
Rene A. Ramirez, County Judge

ATTEST:

_____
Arturo Guajardo Jr., County Clerk

COMPANY:
Ceballos Funeral Home, Inc.

By: Linda Ceballos

Printed Name: LINDA CEBALLOS

Title: President / Owner

APPROVED BY COMMISSIONES COURT: **July 6, 2010**

APPROVED AS TO FORM:
Atlas & Hall, L.L.P.

By: _____
Stephen L. Crain

EXHIBIT "A"
SCOPE OF SERVICES

SCOPE:
PURSUANT TO CHAPTER 49 OF THE CODE OF CRIMINAL PROCEDURES AND CHAPTER 691 OF THE HEALTH AND SAFETY CODE, THE FOLLOWING ARE THE SCOPE OF SERVICES TO BE PROVIDED BY COMPANY FOR A FACILITY LOCATED IN HIDALGO COUNTY WITH ALL NECESSARY EQUPMENT AT WHICH THE COUNTY'S CONTRACTED PATHOLOGIST CAN PERFROM AUTOPSIES AND RELATED SERVICES ON AN "AS NEEDED BASIS", ON DEAD BODIES IN ALL STATES OF DECOMPOSTION. THE FOLLOWING LIST IS THE MINIMUM REQUIRED EQUIPMENT, ACCESSORIES AND SUPPLIES FOR A FACILITY IN WHICH AUTOPSIES AND ALL NECESSARY AND RELATED SERVICES CAN BE PERFORMED AS REQUIRED BY STATE.

1) Refrigerator for storing dead bodies on site
2) Portable Trays
3) Suction with hose
4) Sink scale
5) Floor drain
6) X-ray machine
7) X-ray developer
8) View box(es)
9) Specimen freezer
10) Dissecting board
11) Camera with film
12) Kramer Kick Stool
13) Ladder
14) Counter top digital scale (for infant organs)
15) In/Out cards
16) Toe Tags
17) Body Bags
18) Scrubs
19) Aprons
20) Gowns Gloves
21) Clothing Scissors
22) Mayo dissecting scissors
23) Formalin
24) Viscera pan
25) Viscera bucket
26) Viscera bags
27) Test tube rack
28) Red Top Test Tubes
29) Lavender Top Test Tubes
30) Green Top Test Tubes
31) Stryker Saw with bone dust collector
32) Head blocks
33) 50 cc glass syringes
34) 6 cc disposable sterile syringes
35) 18 ga x 11/2 hypodermic needles
36) 12"x5 ga stainless steel (reusable sterile needles)
37) Stomach pan
38) Short scissor with disposable sharp/blunt blades
39) Three (3) toothed forceps
40) Storage for tissue blocks (paraffin)
41) Property Envelopes
42) Safe for storing property
43) Finger printing equipment
44) Possess or have access to:
    a. X-ray machines
    b. X-ray developer
    c. Histology Lab
    d. Toxicology Lab
45) Paper grocery bags
46) Specifications-Autopsy Facility
47) Bio hazard disposal boxes
48) Sharps containers
49) Masks
50) Splash shields
51) Tissue jars (wide mouth plastic with screw top)
52) Large glass measuring cup (2 liter/200 ML)
53) Small Stainless Steel Ladle
54) Tea strainer (for rinsing bullets, pellets, etc.)
55) Colander (for straining stomach content, fixed tissue, etc.)
56) Autopsy knife with disposable blades
57) Rib cutters
58) Pliers
59) Skull Breaker
60) Stainless steel wall unit with dual faucets, center drain, and disposal unit
61) Autopsy Needles
62) Scalpel handles with disposable blades
63) Stainless Steel Chisel
64) Dia-stix
65) Keto-stix
66) Swabs
67) Swab boxes

68) Slides
69) Slide Boxes
70) Paint cans
71) Embalmers Thread
72) Bone Scissors
73) Microscope
74) Storage for micro-slides

The facility must be available and on call twenty-four (24) hours daily, seven (7) days per week, three-hundred-sixty-five (365) days a year, for the County's contracted forensic pathologist to perform autopsies and related services.

Facility must be located in Hidalgo County, Texas.

All necessary equipment, accessories and supplies will be available at all times so as not to cause delay in the provision f autopsies and related services by the County's contracted forensic pathologist.

Contractor, it's employees, and/or agents cannot offer any information to family, friends, or acquaintances about "funeral related services." All inquires related to the descendent will be forwarded to the proper County official to ensure compliance with Title I of the Health Insurance Portability and Accountability Act of 1996; HIPAA Standards for Privacy of Individually Identifiable Health Information (the Privacy Rule).

Records Of Victims: Contractor must keep an updated log with information pertaining to the victim (i.e., name, date of birth, photo I.D. driver's license number, social security number, date and time of autopsy, performed by, witnessed by, body release to, etc.).

The contractor shall provide his/her own telephone and page numbers to the appropriate county officials.

TERMS AND CONDITIONS:
Term of contract is for a period of six (6) months, effective July 6, 2010 and ending on January 5, 2011. If County holds over and continue in possession of the Premises after expiration of the term of this contract, Hidalgo County will be deemed to be occupying the premises on the basis of a month to month tenancy subject to all of the terms and conditions of this contract.

Hidalgo County reserves the right to terminate this agreement by giving contractor sixty (60) days written notice of such termination.

Volume: There is no guaranteed annual volume. Hidalgo County will seek use of the "facility" on "As Needed Basis".

Contractor will be responsible for maintaining the facility in a manner that will allow the performance of autopsies and all necessary and related services without delay. Contractor will comply with all federal, state, and local statutes, codes, and regulations governing such premises.

Facility shall have public bathrooms and be handicapped accessible.

Contractor shall provide insurance for the "Facility" against, fire, accidents or natural disasters. Contractor shall maintain liability insurance on the premises in the amounts and coverages as required.

Facility shall be in good working condition and be handicapped accessible to provide the services required.

The facility shall be free from rodents and insects. The facility shall have adequate air conditioning and heating

available. Maintenances of air conditions, hearing, along with pest control will be the responsibility of the contractor's expense.

Facility shall have water, sewer, garbage pick-up in addition to electricity and/or natural gas.

Insurance: Contractor shall adhere o the following insurance requirements:

- Property policy shall provide that any proceeds of loss or damage to buildings or to improvements shall be payable solely to Owner, which sum Owner shall u se for repair and restoration purpose:

Applicable Coinsurance: 80%

Certificates Of Insurance shall be submitted to Hidalgo County Purchasing Department for approval prior to autopsies and necessary related services being performed.

Each policy of insurance required shall extend for a period equivalent to or longer than the term of this contract, and any insurer hereunder shall be required to give at least thirty (3) days written notice to the County prior to the cancellation of any such coverage on the termination date or otherwise.

The contract shall be automatically suspended upon the cancellation or other termination or of he required policy of insurance hereunder.

EXHIBIT "B"
VENDOR'S FEES

PURSUANT TO THE EXEMPTION AND CONTRACT NEGOTIATION MEETING HELD ON JUNE 17, 2010, THE FOLLOW ARE THE FEES SUBMITTED BY COMPANY.

1) Storage Fees: **$250.00 A Month Storage Fee**
(The storage fee will be charged to the County for specimens which are under air conditioning and/or refrigerated 24/7. Specimens stored are muscle, brain, body tissues for every John Doe for up to five (5) years as required.)

2) Facility Fees: **85.00 Per Body/Autopsy**

3) Body/Cooler Storage Fee: **$75.00 Per Body**
(Cooler fee will be charged to the County upon the arrival of the body/remains to be autopsied.) No longer will the 48 hours be waived.

4) Company's Request: One (1) 10,000 Watt Generator pursuant to the negotiations as backup to the a/c cooling segment where the specimen tissues and bodies are contained. The generator will ***only*** be during the hurricane period/season for disaster related emergency use in the event of a power shortage. Company will bear the obligation, responsibility and cost for the electrical system transfer switch for connection of the power generator.

MEMORANDUM

(IMMEDIATE REVIEW AND RESPONSE REQUIRED)

2812 SOUTH BUSINESS HIGHWAY 281 ★ EDINBURG, TEXAS 78539★TEL: (956) 318-2626 ★ FAX: (956) 318-2629

To: Linda Ceballos,
Ceballos Funeral Home

From: **Vangie Y. Garcia, Contract's Manager for:**
Martha L. Salazar, CPPB
Hidalgo County Purchasing Department

Date: June 29, 2010

Re: Best and Final Offer for Hidalgo County -"Autopsy Facility"

Pursuant to the contract negotiation meeting held on Thursday, June 17, 2010. The following is an outline of what was discussed and proposed by your company.

1) Storage Fee $ 250.00 per month
2) Facility Fee $85.00 per body
3) Body Storage Fee $75.00 per body after 24 hours
4) A 10,000 Watt Generator To Be Provided To Ceballos Funeral During A Disaster Related Event Only

Hidalgo County is hereby requesting your best and final offer on the above referenced Service to be provided to Hidalgo County. Please acknowledge and sign receipt of this Memorandum if you are in agreement with the terms of the outline. Please fax immediately in order to have as backup for an Emergency Agenda Item for today's Court: (956) 318-2629 or via email to: evangelina.garcia@co.hidalgo.tx.us or yolanda.velasquez@co.hidalgo.tx.us.

Signed: Manuel Cavazos Jr.

Printed Name: MANUEL CAVAZOS JR.

EXHIBIT "C"
INSURANCE REQUIREMENTS

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY) 03/05/10

PRODUCER

FEDERATED MUTUAL INSURANCE COMPANY
Home Office: P.O. Box 328
Owatonna, MN 55060
Phone: 1-888-333-4949

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED 281-888-8

CEBALLOS FUNERAL HOME INC
1023 NORTH 23RD STREET
MCALLEN TX 78501

COMPANIES AFFORDING COVERAGE

COMPANY A: FEDERATED MUTUAL INSURANCE COMPANY OR FEDERATED SERVICE INSURANCE COMPANY

COMPANY B:

COMPANY C:

COMPANY D:

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	GENERAL LIABILITY COMMERCIAL GENERAL LIABILITY CLAIMS MADE [X] OCCUR OWNER'S & CONTRACTOR'S PROT [X] BUSINESSOWNER'S POLICY	9350350	04/21/10	04/21/11	GENERAL AGGREGATE PRODUCTS - COMP/OP AGG PERSONAL & ADV INJURY EACH OCCURRENCE FIRE DAMAGE (Any one fire) MED EXP (Any one person)	$ 2,000,000 $ 2,000,000 $ 1,000,000 $ 1,000,000 $ 50,000 $ 5,000
A	AUTOMOBILE LIABILITY [X] ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS [X] HIRED AUTOS [X] NON-OWNED AUTOS	9350351	04/21/10	04/21/11	COMBINED SINGLE LIMIT BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE	$ 1,000,000 $ $ $
	GARAGE LIABILITY ANY AUTO				AUTO ONLY - EA ACCIDENT OTHER THAN AUTO ONLY: EACH ACCIDENT AGGREGATE	$ $ $
A	EXCESS LIABILITY [X] UMBRELLA FORM OTHER THAN UMBRELLA FORM	9261253	04/21/10	04/21/11	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000 $
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY THE PROPRIETOR/ PARTNERS/EXECUTIVE OFFICERS ARE: [ ] INCL [ ] EXCL	9411504	04/21/10	04/21/11	[X] WC STATUTORY LIMITS [ ] OTHER EL EACH ACCIDENT EL DISEASE - POLICY LIMIT EL DISEASE - EA EMPLOYEE	 $ 1,000,000 $ 1,000,000 $ 1,000,000
	OTHER					

RECEIVED
MAR 11 2010
By 2:48pm

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

CERTIFICATE HOLDER

2818888

HIDALGO COUNTY
2812 S HWY 281
EDINBURG TX 78539

1

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Jeffrey Sabatka
PRESIDENT

© ACORD CORPORATION 1988

AI-21869 **15.A.4.**

Autopsy Facility

CC REGULAR

Date: 07/06/2010

Submitted By: Vangie Garcia, PURCHASING DEPT.

Submitted For: Marty Salazar

Department: PURCHASING DEPT.

Agenda Category: Purchasing Department **Sub-category:** Hidalgo County

Information

CAPTION

Presentation for discussion, consideration and approval of contract (subject to legal review) for "Autopsy Facility" with Ceballos Funeral Home as previously approved by Commissioners Court on 06/08/2010 of the exemption from competitive bidding under Texas Local Government Code, Chapter 262, Section 024(a)(2)-"an item necessary to preserve or protect the public safety of the residents of the county".

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2010 **ACCT. #:** 1100-421-00-080-003-0-344

FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Attachments

Link: CONTRACT

Form Routing/Status

Form Started By: Vangie Garcia Started On: 06/29/2010 08:37 AM

Final Approval Date: 06/29/2010

AI-59035 **Closed Session** **25. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

Pending/potential litigation - matter involving joint real estate sale by the County of Hidalgo, City of Edinburg, Edinburg EDC and others

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Form Started By: Monica Badillo Started On: 03/17/2017 02:10 PM

Final Approval Date: 03/17/2017

AI-58898 **Closed Session** **25. D.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

C-0722-16-E; Santiago Aguilera Lara et al v. County of Hidalgo

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/09/2017 02:27 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/09/2017 01:54 PM
Final Approval Date: 03/17/2017		

AI-58922 **Closed Session** **25. E.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

CL-15-4029-H; Yesenia Garza v. Russell Doaks Suits Jr. and Hidalgo County Sheriff's Department

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/10/2017 03:46 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Monica Badillo Started On: 03/10/2017 03:20 PM

Final Approval Date: 03/17/2017

AI-58966 **Closed Session** **25. F.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

EEOC Charge No. 451-2017-01167; Leticia Martinez

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/15/2017 01:59 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/15/2017 01:58 PM
Final Approval Date: 03/17/2017		

AI-59027 **Closed Session** **25. G.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

Cause No. CCD-0371-E; Hidalgo County RMA v Jose Antonio Aguilar, et al

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 01:17 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/17/2017 01:14 PM
Final Approval Date: 03/17/2017		

AI-59029 **Closed Session** **25. H.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

CL-17-1012-F; Cristo Rey Garza v. Hon. Luis Garza

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 01:30 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/17/2017 01:20 PM
Final Approval Date: 03/17/2017		

AI-58969 **Closed Session** **25. I.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Armando Guzman, SAFETY DIVISION

Submitted By: Aida Alvarez, SAFETY DIVISION

Department: SAFETY DIVISION

Information

CAPTION

Hidalgo County v. Daniel Wayne Young

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/15/2017 03:57 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Aida Alvarez		Started On: 03/15/2017 03:10 PM
Final Approval Date: 03/17/2017		

AI-58971 **Closed Session** **25. J.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Armando Guzman, SAFETY DIVISION

Submitted By: Aida Alvarez, SAFETY DIVISION

Department: SAFETY DIVISION

Information

CAPTION

Hidalgo County v. Ramiro Lerma Sanchez & Anna Liza Sanchez

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/15/2017 03:57 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Aida Alvarez		Started On: 03/15/2017 03:20 PM
Final Approval Date: 03/17/2017		

AI-59036 **Open Session** **27. C.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

Pending/potential litigation - matter involving joint real estate sale by the County of Hidalgo, City of Edinburg, Edinburg EDC and others

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Form Started By: Monica Badillo Started On: 03/17/2017 02:10 PM

Final Approval Date: 03/17/2017

AI-58899 **Open Session** **27. D.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

C-0722-16-E; Santiago Aguilera Lara et al v. County of Hidalgo

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/09/2017 02:27 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/09/2017 01:54 PM
Final Approval Date: 03/17/2017		

AI-58923 **Open Session** **27. E.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

CL-15-4029-H; Yesenia Garza v. Russell Doaks Suits Jr. and Hidalgo County Sheriff's Department

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/10/2017 03:46 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM

Form Started By: Monica Badillo Started On: 03/10/2017 03:21 PM

Final Approval Date: 03/17/2017

AI-58967 **Open Session** **27. F.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

EEOC Charge No. 451-2017-01167; Leticia Martinez

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/15/2017 01:59 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/15/2017 01:59 PM
Final Approval Date: 03/17/2017		

AI-59028 **Open Session** **27. G.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

Cause No. CCD-0371-E; Hidalgo County RMA v Jose Antonio Aguilar, et al

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 01:18 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/17/2017 01:16 PM
Final Approval Date: 03/17/2017		

AI-59030 **Open Session** **27. H.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted By: Monica Badillo, EXECUTIVE OFFICE

Department: EXECUTIVE OFFICE

Information

CAPTION

CL-17-1012-F; Cristo Rey Garza v. Hon. Luis Garza

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/17/2017 01:30 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Monica Badillo		Started On: 03/17/2017 01:21 PM
Final Approval Date: 03/17/2017		

AI-58970 **Open Session** **27. I.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Armando Guzman, SAFETY DIVISION

Submitted By: Aida Alvarez, SAFETY DIVISION

Department: SAFETY DIVISION

Information

CAPTION

Hidalgo County v. Daniel Wayne Young

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/15/2017 03:57 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Aida Alvarez		Started On: 03/15/2017 03:15 PM
Final Approval Date: 03/17/2017		

AI-58972 **Open Session** **27. J.**

CC - REGULAR

Meeting Date: 03/21/2017

Submitted For: Armando Guzman, SAFETY DIVISION

Submitted By: Aida Alvarez, SAFETY DIVISION

Department: SAFETY DIVISION

Information

CAPTION

Hidalgo County v. Ramiro Lerma Sanchez & Anna Liza Sanchez

BACKGROUND

Fiscal Impact

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Budget & Management	Veronica Ortiz	03/15/2017 03:57 PM
Final Approval	Monica Badillo	03/17/2017 05:25 PM
Form Started By: Aida Alvarez		Started On: 03/15/2017 03:23 PM
Final Approval Date: 03/17/2017		