

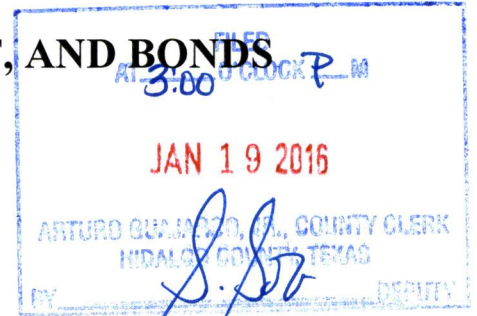
**FORMS OF SPECIFICATIONS, CONTRACT, AND BONDS**

**FOR**

**BORDER COLONIA ACCESS PROGRAM**

**HIDALGO COUNTY PRECINCT NO. 1 -  
ROAD CONSTRUCTION FOR TIJERINA ESTATES  
SUBDIVISION**

**CONTRACT NO.: C-CAP-15-332-12-01**



*Jose N. Saldivar, P.E.*  
12/17/15

**PREPARED BY:**

**JOSE NOE SALDIVAR, P.E., PROJECT ENGINEER  
HIDALGO COUNTY  
902 N. DOOLITTLE ROAD  
EDINBURG, TEXAS 78542  
(956) 292-7080**

# BORDER COLONIA ACCESS PROGRAM

## Hidalgo County Precinct No. 1 Road Construction for Tijerina Estates Subdivision Contract No.: C-CAP-15-332-12-01

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# REQUEST FOR BIDS

## (Colonia Access Program Project)

TO SUPPLY HIDALGO COUNTY (PRECINCT NO. 1) with sealed bids on:

**CAP-15-332-10-14-YSS "ROAD CONSTRUCTION FOR TIJERINA SUBDIVISION"**

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 project engineer's office: **Hidalgo County Drainage District No. 1, Nora D. Cavazos, 902 N. Doolittle Road, Edinburg, TX 78542, Phone No 956-292-7080.**

PRE-BID CONFERENCE is scheduled for **WEDNESDAY, OCTOBER 07, 2104 at 2:00 P.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.: **CAP-15-332-10-14-YSS "ROAD CONSTRUCTION FOR TIJERINA SUBDIVISION"** on the lower left hand corner of the corresponding 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 Hwy 281  
Edinburg, Texas 78539**

**Physical Location:**

**Hidalgo County New Administration Building  
2802 S. Business Hwy. 281  
(Southeast of Canton Rd & Business 281)  
Edinburg, Texas 78539**

Sealed bids will be accepted until **9:30 a.m. on Wednesday, OCTOBER 14, 2015** 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

The project is to be funded with Border Colonia Access Program funds through Proposition II Funding from the Texas Department of Transportation (Tx.D.O.T.) and Urban County Program CDBG funds.

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.

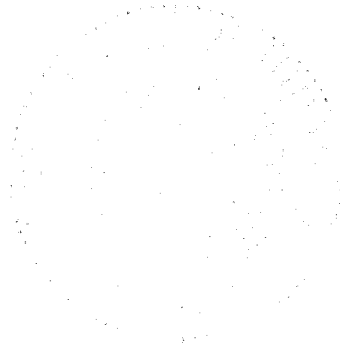
**BIDS MAY BE HELD** by the County of Hidalgo for a period not to exceed ninety (90) days from the date of the opening of bids for the purpose of reviewing the bids and investigating the qualifications of bidders, prior to awarding of the contract.

**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.

**BY ORDER OF THE COMMISSIONERS COURT OF HIDALGO COUNTY, TEXAS** on this the 31<sup>ST</sup> day of **MARCH, 2015.**

**MARTHA L. SALAZAR, CPPB  
HIDALGO COUNTY PURCHASING AGENT**

**REPORT ROAD HAZARDS @ 1-866-HCR-SAFE OR 1-866-427-7233**



**REQUEST FOR BIDS (RFB)**

**BORDER COLONIA ACCESS PROGRAM**

**HIDALGO COUNTY PRECINCT NO. 1  
“Road Construction for Tijerina Estates Subdivision”**

**RFB NO: CAP-15-332-10-14-YSS**

**Bid Date: October 14, 2015**

Martha L. Salazar, CPPB, Purchasing Agent  
Hidalgo County Purchasing Department

**Project Buyer Contact Information:**

Yvette Salinas, Buyer III  
(956) 318-2626  
[yvette.salinas@co.hidalgo.tx.us](mailto:yvette.salinas@co.hidalgo.tx.us)

## LEGAL NOTICE

BID NO:CAP-15-332-10-14-YSS

1. Sealed bids will be received for **"HIDALGO COUNTY PRECINCT NO. 1 – ROAD CONSTRUCTION FOR TIJERINA ESTATES SUBDIVISION"** 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/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 – CAP-15-332-10-14-YSS - HIDALGO COUNTY PRECINCT NO. 1 – ROAD CONSTRUCTION FOR TIJERINA ESTATES SUBDIVISION"** and in County's Purchasing Department, physical address: 2802 S. Business Hwy 281, mailing address 2812 S. Business 281 New Administration Building,, Edinburg, Texas, **on or before 9:30 a.m., WEDNESDAY, OCTOBER 14, 2015.**

**NO FACSIMILES 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 "REQUEST FOR BIDS – CAP-15-332-10-14-YSS - HIDALGO COUNTY PRECINCT NO. 1 – ROAD CONSTRUCTION FOR TIJERINA ESTATES SUBDIVISION".**

WRITTEN QUESTIONS WILL BE ACCEPTED. Written RFI's shall be sent to the office of project engineer: Noe Saldivar, P.E., Hidalgo County to the attention of, *Nora D Cavazos* at [nora.cavazos@hcddl.org](mailto:nora.cavazos@hcddl.org) . Please call 956-292-7080 to confirm receipt RFI. RFI's will not be answered by phone. NO HAND WRITTEN RFI'S will be answered. All inquiries shall be forwarded by October 7, 2015. Inquiries beyond this date will not be responded. Contact project engineer 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 refund.

Hidalgo County reserves the right to refuse and reject any/all RFB and to waive any/all formalities or technicalities, or to accept the RFB 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 Hidalgo County to accept the lowest dollar amount. The award of this contract shall be made to the responsible bidder whose qualification is determined to be the best evaluated offer resulting from negotiation,

## LEGAL NOTICE

**BID NO:CAP-15-332-10-14-YSS**

4. The Bidder shall not substitute items named in the bid without the express written consent of Hidalgo County. Failure of the delivered item(s) 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

## LEGAL NOTICE

**BID NO:CAP-15-332-10-14-YSS**

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 – **BID – CAP-15-332-10-14-YSS - HIDALGO COUNTY PRECINCT NO. 1 -"ROAD CONSTRUCTION FOR TIJERINA ESTATES SUBDIVISION"** 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:

**Marcie Jackson**  
**Border Colonia Access Program**  
**Hidalgo County Precinct No. 1**  
**1902 Joe Stephens Ave, Ste. 101**  
**Weslaco, Texas 78599**  
**(956) 968-8733**

### 17. Schedule

|                                   |         |                  |
|-----------------------------------|---------|------------------|
| Pre-Bid Conference,               | 2:00 PM | October 7, 2015  |
| Bid Opening,                      | 9:30 AM | October 14, 2015 |
| Award of Contract                 |         | , 2015           |
| Commence Work or Deliver Products |         | , 2015           |

## LEGAL NOTICE

BID NO:CAP-15-332-10-14-YSS

### 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.

. 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 \$100,000.

. 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. 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

## LEGAL NOTICE

BID NO:CAP-15-332-10-14-YSS

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.

20. Disclosure of Conflict of Interest

. Effective January 1, 2006, 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 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.

Please Submit completed CIQ forms 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 BIDDER.**

21. 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 County.
22. Bids, 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 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 and submit a Certificate of Account Status indicating bidder is in "Good Standing" with the Texas Comptroller of Public Accounts if such bidder is incorporated in the State of Texas. If the bidder is not incorporated with the Texas, the bidder must submit the appropriate evidence of filing with the Texas Secretary of State stating that the business is authorized to transact business in Texas.
  - . 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.
24. 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.
25. 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.
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 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.

## LEGAL NOTICE

BID NO:CAP-15-332-10-14-YSS

27. 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.
28. 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.
29. *Vendors hereby assigns to purchaser any and all claims for overcharges associated with this contract which arise under the antitrust laws of the United States, 15 USCA, Section 1 et. seq., and which arise under the antitrust laws of the State of Texas, Bus. & Com. Code, Section 15.01, et. seq.*
30. 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.
31. 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.

**BIDDERS ACKNOWLEDGEMENT**

Bid For

**BORDER COLONIA ACCESS PROGRAM**

**HIDALGO COUNTY PRECINCT NO. 1**

**"ROAD CONSTRUCTION FOR TIJERINA ESTATES SUBDIVISION"**

**BID NO.: CAP-15-332-10-14-YSS**

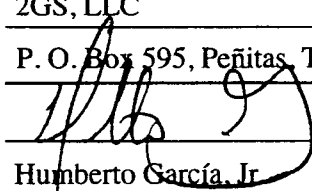
To: Martha L. Salazar, CPPB, Purchasing Agent  
Hidalgo County Purchasing Department  
2802 S. Bus. Hwy. 281  
Edinburg, Texas 78539

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 Table of Contents 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: 2GS, LLC  
Address: P. O. Box 595, Peñitas, TX 78576  
By:   
Printed Name: Humberto García, Jr.  
Title: Managing Member

*(THIS PAGE MUST BE SUBMITTED WITH BID PACKET)*

## STATEMENT OF CREDENTIALS

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: 2GS, LLC

Address: P. O. Box 595, Peñitas, TX 78576

Date Organized: January 20, 2012 Date Incorporated: January 20, 2012

Office Number: (956) 424-3414 Fax Number: (956) 683-6149

Number of years in business under present name: 3

Type of work performed by your company: Paving and Underground Civil Utility

Infrastructure

Have you ever failed to complete any work awarded to you? No

Have you ever defaulted on a contract? No

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: La Joya ISD

Address: 201 East Expressway 83, La Joya, TX 78560

Ph/Fx Number: (956) 580-8868 Email: d.garza9@lajoyaisd.net

Scope of Work Description: Paving and Drainage Improvements for Elementary Schools

Date Completed: January 2014 Total Cost: \$687,000.00

\*\*\*\*\*

2. Owner: Mission CISD

Address: 520 South Holland Avenue, Mission, TX 78572

Ph/Fx Number: (956) 323-8960 Email: rriver49@mcisd.org

Scope of Work Description: Water, Storm and Paving Improvements

Date Completed: November 2014 Total Cost: \$762,776.00

\*\*\*\*\*

3. Owner: Hidalgo County Precinct #2

Address: 1304 South 25th Street, Edinburg, TX 78539

Ph/Fx Number: (956) 318-2626 Email: raul.sesin@co.hidalgo.tx.us

Little Mexico Subdivision and South Tower Road Estates Paving

Scope of Work Description: Improvements and Drainage Improvements

Date Completed: October 2013 Total Cost: \$468,569.00

\*\*\*\*\*

4. Owner: Hidalgo County Precinct #2

Address: 1304 South 25th Street, Edinburg, Tx 78539

Ph/Fx Number: (956) 318-2626 Email: raul.sesin@co.hidalgo.tx.us

Scope of Work Description: McColl Road Overlay and Curb and Gutter Improvements

Date Completed: August 2013 Total Cost: \$408,758.00

\*\*\*\*\*

5. Owner: City of San Juan

Address: 709 South Nebraska, San Juan, TX 78589

Ph/Fx Number: (956) 702-6408 Email: ronnie@cruzhogan.net

Scope of Work Description: Street Reconstruction and Drainage Improvements

Date Completed: October 2014 Total Cost: \$863,094.00

\*\*\*\*\*

3. **CONTRACTS ON HAND:** The Bidder shall provide below a list of any contracts/projects he/she currently has on hand:

\_\_\_\_\_

Hidalgo County Precinct #1 - Sioux Road Paving and Drainage Improvements \$740,819.00

Mission CISD - Elementary Schools Tracks Improvements - \$811,900.00

Domain Development - Camden Village Subdivision - \$654,799.00

4. **SUBCONTRACTORS:** List any subcontractors you propose to use on the Hidalgo County's project that will comprise at least 20% of the total project cost. 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.

None

6. **PERFORMANCE OF WORK BY BIDDER:** Except as otherwise provided, the bidder shall perform no less than eighty percent (80%) of the work with his own organization, only 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 hereby 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.

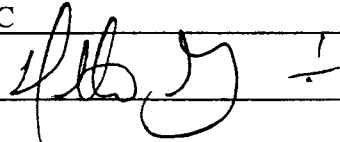
All subcontractors must comply with federally determined prevailing Davis-Bacon and Related Acts wage rate.

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.

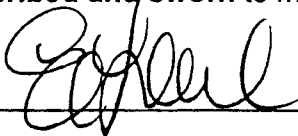
Executed this 14th day of October, 2015.

2GS, LLC

By 

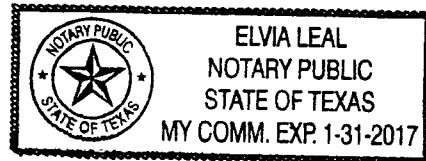
Title Member

Subscribed and sworn to me this 13<sup>th</sup> day of October, 2015.

By: 

Notary Public in and for Hidalgo County, Texas

My commission expires 1-31-2017



# INFORMATION FOR BIDDERS

## 1. Receipt and Opening of Bids

The Hidalgo County Pct # 1 (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, October 14, 2015 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 Pct # 1.

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 60 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 and/or 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 addition 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: Hidalgo County Precinct No. 1 – Road Construction for Tijerina Estates Subdivision.

Project Number: CAP-15-332-10-14-YSS

### **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.

## **6. 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 been made within 60 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.

## **7. 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.

## **8. 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 90 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.

## **9. 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.

## **10. 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 via e-mail to [yvette.salinas@co.hidalgo.tx.us](mailto:yvette.salinas@co.hidalgo.tx.us) or via fax to (956) 292-7612 addressed to Martha L. Salazar, Purchasing Agent, 2802 S. Business Hwy. 281, Edinburg, TX 78539 attn: Yvette Salinas, Buyer 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.

## **11. 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.

## **12. 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.

## **13. Notice of Special Conditions**

Attention is particularly called to those parts of the contract documents and specifications which deal with the following;

- a Inspection and testing of materials
- b Insurance requirements
- c Wage rates
- d States allowances
- e

#### **14. 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.

#### **15. 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.

#### **16. 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**

**17. 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.

**BID TAB**  
**HIDALGO COUNTY PRECINCT No. 1**  
**BID No. CAP-15-332-10-14-YSS**  
**BORDER COLONIA ACCESS PROGRAM - TIERRA ESTATES PAVING IMPROVEMENTS**  
**ESTIMATOR: NOE SALDIVAR, P.E. DATE: 10/28/2015**

| Item No. | Estimated Quantity | Unit | Item Description | Unit Bid Price In Words | Unit Price In Figures | Total Extension In Figures |
|----------|--------------------|------|------------------|-------------------------|-----------------------|----------------------------|
| 1        | 34.38              | STA  | PREPARING ROW    | THREE HUNDRED FIFTY     | \$300.50              | \$6,271.44                 |

| Item No.                                              | Estimated Quantity | Unit | Item Description                                 | Unit Bid Price In Words                   | Unit Price In Figures | Total Extension In Figures |
|-------------------------------------------------------|--------------------|------|--------------------------------------------------|-------------------------------------------|-----------------------|----------------------------|
| 1                                                     | 843                | CY   | EXCAVATION (ROADWAY)                             | Twelve                                    | \$12.00               | \$10,116.00                |
| 2                                                     | 22.75              | STA  | 8" RD GRADER WORK (DENS CONT.) SUB-GRADE         | THIRTEEN THOUSAND FOUR HUNDRED THIRTY-ONE | 15,932.25             | 15,932.25                  |
| 3                                                     | 7.081              | SY   | 8" FLEX BASE (CMP IN PLC) (TY D)                 | Twenty-Five                               | 7.50                  | 53,107.50                  |
| 4                                                     | 7.081              | SY   | EN-1 ROAD STABILIZER FOR SUB-GRADE (8")          | Three                                     | 3.00                  | 21,243.00                  |
| 5                                                     | 1.214              | GAL  | ASPH MATRL (MC-30)                               | Six                                       | 6.00                  | 7,284.00                   |
| 6                                                     | 6.063              | SY   | 2" ASPH CONC TY D                                | Thirteen                                  | 13.00                 | 78,897.00                  |
| 7                                                     | 1                  | LS   | BARRICADES, SIGNS, AND TRAFIC HANDLING           | Three Thousand                            | 3,000.00              | 3,000.00                   |
| 8                                                     | 1                  | LS   | TEMPORARY EROSION CONTROL                        | One Thousand Two Hundred                  | 1,200.00              | 1,200.00                   |
| 9                                                     | 1                  | LS   | TYPICAL STRIPING AND PERMANENT PAVEMENT MARKINGS | Three Thousand Nine Hundred               | 3,900.00              | 3,900.00                   |
| 10                                                    | 1                  | LS   | ALUMINUM SIGNING                                 | Two Thousand Four Hundred                 | 2,400.00              | 2,400.00                   |
| <b>BASE BID PRICE IN WORDS</b>                        |                    |      |                                                  | <b>BID IN FIGURES</b>                     |                       |                            |
| <b>One Hundred Ninety-Seven Thousand Seventy-Nine</b> |                    |      |                                                  | <b>\$497,079.75</b>                       |                       |                            |

SY- SQUARE YARDS  
CY- CUBIC YARDS  
STA- STATION  
LS- LUMP SUM  
GAL- GALLONS

COMPANY NAME: 2CS, LLC

PHONE NUMBER: (956) 424-3414

AUTHORIZED SIGNATURE:

PRINTED NAME: Humberto Garcia, Jr.

TITLE: Managing Member

Witnessed

9/28/2015

H.G. 10/24/15  
Seven Hundred  
15,932.00  
\$700.00  
H.G. 11/20/15

\$197,079.50  
H.G. 11/20/15

**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 90 calendar days.

Enclosed with this Proposal is a Cashier's check or Certified Check for \_\_\_\_\_ Dollars (\_\_\_\_\_) or a Bid Bond in the Sum of \_\_\_\_\_ 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 | 10/9/15 | Humberto García, Jr. | #2   |             |
| #3 |         |                      | #4   |             |

Respectfully submitted,

2GS, LLC

Name of Firm

By: [Signature] . October 14, 2015

Signature

Date

Member

Title

**THIS PROPOSAL MUST BE  
SIGNED BY AN OFFICER OF  
REPRESENTATIVE DULY  
AUTHORIZED BY THE BIDDER.**

P. O. Box 595

Address

Peñitas, TX 78576

(956) 424-3414

Telephone Number

(Seal, if Bid is by a Corporation)

Attest: \_\_\_\_\_

# **ADDENDUM NO. 1**

October 9, 2015

**BORDER COLONIA ACCESS PROGRAM  
HIDALGO COUNTY PRECINCT NO. 1  
"ROAD CONSTRUCTION FOR TIJERINA ESTATES SUBDIVISION"**

**BID NO.: CAP-15-332-10-14-YSS**

**Bid Opening Date: OCTOBER 14, 2015**

**PLEASE NOTE CHANGES AS FOLLOWS:**

1. The subsidiary item "Excavation (Roadside ditch)" to Base Bid Item No. 1- has been removed. Roadside ditch grading will no longer be included in the scope of work.
2. Base Bid Item No. 10 "Aluminum Signs" has been added .
3. Plan Sheet C1-1 - Project Quantities has been revised to reflect items 1&2.
4. The Technical Specification for "Road Stabilizer" has been revised.

I, Humberto García, Jr., acknowledge receipt of ADDENDUM NO. 1 dated, October 9  
2015, for RFB- HIDALGO COUNTY PRECINCT NO. 1 -"ROAD CONSTRUCTION FOR  
TIJERINA ESTATES SUBDIVISION".

2GS, LLC, Humberto García, Jr.

Printed Bidder Name



October 13, 2015

Date

**NOTE: PLEASE SUBMIT THIS ADDENDUM WITH YOUR**  
**BID PACKET, IN ORDER TO COMPLETE THE**  
**BID.....**

**BID BOND**

THE STATE OF \_\_\_\_\_ )

COUNTY OF \_\_\_\_\_ )

ss. KNOW ALL MEN BY THESE PRESENTS:

That we, 2GS, LLC, of the City of Penitas, County of Hidalgo, State of Texas (hereinafter called "Principal") as Principal, and Hartford Fire Insurance Company (hereinafter called the Surety) as Surety, authorized under the laws of the State of Connecticut to act as surety on bonds for principals, are held and firmly bound unto Hidalgo County (hereinafter called the Owner) as obligee, in the sum of 5% Greatest Amount Bid

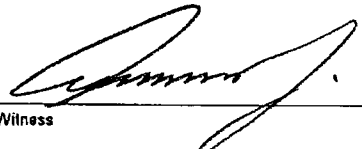
(\$ 5%) in lawful money of the United States for the payment of Principal and Surety, and bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally and firmly by these presents.

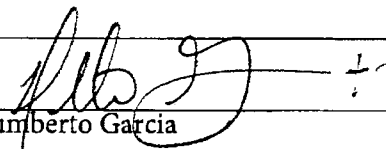
WHEREAS, the Principal has, submitted a Bid Form (Proposal) to enter into a certain written agreement with Owner for Construction of Hidalgo County Drainage District #1 Border Colonia Access Project Tijerina Subdivision hereinafter referred to as "Agreement."

NOW, THEREFORE, the condition of this obligation is such that if the Owner shall accept the Bid Form (Proposal) of the the Principal and the Principal shall faithfully enter into agreement with Owner in accordance with the terms of such Bid, and give such Bonds as are specified in the Bidding or Contract Documents; or in the event of the failure of Principal to enter such Agreement and give such Bond or Bonds, if the Principal shall pay to Owner the difference not to exceed the sum hereof between the amount specified in said Bid and such larger amount for which the Owner 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.

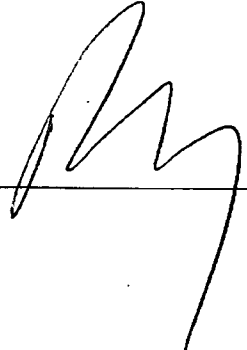
SIGNED AND SEALED THIS 13th day of October A.D. 2015.

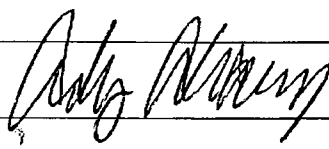
PRINCIPAL: 2GS, LLC

  
\_\_\_\_\_  
Witness

By:   
\_\_\_\_\_  
Humberto Garcia  
P.O. Box 595  
Penitas TX 78576  
Address

SURETY: Hartford Fire Insurance Company

  
\_\_\_\_\_  
Witness

By:   
\_\_\_\_\_  
Andy Alvarez  
Attorney-in-Fact  
P.O. Drawer 3783  
McAllen, TX 78502  
Address  
956-787-8536  
(Surety's Telephone Number)

# POWER OF ATTORNEY

Direct Inquiries/Claims to:

**THE HARTFORD**

Bond T-4

One Hartford Plaza

Hartford, Connecticut 06155

call: 888-266-3488 or fax: 860-757-5835)

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Code: 65-813646

- ☒ Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- ☒ Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
- ☐ Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
- ☐ Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
- ☐ Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
- ☐ Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
- ☐ Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
- ☐ Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, **up to the amount of Unlimited** :

Andy Alvarez, Phil Young, Dewey Young of SAN JUAN, Texas

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on August 1, 2009, the Companies have caused these presents to be signed by its Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



*Wesley W. Cowling*

Wesley W. Cowling, Assistant Secretary

*M. Ross Fisher*

M. Ross Fisher, Vice President

STATE OF CONNECTICUT

COUNTY OF HARTFORD

ss.

Hartford

On this 12th day of July, 2012, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

*Kathleen T. Maynard*

Kathleen T. Maynard  
Notary Public

My Commission Expires July 31, 2016

I, the undersigned, Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of October 13th, 2015  
Signed and sealed at the City of Hartford.



*Gary W. Stumper*

Gary W. Stumper, Vice President

THE STATE OF TEXAS   §  
                                      §  
COUNTY OF HIDALGO   §

**CONSTRUCTION CONTRACT  
C-CAP-15-332-12-01**

This Agreement, entered into this 01 day of December, 2015 by and between **Hidalgo County** (hereinafter called the "OWNER," and, 2GS, 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:

**Road and Drainage Construction Tijerina Estates Subdivision**

Hereinafter called the project, for the sum of **One Hundred Ninety Seven Thousand Seventy Nine Dollars and seventy fifty cents ( \$ 197,079.50 )** 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 Technical Specifications, the General Conditions and Special Conditions printed or written explanatory matter thereof, the specifications and contract documents therefore as prepared by County of Hidalgo, Noe Saldivar, P.E., entitled the 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 **90 consecutive calendar days**. Thereafter, the CONTRACTOR further agrees to pay, as liquidated damages, the sum of \$ **250.00** 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 WHEREOF, 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.

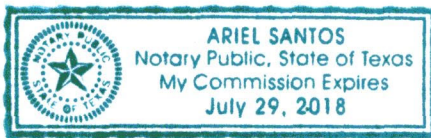
APPROVED BY COMMISSIONERS COURT ON: December 01, 2015.

CONTRACTOR: [Signature]  
Print Name & Title: Humberto Garcia Jr  
Name of Firm: 2GS, LLC  
Address: P.O. Box 595  
Peritas, TX 78576  
Fed I.D. #/SS #: 45-4338911

STATE OF TEXAS

COUNTY OF HIDALGO

This instrument was acknowledged before me on this the 22<sup>nd</sup> day of December, 2015, by Humberto Garcia Jr Of and on behalf of  
(Title)  
2GS, LLC  
(A corporation)



[Signature]  
Notary Public-Signature

APPROVED AS TO FORM:

Atlas & Hall, L.L.P.

BY: [Signature]

ATTEST:

[Signature]  
Arturo Guajardo, County Clerk



COUNTY OF HIDALGO:

[Signature]  
Ramon Garcia, County Judge

APPROVED BY  
COMMISSIONERS' COURT  
ON: 1/19/16 [Signature]

**NON-COLLUSION AFFIDAVIT OF PRIME BIDDER**

State of ..... Texas .....)

County of..... Hidalgo .....)

Humberto García, Jr., being first duly sworn,  
deposes and says that:

(1) He is Managing Member, of  
2GS, 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;

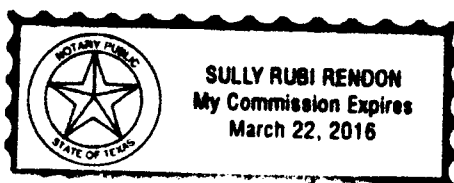
(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representative:, employees or parties in interest, including this affiant, has in any way colluded, conspired a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication 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 17<sup>th</sup>  
Day of December, 2015.

  
Title



**Statutory Payment Bond Pursuant to Chapter 2253  
Of The Texas Government Code  
(Public Work)  
(Penalty of this Bond must be 100% of Contract Amount)**

Bond# 65BCSGY6870

KNOW ALL MEN BY THESE PRESENTS, That 2GS, LLC

hereinafter called the Principal), as Principal, and Hartford Fire Insurance Company

(hereinafter called the Surety), as Surety, are held and firmly bound unto

Hidalgo County

(hereinafter called the Obligee), in the amount of One Hundred Ninety Seven Thousand Seventy Nine and 75/100\*\*  
**Dollars (\$ 197,079.75\*\* )**

for the payment of 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 Obligee,  
dated the 1st day of December, 2015 for

Road Construction for Tijerina Estates Subdivision

which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied 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 for in said contract, 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 Chapter 2253 of the Texas Government Code and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitation of said Chapter to the same extent as if it were copied at length herein.

**SURETY**, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications or drawings accompanying the same, shall in anywise 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 to be performed thereunder,

**IN WITNESS WHEREOF**, the said Principal and Surety have signed this instrument this  
day December 16th, 2015  
of

Witness

2GS, LLC

By:

Humberto Garcia, Jr

Witness

Phil Young

Hartford Fire Insurance Company

By:

Andy Alvarez

Attorney-In-Fact

**Statutory Performance Bond Pursuant to Chapter 2253  
Of The Texas Government Code  
(Public Work)  
(Penalty of this Bond must be 100% of Contract Amount)**

Bond# 65BCSGY6870

KNOW ALL MEN BY THESE PRESENTS, That 2GS, LLC

(hereinafter called the Principal), as Principal, and Hartford Fire Insurance Company

(hereinafter called Surety), as Surety, are held and firmly bound unto

Hidalgo County

(hereinafter called the Oblige), in the amount of One Hundred Ninety Seven Thousand Seventy Nine and 75/100\*\*  
**Dollars (\$ 197,079.75\*\* )**

for the payment whereof the said Principal and Surety bind themselves and heir 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 1st day of December, 2015 for

Road Construction for Tijerina Estates Subdivision

which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

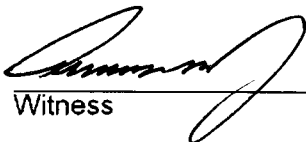
NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform the work in accordance with the plans, specifications and contract documents, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code and all liabilities on this bond shall be determined in accordance with the provisions, conditions and limitations of said Chapter to the same extent as if it were copied at length herein.

SURETY, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications or drawings accompanying the same, shall in anywise 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 to be performed thereunder.

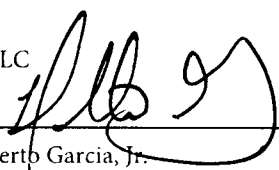
IN WITNESS WHEREOF, the said Principal and Surety have signed this instrument this day December 16th, 2015

of

  
Witness

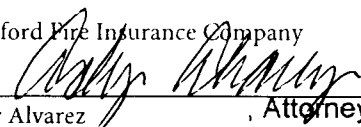
2GS, LLC

By:

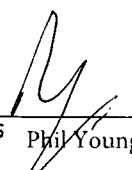
  
Humberto Garcia, Jr.

Hartford Fire Insurance Company

By:

  
Andy Alvarez

, Attorney-In-Fact

  
Witness Phil Young

# POWER OF ATTORNEY

Direct Inquiries/Claims to:

**THE HARTFORD**  
Bond T-4  
One Hartford Plaza  
Hartford, Connecticut 06155  
call: 888-266-3488 or fax: 860-757-5835)

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Code: 65-813646

- ☒ **Hartford Fire Insurance Company**, a corporation duly organized under the laws of the State of Connecticut  
☒ **Hartford Casualty Insurance Company**, a corporation duly organized under the laws of the State of Indiana  
☐ **Hartford Accident and Indemnity Company**, a corporation duly organized under the laws of the State of Connecticut  
☐ **Hartford Underwriters Insurance Company**, a corporation duly organized under the laws of the State of Connecticut  
☐ **Twin City Fire Insurance Company**, a corporation duly organized under the laws of the State of Indiana  
☐ **Hartford Insurance Company of Illinois**, a corporation duly organized under the laws of the State of Illinois  
☐ **Hartford Insurance Company of the Midwest**, a corporation duly organized under the laws of the State of Indiana  
☐ **Hartford Insurance Company of the Southeast**, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, **up to the amount of Unlimited** :  
**Andy Alvarez, Phil Young, Dewey Young of SAN JUAN, Texas**

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

**In Witness Whereof**, and as authorized by a Resolution of the Board of Directors of the Companies on August 1, 2009, the Companies have caused these presents to be signed by its Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



*Wesley W. Cowling*

Wesley W. Cowling, Assistant Secretary

*M. Ross Fisher*

M. Ross Fisher, Vice President

STATE OF CONNECTICUT

COUNTY OF HARTFORD

ss.

Hartford

On this 12th day of July, 2012, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

*Kathleen T. Maynard*

Kathleen T. Maynard  
Notary Public

My Commission Expires July 31, 2016

I, the undersigned, Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of **December 16th, 2015**  
Signed and sealed at the City of Hartford.



*Gary W. Stumper*

Gary W. Stumper, Vice President

## **IMPORTANT NOTICE**

To obtain information or make a complaint:

You may contact your agent.

You may call Hartford Insurance Group at the toll free telephone number for information or to make a complaint at:

**1-800-392-7805**

You may also write to The Hartford:

**The Hartford  
Hartford Financial Products  
2 Park Avenue, 5<sup>th</sup> Floor  
New York, New York 10016  
1-212-277-0400**

You may contact 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, TX 78714-9104  
Fax Number (512) 475-1771  
Web: <http://www.tdi.state.tx.us>  
E-mail: [ConsumerProtection@tdi.state.tx.us](mailto:ConsumerProtection@tdi.state.tx.us)

**PREMIUM OR CLAIMS DISPUTES:** Should you have a dispute concerning your premium or about a claim you should contact the agent 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 your information only and does not become a part or condition of the attached document.

## **AVISO IMPORTANTE**

Para obtener informacion o para someter una queja.

Puede comunicarse con su agente.

Usted puede llamar al numero de telefono gratis de The Hartford Insurance Group para informacion o para someter una queja al

**1-800-392-7805**

Usted tambien puede escribir a The Hartford.

**The Hartford  
Hartford Financial Products  
2 Park Avenue, 5<sup>th</sup> Floor  
New York, New York 10016  
1-212-277-0400**

Puede comunicarse con el Departamento de Seguros de Texas para obtener informacion acerca de compañías, coberturas, derechos o quejas al:

**1-800-252-3439**

Puede escribir al Departamento de Seguros de Texas

P.O. Box 149104  
Austin, TX 78714-9104  
Fax Number (512) 475-1771  
Web: <http://www.tdi.state.tx.us>  
E-mail: [ConsumerProtection@tdi.state.tx.us](mailto:ConsumerProtection@tdi.state.tx.us)

### **DISPUTAS SOBRE PRIMAS O RECLAMOS:**

Si tiene una disputa concerniente a su prima o a un reclamo, debe comunicarse con su agente primero. Si no se resuelve la disputa, puede entonces comunicarse con el departamento (TDI).

**UNA ESTE AVISO A SU POLIZA:** Este aviso es solo para proposito de informacion y no se convierte en parte o condicion del documento adjunto.

## **EXHIBIT "C"**

### **Insurance Requirements**

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.

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, Humberto García, Jr., authorized representative for 2GS, LLC,  
Company/Vendor

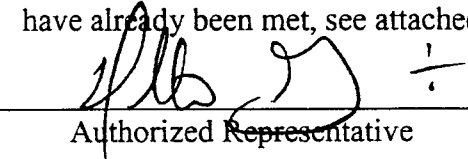
hereby acknowledge receipt of the County's required insurance limits. Said requirements:

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: \$ \_\_\_\_\_ General Liability: \$ \_\_\_\_\_

have already been met, see attached copy of insurance certificate.

  
Authorized Representative

October 14, 2015  
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, Humberto García, Jr., possess all of the APPLICABLE:

1. Licenses: \_\_\_\_\_.
2. Bonds: Bid Bond; Performance and Payment Bonds.
3. Certificates: HUB Certified.
4. Permits: \_\_\_\_\_.
5. Other: General Liability and Worker's Compensation Insurance.

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

October 14, 2015  
Date

2GS, LLC  
Company

P. O. Box 595  
Address

Peñitas, TX 78576  
City, State, Zip



## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

12/16/2015

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 | San Juan Insurance Agency, Inc DBA<br>Valley Ins Providers &/or Truckers Ins<br>PO Drawer 3783<br>McAllen TX 78502- | CONTACT NAME:                 | NORMA PEREZ                    |                |               |
|          |                                                                                                                     | PHONE (A/C, No, Ext):         | (956)781-6663                  | FAX (A/C, No): | (956)702-7556 |
|          |                                                                                                                     | E-MAIL ADDRESS:               | nperez@vip-ins.net             |                |               |
| INSURED  | 2GS, LLC<br>PO BOX 595<br>Penitas TX 78576-                                                                         | INSURER(S) AFFORDING COVERAGE |                                |                |               |
|          |                                                                                                                     | INSURER A:                    | Technology Insurance Co., Inc. | NAIC #         | 16691         |
|          |                                                                                                                     | INSURER B:                    | Technology Insurance Co., Inc. |                |               |
|          |                                                                                                                     | INSURER C:                    | Great American Specialty E & S |                |               |
|          |                                                                                                                     | 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.

| INSR LTR | TYPE OF INSURANCE                                                                                                                                                                                                                                                                             | ADDL INSD                    | SUBR INSD | POLICY NUMBER  | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS                                                                                                                                                                                                                                  |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------|----------------|-------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A        | <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY<br><input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR<br><br>GEN'L AGGREGATE LIMIT APPLIES PER:<br><input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC<br>OTHER: | X                            | X         | WPP124419300   | 02/21/2015              | 02/21/2016              | EACH OCCURRENCE \$ 1,000,000<br>DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000<br>MED EXP (Any one person) \$ 5,000<br>PERSONAL & ADV INJURY \$ 1,000,000<br>GENERAL AGGREGATE \$ 2,000,000<br>PRODUCTS - COM/OP AGG \$ 2,000,000 |
| B        | AUTOMOBILE LIABILITY<br><input checked="" type="checkbox"/> ANY AUTO<br><input type="checkbox"/> ALL OWNED AUTOS<br><input type="checkbox"/> HIRED AUTOS<br><input type="checkbox"/> SCHEDULED AUTOS<br><input type="checkbox"/> NON-OWNED AUTOS                                              | X                            | X         | WPP124419300   | 02/21/2015              | 02/21/2016              | COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000<br>BODILY INJURY (Per person) \$<br>BODILY INJURY (Per accident) \$<br>PROPERTY DAMAGE (Per accident) \$                                                                               |
| C        | UMBRELLA LIAB<br><input checked="" type="checkbox"/> EXCESS LIAB<br>DED <input type="checkbox"/> RETENTION \$                                                                                                                                                                                 |                              |           | XS3718448      | 04/10/2015              | 04/10/2016              | EACH OCCURRENCE \$ 2,000,000<br>AGGREGATE \$ 2,000,000                                                                                                                                                                                  |
| C        | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY<br>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)<br>If yes, describe under DESCRIPTION OF OPERATIONS below                                                                                                        | Y/N <input type="checkbox"/> | N/A       | TSF-0001234244 | 02/21/2015              | 02/21/2016              | <input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER<br>E.L. EACH ACCIDENT \$ 1,000,000<br>E.L. DISEASE - EA EMPLOYEE \$ 1,000,000<br>E.L. DISEASE - POLICY LIMIT \$ 1,000,000                               |
| B        | Contractor's Equipment                                                                                                                                                                                                                                                                        |                              |           | WPP124419300   | 02/21/2015              | 02/21/2016              | Limit 483,777<br>Leased/Rented 250,000<br>Deductible 1,000                                                                                                                                                                              |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Project: Drainage and Road Construction to Tijerina Estates Subdivision. CSJ#3C080727, Border Colonia access Program Contract#C-CAP-15-332-12-01. Hidalgo County shown as additional insured as per written contract. see attached blanket endorsement for General Liability policy.

## CERTIFICATE HOLDER

## CANCELLATION

AI 014952

HIDALGO COUNTY  
2802 S. BUSINESS HIGHWAY 281  
EDINBURG TX 78539-

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

Fax: (956)973-7804

© 1988-2014 ACORD CORPORATION. All rights reserved.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

## TEXAS ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

### SCHEDULE

| Name Of Additional Insured Person(s) Or Organization(s)                                                | Location(s) Of Covered Operations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Blanket as required by written contract.                                                               | Blanket as required by written contract.<br><br>It is agreed that such insurance as is afforded by this policy for the benefit of the additional insured shown shall be primary insurance, and any other insurance maintained by the additional insured(s) shall be excess and noncontributory as respects to any claim, loss or liability, allegedly arising out of the operations of the named insured, provided however that this insurance will not apply to any claim loss or liability which is determined to be solely the additional insured's responsibility. |
| Information required to complete this Schedule, if not shown above, will be shown in the Declarations. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However, if you have entered into a construction contract subject to Subchapter C of Chapter 151 of Subtitle C of Title 2 of the Texas Insurance Code with the additional insured shown in the Schedule, the insurance afforded to such person(s) or organization(s) only applies to the extent permitted by Subchapter C of Chapter 151 of Subtitle C of Title 2 of the Texas Insurance Code.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusion applies:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

## WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

### SCHEDULE

**Name Of Person Or Organization:**

Blanket as required by written contract.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph 8. **Transfer Of Rights Of Recovery Against Others To Us** of Section IV – Conditions:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

## TEXAS WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement applies only to the insurance provided by the policy because Texas is shown in Item 3.A. of the Information Page.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule, but this waiver applies only with respect to bodily injury arising out of the operations described in the Schedule where you are required by a written contract to obtain this waiver from us.

This endorsement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

The premium for this endorsement is shown in the Schedule.

### Schedule

1. ( ) Specific Waiver  
Name of person or organization

( X ) Blanket Waiver  
Any person or organization for whom the Named Insured has agreed by written contract to furnish this waiver.

2. Operations: ALL TEXAS OPERATIONS

3. Premium

The premium charge for this endorsement shall be 2.00 percent of the premium developed on payroll in connection with work performed for the above person(s) or organization(s) arising out of the operations described.

4. Advance Premium INCLUDED, SEE INFORMATION PAGE.

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy.)

This endorsement, effective on

at 12:01 A.M. standard time, forms a part of

Policy No. TSF-0001234244 20150221 of the Texas Mutual Insurance Company

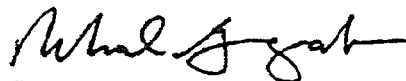
Issued to 2GS LLC

Premium \$

NCCI Carrier Code 29939

WC420304B (ED. 6-01-2014)

Endorsement No.



Authorized Representative

## SUMMARY OF INSURANCE: VEHICLE INFORMATION

DATE 12/14/2015

## PRODUCER

San Juan Insurance Agency, Inc DBA  
Valley Ins Providers &/or Truckers Ins  
PO Drawer 3783  
McAllen TX 78502-  
(956)781-6663

## APPLICANT NAME AND MAILING ADDRESS

2GS, LLC  
PO BOX 595  
Penitas  
(956)424-3414

## CLIENT ID

8124

TX 78576-

POLICY WPP124419300

06/30/2015 to 02/21/2016

| YEAR | MAKE AND MODEL   | VEHICLE IDENTIFICATION NUMBER | CLASS | ACTUAL CASH VALUE |
|------|------------------|-------------------------------|-------|-------------------|
| 2002 | FORD F150        | 1FTNW21F82ED57063             |       | 32,175            |
| 2009 | CHEVY 1/2 T      | 3GCEC23009G191447             |       | 30,615            |
| 2000 | FRONTAINE LOWBOY | 4LF4S5239Y3510427             |       | 2,500             |
| 1984 | CHEVY WATER TRK  | 1GBM7D1G3EV120065             |       | 2,500             |
| 1980 | MACK DUMP TRUCK  | RWS786LST52722                |       |                   |
| 2001 | VOLVO VNL        | 4V4NC9TJ41N312871             |       | 81,577            |
| 2005 | FORD F350        | 1FDWF36P55EC16267             |       | 24,675            |
| 2001 | FORD F250        | 1FTNW20L31EB97261             |       | 24,015            |
| 2004 | DODGE 1/2 T      | 1D7HL38K04S782009             |       | 21,810            |
| 2001 | INTL 4400        | 1HSSDAAN4IH340873             |       |                   |
| 2004 | Ford Pick up     | 1FTYR10DX4PA75240             |       |                   |
| 2015 | FORD F350        | 1FT8W3BT2FEB93208             |       | 60,000            |
| 2012 | FORD F250        | 1FT7W2BT3CED07346             |       | 35,295            |
| 2004 | FORD PICKUP      | 1FTRF12WX4NC67216             |       |                   |
| 1998 | Ford water trk   | 1FDNF70JXWVA00083             |       | 7,750             |
| 2015 | Ford F-150       | 1FTEW1EF9FFC52536             |       | 62,763.62         |
| 1996 | Ford SEQTK       | 1FDXF80C1TVA30147             |       |                   |

THIS DOCUMENT OUTLINES THE GENERAL COVERAGES PRESENTED AND IN NO WAY CHANGES OR AFFECTS THE INSURANCE UNDER ANY POLICY ACTUALLY ISSUED. ALL PROTECTION IS SUBJECT TO ACTUAL POLICY CONDITIONS AND EXCLUSIONS.

## **GENERAL CONDITIONS OF THE AGREEMENT**

### **1. GENERAL**

It is the intent of these instructions, plans and specifications to provide guidance for the construction of this project.

### **2. REGULATIONS AND DISCREPANCIES**

All applicable laws, ordinances, policy, rules, regulations and other directives of all authorities having jurisdiction over the projects shall apply to the contract throughout and will be deemed to be included in the contract the same as those written out in full. Discrepancies between regulations or conflicting parts of the Specifications shall be brought to the attention of an clarified by the Engineer before proceeding with any work. Proceeding with affected work without instructions from the Engineer can result in the Contractor being responsible for taking the necessary steps to insure the work conforms to the governing regulation.

### **3. ENGINEER**

Whenever the work "ENGINEER" is used in this contract with reference to the preparation of plans, specifications, and contract documents, it shall be understood as referring to County of Hidalgo, Raul E. Sesin, P.E.

### **4. INTERPRETATION OF PHRASES**

Whenever the words "Directed", "Required", "Permitted", "Designated", "Considered Necessary", "Prescribed", or words of like importance are used, it shall be understood that the direction, requirements, permission, order, designation or prescription, of the ENGINEER is intended and similarly, the words "Approval", "Acceptable", "Satisfactory", or words of like importance shall mean approved by or acceptable of satisfactory to the ENGINEER. The preceeding to the contrary notwithstanding, Engineer's approval or acceptance of the work shall by advisory to OWNER, and shall not bind the OWNER to accept or approve the same.

Whenever, in the specifications or drawings accompanying this agreement, the terms or description of various qualities relative to finish, workmanship, or other qualities of similar kind which cannot,, from their nature, be specifically and clearly described and specified, but are necessarily described in general terms, then, in all such cases, any question of the fulfillment of said specifications shall be decided by the ENGINEER, and said work shall be done in accordance with his interpretations of the meaning of the words, terms, or clauses defining the character of the work.

# 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,

#### *Copeland Act Regulations*

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 United 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

(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

instrumentality's.

(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, 1964, as amended 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.**

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 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 laborer 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,

(k) Any deduction for the cost of safety equipment of nominal value purchased by the

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

#### *Copeland Act Regulations*

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.

(j) 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.

(k) Any deduction for the cost of safety equipment of nominal value purchased by the employee as his own proper for his personal protection in his work, such as safety shoes, safety

glasses, safety gloves, and hard hats, if such equipment is not required by law to be furnished by the employer, if such deduction is not 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 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.  
(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 1 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.R. 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.

### *Copeland Act Regulations*

(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 payable 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 contract.**

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.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE  
*a practice division of the*  
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

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AMERICAN CONSULTING ENGINEERS COUNCIL

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AMERICAN SOCIETY OF CIVIL ENGINEERS

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## GENERAL CONDITIONS

### ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

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#### 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.

\*See Supplementary Conditions

#### 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.

\*See Supplementary Conditions

### 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

\*See Supplementary Conditions

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.

\*See Supplementary Conditions

#### 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

\*See Supplementary Conditions

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.

\*See Supplementary Conditions

## 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 Compa-

nies" 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:

\*See Supplementary Conditions

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);
- \*See Supplementary Conditions
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:

\*See Supplementary Conditions

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

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#### 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

\*See Supplementary Conditions

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 CONTRAC-

TOR 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,

##### \*See Supplementary Conditions

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

\*See Supplementary Conditions

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

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#### 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.

\*See Supplementary Conditions

#### 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

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#### 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,

\*See Supplementary Conditions

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 Documents.

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.

\*See Supplementary Conditions

#### 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

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### 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 6.13.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 performance 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, expeditors, 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

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##### 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;

\*See Supplementary Conditions

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

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##### 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.

\*See Supplementary Conditions

#### 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

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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 progress payments will be as stipulated in the Agreement.

\*See Supplementary Conditions

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 Completion, 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

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##### 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\*

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#### 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 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 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-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 ENGINEERS recommendation, the amount recommended will (subject to 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 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"

# **GENERAL NOTES AND STANDARD SPECIFICATIONS**

# GENERAL NOTES

1. ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE HIDALGO COUNTY PRECINCT No. 1.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT MR. RICHARD GARCIA WITH NORTH ALAMO WATER SUPPLY CORP. (N.A.W.S.C.) 48 HOURS PRIOR TO COMMENCEMENT OF WORK @ (956) 383-1618 TO COORDINATE AND MEET ANY ADDITIONAL REQUIREMENTS AND/OR SPECIFICATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL DIG TESS 48 HOURS PRIOR TO COMMENCEMENT OF WORK FOR UTILITY SPOTTING @ (1-800-DIG-TESS).
4. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR VERIFICATION OF THE LOCATION OF EXISTING FACILITIES PRIOR TO BEGINNING ANY EXCAVATION.
5. LOCATIONS OF UNDERGROUND FACILITIES ARE FROM BEST INFORMATION AVAILABLE. NEITHER THE OWNER OR ENGINEER, WARRANT THE ACCURACY OF THE INFORMATION PROVIDED. ANY DEVIATIONS SHALL BE CALLED TO THE ENGINEER'S ATTENTION IMMEDIATELY.
6. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE CORRESPONDING UTILITY CORPORATION IN REGARDS TO THE RELOCATION OF ANY CONFLICTING UTILITIES.
7. THE CONTRACTOR SHALL REMOVE ALL FENCES LOCATED WITHIN THE EASEMENTS, INTERFERING WITH CONSTRUCTION OPERATION AND PROVIDE TEMPORARY FENCING DURING CONSTRUCTION. REMOVED FENCES SHALL BE REPLACED WITH A NEW FENCE OR UNDAMAGED ORIGINAL FENCING. REMOVAL AND REPLACEMENT OF EXISTING AND TEMPORARY FENCES SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
8. ANY DAMAGES TO FENCES, WALKS, OR PRIVATE PROPERTY SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
9. THE CONTRACTOR SHALL PROVIDE ACCESS TO EXISTING RESIDENCES AT ALL TIMES.
10. THE CONTRACTOR IS TO MAINTAIN ALL EQUIPMENT AND TRANSPORTATION OF SAID EQUIPMENT WITHIN THE EXISTING RIGHT-OF-WAYS OF THE CITY, COUNTY OR STATE.

## **GENERAL NOTES**

*Hidalgo County Pct. 1*

*Road Construction for Tijerina Subdivision*

11. NO OPEN EXCAVATION SHALL BE LEFT OPEN OVERNIGHT. ALL EXCAVATIONS WHICH CANNOT BE BACKFILLED OVERNIGHT SHALL BE COVERED, AS A MINIMUM, WITH STEEL PLATING WHEN IN PAVED AND UNPAVED AREAS SUBJECT TO VEHICULAR LOADING;  $\frac{3}{4}$  PLYWOOD, WOOD PLANKING WITH O.S.H.A. ORANGE PLASTIC EXPANDED MESH BARRIER AROUND PERIMETER IN UNPAVED AREAS NOT SUBJECT TO VEHICULAR LOADING, OR AS APPROVED BY THE ENGINEER.
12. THE PREPARATION OF THESE PLANS REFLECTS INFORMATION, PROVIDED BY OTHERS, ON THE APPROXIMATE LOCATION AND EXISTENCE OF EXISTING UTILITY AND ADJACENT PHYSICAL FEATURES. HOWEVER, THEY DO NOT IMPLY OR AFFIRM THAT ALL UTILITIES OR PHYSICAL FEATURES ARE SHOWN. GENERALLY, UTILITY SERVICE CONNECTIONS ARE NOT INDICATED ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS OF THE OWNER IMMEDIATELY UPON ENCOUNTERING UNFORESEEN CONFLICTS.
13. THE APPROXIMATE LOCATIONS OF KNOWN EXISTING UTILITIES ARE SHOWN, CONTRACTOR SHALL DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS IN THE FIELD PRIOR TO COMMENCING WORK. CONTRACTOR TO BE FULLY RESPONSIBLE FOR DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE EXISTING UTILITIES.
14. PUBLIC AND PRIVATE UTILITY LINES AND CUSTOMER SERVICE LINES MAY EXIST THAT ARE NOT SHOWN ON THE CONSTRUCTION DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE, MAINTAIN AND PROTECT THE INTEGRITY OF THESE LINES. HAND EXCAVATION MAY BE REQUIRED. THE CONTRACTOR SHALL RESTORE RELOCATED OR DIVERTED UTILITY TO ITS ORIGINAL CONDITION AND LOCATION WHEN APPLICABLE UPON COMPLETION OF CONSTRUCTION. SAID RESTORATION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
15. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WATER AND SEWER CONNECTIONS TO ALL HOMES AND BUSINESSES IN WORKING ORDER AT ALL TIMES, EXCEPT FOR BRIEF INTERRUPTIONS IN SERVICE FOR CONNECTIONS TO BE REINSTALLED. IN NO CASE SHALL SERVICES BE ALLOWED TO REMAIN OUT OF SERVICE OVERNIGHT. CONTRACTOR IS RESPONSIBLE FOR DAMAGES TO SAID SERVICES.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING AREA BETWEEN THE BACK OF CURB/EDGE OF PAVEMENT, ROAD SIDE DITCH AND RIGHT-OF-WAY TO HAVE POSITIVE FLOW TO THE EXISTING DRAINAGE SYSTEM.
17. THE CONTRACTOR SHALL CLEANUP AND RESTORE THE AREA OF OPERATIONS TO A CONDITION AS GOOD AS OR BETTER THAN THAT WHICH EXISTED PRIOR TO INSTALLATION OF ALL ITEMS TO BE CONSTRUCTED.

#### **GENERAL NOTES**

*Hidalgo County Pct. 1*

*Road Construction for Tijerina Subdivision*

18. THE CONTRACTOR SHALL PROVIDE/MAINTAIN ADEQUATE POSITIVE DRAINAGE AT ALL TIMES DURING THE INSTALLATION OF THE STRUCTURES, DRAINAGE, UTILITY, IRRIGATION AND ROAD IMPROVEMENTS. DEWATERING OF THE TRENCH MAY BE REQUIRED DURING THE INSTALLATION OF THE DRAINAGE, UTILITY AND IRRIGATION FACILITIES/STRUCTURES. SAID DEWATERING SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
19. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY SURFACE IRREGULARITIES, AS DIRECTED BY THE ENGINEER, CAUSED BY THE CONTRACTOR'S WORKING OPERATIONS.
20. THE COUNTY WILL PROVIDE CONTROL POINTS (BENCHMARK AND PROPERTY CORNERS) FOR THE WORK TO BE PERFORMED BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING, INCLUDING BUT NOT LIMITED TO HORIZONTAL & VERTICAL GRADE CUTS FOR CURB & GUTTER, ROADWAY, STORM DRAIN PIPE, ROADSIDE DITCHES, DRIVEWAY CULVERTS AND DITCH WORK. THE SUB-GRADE, BASE AND HMAC SHALL BE GRADED AS PER THE PROPOSED CROSS SLOPE.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL EXISTING WATER VALVES AND MANHOLES TO MATCH PROPOSED FINISH GRADE OF ROADWAY. CONCRETE APRONS SHALL BE INSTALLED TO MATCH TOPS WITH PAVEMENT GRADE. THIS WORK SHALL BE INCIDENTAL AND NOT A SEPARATE PAY ITEM UNLESS STATED OTHERWISE.
22. ALL DEBRIS, VEGETATION AND SURPLUS MATERIAL, EXCEPT ROADWAY SECTION, RESULTING FROM DEMOLITION AND/OR CLEARING OF THE RIGHT-OF-WAY AND PROJECT LOCATION, IN PREPARATION OF PROPOSED IMPROVEMENTS, SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF AT A SITE ACCEPTABLE TO HIDALGO COUNTY PRECINCT No 1. THE CONTRACTOR SHALL PROVIDE A LETTER STATING SO. THIS SHALL BE INCIDENTAL AND NOT A SEPARATE PAY ITEM UNLESS STATED SO. NO EXCESS EXCAVATED MATERIAL SHALL BE DEPOSITED IN LOW AREAS OR ALONG NATURAL DRAINAGE WAYS WITHOUT WRITTEN PERMISSION FROM THE AFFECTED PROPERTY OWNER AND THE HIDALGO COUNTY PRECINCT No 1. IF THE CONTRACTOR PLACES EXCESS MATERIAL IN THE AREAS WITHOUT WRITTEN PERMISSION, HE WILL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM SUCH FILL AND CONTRACTOR SHALL REMOVE THE MATERIAL AT OWN COST.
23. HIDALGO COUNTY PRECINCT No. 1 WILL RETAIN OWNERSHIP OF BASE MATERIAL GENERATED ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOADING OF BASE MATERIAL FOR RELOCATION TO AN APPROVED SITE ASSIGNED BY HIDALGO COUNTY PRECINCT No. 1. THE COUNTY WILL BE RESPONSIBLE FOR THE HAULING OF THE MATERIAL. THIS SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED ON THE PROPOSAL.

#### **GENERAL NOTES**

***Hidalgo County Pct. 1***

***Road Construction for Tijerina Subdivision***

24. THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN ON ALL STREET AND ROAD CROSSINGS FOR APPROVAL BY HIDALGO COUNTY PRECINCT NO. 1 AND PROJECT ENGINEER PRIOR TO COMMENCEMENT OF WORK. ALL CONSTRUCTION OPERATIONS SHALL BE CONDUCTED TO PROVIDE THE LEAST POSSIBLE INTERFERENCE TO TRAFFIC AS PROVIDED FOR IN THE SPECIFICATIONS, TXDOT STANDARDS, TEXAS M.U.T.C.D. AND/OR AS DIRECTED. THE CONTRACTOR SHALL INSTALL THE APPROPRIATE ALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE CURRENT EDITION OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
25. THE CONTRACTOR SHALL PROVIDE STORM WATER POLLUTION PREVENTION PLAN (SWP3) PRIOR TO COMMENCEMENT OF CONSTRUCTION AS REQUIRED BY HIDALGO COUNTY AND OR TCEQ.
26. ALL NEW SIGNING SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
27. THE CONTRACTOR SHALL EXERCISE DILIGENCE IN THE APPLICATION OF PRIME COAT/ TACK COAT BY THE USE OF FLAGGING AND ROLLING PROCEDURES TO KEEP FROM SPRAYING OR SPLATTERING THE TRAVELING PUBLIC WITH ASPHALT MATERIAL, BLADING MAY ALSO BE NECESSARY TO CLEAN DIRT AND GRASS FROM PAVEMENT EDGES AND TURNOUT AREAS. THE COST OF THIS BLADING WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST.
28. FLEXIBLE BASE AGGREGATE SHALL MEET THE REQUIREMENTS IN THE TABLE BELOW. EN-I ROAD STABILIZER SHALL BE USED, AT THE MANUFACTURERS SUGGESTED APPLICATION RATE, IF THE PLASTICITY INDEX IS GREATER THAN 12.

TYPE E (CALICHE)

| PROPERTY                                           | TEST METHOD | REQUIREMENT |
|----------------------------------------------------|-------------|-------------|
| 2 ½" SEIVE (CUMULATIVE, % RET)                     | TEX-110-E   | 0           |
| 1 3/4" SEIVE (CUMULATIVE, % RET)                   | TEX-110-E   | 0-10        |
| #4 SEIVE (CUMULATIVE, % RET)                       | TEX-110-E   | 45-75       |
| #40 SEIVE (CUMULATIVE, % RET)                      | TEX-110-E   | 50-85       |
| LIQUID LIMIT, % MAX                                | TEX-104-E   | 40          |
| PLASTICITY INDEX, % MAX                            | TEX-106-E   | 12          |
| WET BALL MILL, % MAX                               | TEX-116-E   | 50          |
| WET BALL MILL, % MAX<br>INCREASE PASSING #40 SIEVE | TEX-116-E   | 20          |

29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT/RELOCATION OF ALL REGULATORY SIGNS REMOVED DUE TO CONSTRUCTION OPERATIONS WITH THE SAME SIGN ON FIXED SUPPORT(S) IMMEDIATELY UPON ITS REMOVAL.

#### **GENERAL NOTES**

*Hidalgo County Pct. 1*

*Road Construction for Tijerina Subdivision*

APPROVAL BY THE ENGINEER IS NECESSARY BEFORE REMOVING ANY REGULATORY ROADWAY SIGN(S). FLAGGERS ARE REQUIRED TO BE AVAILABLE TO DIRECT TRAFFIC DURING SIGN INTERMEDIATE DOWN TIME. RELOCATION OF ANY DIRECTIONAL SIGN ASSEMBLIES REMOVED DURING CONSTRUCTION OPERATIONS, IMMEDIATELY UPON THEIR REMOVAL, IS REQUIRED. ALL SIGNING, BARRICADING AND HANDLING OF TRAFFIC SHALL CONFORM TO THE LATEST VERSION OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". IN NO CASE WILL A SIGN BE REMOVED WITHOUT A REPLACEMENT SIGN AND SUPPORT(S) BEING READILY AVAILABLE AND A LOCATION ESTABLISHED. REMOVAL AND RELOCATION OF THESE SIGNS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED ON THE PROPOSAL.

30. PAVEMENT SURFACE PREPARATION FOR MARKINGS AND MARKERS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED ON THE PROPOSAL.
31. PERMANENT PAVEMENT MARKINGS FOR THIS PROJECT SHALL BE 0.100 INCHES (100 MIL) THICK THERMOPLASTIC. ANY PERMANENT PAVEMENT MARKINGS OR NON-REMOVAL WORK ZONE PAVEMENT MARKINGS LACKING REFLECTIVITY IN ACCORDANCE WITH TEST METHOD TEX 828-B, WILL NOT BE PAID FOR AS PER COUNTY POLICY. THE ROADWAY WILL BE RE-STRIPED AT NO ADDITIONAL COMPENSATION.
32. THE BEADS USED ON THIS PROJECT SHALL MEET THE REQUIREMENTS OF TXDOT MATERIALS SPECIFICATION DMS-8290, GLASS TRAFFIC BEADS TEXAS TYPE II & III. USE A 50% TYPE II/ 50% TYPE III MIX UTILIZING A DOUBLE DROP SYSTEM WITH TYPE III BEADS DROPPED FIRST.
33. THE CONTRACTOR SHALL COORDINATE AN ONSITE MEETING BETWEEN ALL PARTIES INVOLVED, PRIOR TO COMMENCING ANY STRIPING OPERATION. SAID MEETING WILL BE REQUIRED TO REVIEW ANY REQUIREMENTS AND TO ENSURE QUALITY WORK.
34. THE CONTRACTOR SHALL RELOCATE OR RECONSTRUCT ALL MAIL BOXES TO BE 1' BEHIND BACK OF CURB OR 3' BEHIND EDGE OF PAVEMENT. MAIL BOXES SHALL BE REPLACED TO THE SAME EXISTING CONDITIONS OR BETTER. SAID RELOCATION OF MAIL BOXES SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
35. THE CONTRACTOR SHALL REGRADE THE ROADSIDE DITCH TO PROVIDE POSITIVE FLOW TO THE EXISTING DRAINAGE STRUCTURES (THAT INCLUDE BUT ARE NOT LIMITED TO: INLETS AND CULVERTS) AS PER "PCT 1 TIJERINA RURAL DEVELOPMENT DRAINAGE PROJECT". REGRADEING OF THE ROADSIDE DITCH WILL

#### **GENERAL NOTES**

*Hidalgo County Pct. 1*

*Road Construction for Tijerina Subdivision*

BE CONSIDERED SUBSIDIARY TO THE COST OF EXCAVATION OF THE ROADWAY (ITEM 110).

36. MOBILIZATION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.

***GENERAL NOTES***

***Hidalgo County Pct. 1***

***Road Construction for Tijerina Subdivision***

# Technical Specifications

## TECHNICAL SPECIFICATIONS

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## SECTION 00101

### ABBREVIATIONS AND DEFINITIONS

#### PART 1 - ABBREVIATIONS

**1.01** Wherever the following abbreviations or symbols are used, they are to be construed the same as the respective expressions represented:

AASHTO American Association of State Highway and Transportation Officials

|                  |                                                  |
|------------------|--------------------------------------------------|
| AB .....         | Aggregate Base                                   |
| AC .....         | Asphalt Concrete                                 |
| ACB.....         | Asphalt Concrete Institute                       |
| ACI .....        | American Concrete Institute                      |
| ACP.....         | Asbestos Cement Pipe                             |
| ACPA .....       | American Concrete Pipe Association               |
| AD .....         | Assessment District                              |
| AGC .....        | Associated General Contractors of America, Inc.  |
| AIEE.....        | American Institute of Electrical Engineers       |
| AISC.....        | American Institute of Steel Construction         |
| ANSI.....        | American National Standards Institute            |
| APWA .....       | American Public Work Association                 |
| AREA .....       | American Railway Engineers Association           |
| ASME .....       | American Society of Mechanical Engineers         |
| ASCE .....       | American Society of Civil Engineers              |
| Asph.....        | Asphalt                                          |
| ASTM.....        | American Society for Testing and Materials       |
| AWG .....        | American Wire Gage (Nonferrous Wire)             |
| AWPA .....       | American Wood Preservers Association             |
| AWPI.....        | American Wood Preservers Institute               |
| AWS.....         | American Welding Society                         |
| AWWA .....       | American Water Works Association                 |
| BC .....         | Beginning of Curb or Back of Curb                |
| BCR .....        | Beginning of Curve Return or Back of Curb Radius |
| BM.....          | Bench Mark                                       |
| BWG .....        | Birmingham Wire Gage (Iron and Steel Wire)       |
| CB .....         | Catch Basin                                      |
| C.C. or C/C..... | Center to Center                                 |
| Cem. ....        | Cement                                           |
| CF .....         | Curb Face                                        |
| CI .....         | Cast Iron                                        |
| CIP .....        | Cast-Iron Pipe                                   |
| CIPP .....       | Cast-in- Place Pipe                              |
| C.L. or CL.....  | Center Line                                      |
| CMP .....        | Corrugated Metal Pipe                            |
| CMPA.....        | Corrugated Metal Pipe Arch                       |
| CO.....          | Clean Out                                        |
| Col.....         | Column                                           |

|                    |                                                              |
|--------------------|--------------------------------------------------------------|
| Conc.....          | Concrete                                                     |
| Const.....         | Construct                                                    |
| DF.....            | Douglas Fir                                                  |
| DG.....            | Decomposed Granite                                           |
| DMH.....           | Drop Manhole                                                 |
| D/W.....           | Driveway                                                     |
| EC.....            | End of Curve                                                 |
| EL. or Elev.....   | Elevation                                                    |
| Ex. or Exist. .... | Existing                                                     |
| F & C.....         | Frame and Cover                                              |
| FH.....            | Fire Hydrant                                                 |
| FL.....            | Flow Line                                                    |
| Fl. El.....        | Floor Elevation                                              |
| FS.....            | Federal Specification of Finished Surface                    |
| FHWA.....          | Federal Highway Administration, Department of Transportation |
| Galv.....          | Galvanized                                                   |
| GL.....            | Ground Line                                                  |
| Gr.....            | Grade                                                        |
| H.....             | Height or High                                               |
| HC.....            | House Connection Sewer                                       |
| Hor.....           | Horizontal                                                   |
| ID.....            | Inside Diameter                                              |
| Inv.....           | Invert                                                       |
| IP.....            | Iron Pipe                                                    |
| ITE.....           | Institute of Transportation Engineers                        |
| Lin.....           | Liner                                                        |
| LL.....            | Liquid Limit                                                 |
| Long.....          | Longitudinal                                                 |
| Max.....           | Maximum                                                      |
| MH.....            | Manhole                                                      |
| M.....             | Thousand                                                     |
| m.....             | meter or middle                                              |
| Min.....           | Minutes or Minimum                                           |
| Mon.....           | Monolithic or Monument                                       |
| MTD.....           | Multiple Tile Duct                                           |
| NEC.....           | National Electrical Code                                     |
| NEMA.....          | National Electrical Manufacturers Association                |
| NFPA.....          | National Fire Protection Association                         |
| NGS.....           | National Geodetic Survey                                     |
| OC.....            | On Center                                                    |
| OD.....            | Outside Diameter                                             |
| PC.....            | Point of Curvature                                           |
| PCC.....           | Point of Compound Curve or Portland Cement Concrete          |
| PI.....            | Point of Intersection or Plasticity Index                    |
| PL.....            | Property Line or Plastic Limit                               |
| PP.....            | Power Pole                                                   |
| ppm.....           | Parts per Million                                            |
| PRC.....           | Point of Reverse Curve                                       |
| Prop.....          | Proposed or Property                                         |
| psf.....           | Point of Tangency                                            |

|                |                                                    |
|----------------|----------------------------------------------------|
| psi .....      | Pavement                                           |
| PT .....       | Polyvinylchloride Pipe                             |
| Q .....        | Rate of Flow                                       |
| R .....        | Radius                                             |
| RC .....       | Reinforced Concrete                                |
| RCP .....      | Reinforced Concrete Pipe                           |
| Rdwy .....     | Roadway                                            |
| Ret.Wall ..... | Retaining Wall                                     |
| RGRCP .....    | Rubber Gasket-Reinforced Concrete Pipe             |
| s. ....        | Slope                                              |
| SAE .....      | Society of Automotive Engineer                     |
| San.....       | Sanitary                                           |
| SCCP .....     | Steel Cylinder Concrete Pipe                       |
| SD .....       | Storm Drain                                        |
| Sdl.....       | Saddle                                             |
| Sect. ....     | Section                                            |
| Spec. ....     | Specification                                      |
| San. S .....   | Sanitary Sewer                                     |
| St. ....       | Street                                             |
| Sta. ....      | Station                                            |
| Std.....       | Standard                                           |
| T .....        | Tangent Distance                                   |
| TH .....       | Test Hole                                          |
| THM .....      | Trap Manhole                                       |
| UL .....       | Underwriters' Laboratories, Inc.                   |
| USA.....       | United States of America Standards Institute, Inc. |
| V.....         | Velocity                                           |
| VC .....       | Vertical Curve                                     |
| VCP.....       | Vitrified Clay Pipe                                |
| VCPI.....      | Vertical Curve Point of Intersection               |
| Vert. ....     | Vertical                                           |
| W.I. ....      | Wrought Iron                                       |

**1.02** All abbreviations and symbols used on plans for structural steel construction shall conform to those given in the Steel Construction Manual of the American Institute of Steel Construction.

## **PART 2 - DEFINITIONS**

**2.01** Agreement-- The written agreement which constitutes a contract between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement.

**2.02** Application for Payment-- The form furnished by ENGINEER which is to be used by CONTRACTOR in requesting progress payments and which is to include the schedule of values required by paragraph 14.1 and an affidavit of CONTRACTOR that progress payments theretofore received on account of the Work have been applied by CONTRACTOR to discharge in full all of CONTRACTOR'S obligations reflected in prior Applications for Payment.

**2.03** Bid-- The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

- 2.04 Bidder--** Any person, firm, or corporation submitting a Bid for the Work.
- 2.05 Bonds--** bid, performance, and payment bonds and other instruments of security, furnished by CONTRACTOR and his surety in accordance with the Contract Documents.
- 2.06 Change Order--** A written order to CONTRACTOR signed by COUNTY authorizing an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Time issued after execution of the Agreement.
- 2.07 CITY --** A public body or authority or the contracting agency for whom the work is to be performed.
- 2.08 Contract Documents--** The Agreement, Addenda (whether issued prior to the opening of Bids or the execution of the Agreement), Instructions to Bidders, CONTRACTOR's Bid, the Bonds, the Certificate of Insurance, the Notice of Award, Notice to Proceed, these COUNTY of McAllen Standard Specifications, Plans and Drawings, and all Modifications.
- 2.09 Contract Price--** The total monies payable to CONTRACTOR under the Contract Documents.
- 2.10 Contract Time--** The number of days stated in the Agreement for the completion of the Work, computed as provided in paragraph 17.2.
- 2.11 Contracting Agency--** (See COUNTY)
- 2.12 CONTRACTOR--** The person, firm, or corporation with whom OWNER has executed the Agreement.
- 2.13 Day--** A calendar day of twenty-four hours measured from midnight to the next midnight.
- 2.14 Drawings or Plans--** The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.
- 2.15 ENGINEER--** The OWNER'S employee or agent responsible for the engineering design and construction inspection and supervision, acting directly or through duly authorized representatives.
- 2.16 Field Order--** A written order issued by ENGINEER which clarifies or interprets the Contract Documents in accordance with paragraph 9.3 or order minor changes in the Work in accordance with paragraph 10.2.
- 2.17 General Conditions --** Conditions which apply to all projects and which can be modified by Special conditions.
- 2.18 General Provisions--** A term having the same meaning as the term General Conditions.

**2.19 Modification--** (a) A written amendment to the Contract Documents signed by both parties, (b) a Change Order, (c) a written clarification or interpretation issued by ENGINEER in accordance with paragraph 9.3, or (d) a written order for a minor change or alteration in the Work issued by ENGINEER pursuant to paragraph 10.2. A Modification may only be issued after execution of the Agreement.

**2.20 Notice of Award--** The written notice by OWNER to the apparent successful Bidder stating that, upon compliance with the conditions precedent to be fulfilled by him within the time specified, OWNER will execute and deliver the Agreement to him.

**2.21 Notice to Proceed--** A written notice given by COUNTY to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform his obligations under the Contract Documents.

**2.22 Project--** The entire construction to be performed as provided in the Contract Documents.

**2.23 Reference Specifications, Test Methods, and Applicable Codes--** All standard specifications and test methods of any society, association, or organization herein referred to are hereby made a part of these Contract Documents the same as if written in full. (Any reference to a paragraph or subparagraph within a section shall include all general provisions of the section to which reference is made.) Reference to such standards refer to the latest published issues as of the date of publication issues as of the date of Invitation to Bid. Reference to local or state codes and laws shall mean the latest adopted and published codes as of the date of the Invitation to Bid.

**2.24 Resident Project Representative--** The authorized representative of ENGINEER who is assigned to the Project site or any part thereof.

**2.25 Service Connections--** Service Connections shall be construed to mean all or any portion of the pipe, conduit, cable, or duct which connects a utility main or distribution line to a building, home, residence, or property.

**2.26 Shop Drawings--** All drawings, diagrams, illustrations, brochures, schedules, and other data which are prepared by CONTRACTOR, a Subcontractor, manufacturer, supplier, or distributor and which illustrate the equipment, material, or some portion of the Work.

**2.27 Special Conditions--** Conditions which are written for a specific project and which modify any section or paragraph of the General Conditions.

**2.28 Specifications, also Technical Specifications--** Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the Work. When Section Items 400, 402, 403, 420, 421, 440, 462, 464 make reference to the following Item numbers 132, 360, 404, 420, 424, 426, 427, 431, 437, 438, 441, 446, 448, 50, 522, 524, 526, 575, the CONTRACTOR shall use Texas Department of Transportation (TxDOT) Standard Specifications for Construction of Highways, Streets and Bridges Latest Edition for Specifications of the aforementioned Item Numbers.

**2.29 Subcontractor--** An individual, firm or corporation having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

**2.30 Substantial Completion--** The date as certified by ENGINEER when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Contract Documents, so that the Project or specified part can be utilized for the purposes for which it was intended; or if there be no such certification, the date when final payment is due in accordance with paragraph 14.13.

**2.31 Supplementary Specifications--** which are written to modify any section or paragraph of the Technical Specifications of this document.

**2.32 Utility--**Overhead or underground wires, pipe lines, conduits, ducts, or structures, operated and maintained in or across a public right-of-way or easement or private easement.

- A. Public Utility--Owned and operated by a municipality or another political subdivision of the State.
- B. Private Utility--Owned and operated by a private company or corporation.

**2.33 Work--** Any and all obligations, duties, and responsibilities necessary to the successful completion of the Project assigned to or undertaken by CONTRACTOR under the Contract Documents, including all labor, materials, equipment, and other incidentals, and the furnishing thereof.

**\* \* \* END OF SECTION \* \* \***

## **SECTION 00102**

### **PRELIMINARY MATTERS**

#### **PART 1 - EXECUTION OF AGREEMENT:**

**1.01** At least four (4) counterparts of the Agreement and such other Contract Documents as practicable will be executed and delivered by CONTRACTOR to COUNTY within fifteen days of the Notice of Award; and COUNTY will execute and deliver one counterpart to CONTRACTOR within ten days of receipt of the executed Agreement from CONTRACTOR. COUNTY will identify those portions of the Contract Documents not so signed and such identification will be binding on all parties. COUNTY, CONTRACTOR, and Project ENGINEER shall receive and execute counterpart of the Contract Documents and additional conformed copies as required.

#### **PART 2 - DELIVERY OF BONDS**

**2.01** When he delivers the executed Agreements to COUNTY, CONTRACTOR shall also deliver to OWNER such Bonds as he may be required to furnish in accordance with the contract documents.

#### **PART 3 - CONTRACT DOCUMENTS**

**3.01** COUNTY shall furnish to CONTRACTOR up to three (3) copies, unless otherwise provided in the Special Conditions, of the Contract Documents as are reasonably necessary for the execution of the work. Additional copies will be furnished upon request at the cost of reproduction.

#### **PART 4 - CONTRACTOR'S ACKNOWLEDGMENT**

**4.01** CONTRACTOR represents that he has familiarized himself with and assumes full responsibility for having familiarized himself with the nature and extent of the CONTRACT DOCUMENTS, Work, locality, and all local conditions and federal, state, and local laws, ordinances, rules, and regulations that may in any manner affect performance of the Work and represents that he has correlated his study and observations with the requirements of the Contract Documents.

**4.02** CONTRACTOR also represents that he has studied all surveys and investigation reports of subsurface and latent physical conditions referred to in the Specifications and made such additional surveys and investigations as he deems necessary for the performance of the Work at the Contract Price in accordance with the requirements of the Contract Documents and that he has correlated the results of all such data with the requirements of the Contract Documents.

## **PART 5 - COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED**

**5.01** The Contract Time will commence to run on the thirteenth day after the day on which the executed Agreement is delivered by COUNTY to CONTRACTOR or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed; but in no event shall the Contract Time commence to run later than the nineteenth day after the day on which COUNTY delivers the executed Agreement to CONTRACTOR. A Notice to Proceed may be given at any time within thirty days after the day on which COUNTY delivers the executed Agreement to CONTRACTOR.

## **PART 6 - PRE-COMMENCEMENT ACTIVITIES**

**6.01** Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract documents and check and verify pertinent figures shown thereon and all applicable field measurements. He shall at once report in writing to ENGINEER any conflict, error or discrepancy which he may discover; however, he shall not be liable to ENGINEER for his failure to discover any conflict, error, or discrepancy in the Drawings of Specifications.

**6.02** Within ten days after delivery of the executed Agreement by COUNTY to CONTRACTOR, CONTRACTOR shall submit to ENGINEER for approval an estimated progress schedule indicating the starting and completion dates of the various stages of the Work and a preliminary schedule of Shop Drawing submissions.

**6.03** Before starting the work at the site, CONTRACTOR shall furnish ENGINEER certificates of insurance as required in the Contract Documents. Within twenty days after delivery of the executed Agreement by COUNTY to CONTRACTOR, but before starting the Work at the site, a conference will be held to review the above schedules, to establish procedures for handling Shop Drawings and other submissions and for processing Applications for Payment, and to establish a working understanding between the parties as to the Project. Present at the conference will be ENGINEER, Project Engineer, Project Inspector, CONTRACTOR and his Superintendent.

## **PART 7 - COMMENCEMENT**

**7.01** CONTRACTOR shall start to perform his obligations under the Contract Documents on the date when the Contract Time commences to run. No Work shall be done at the site prior to the date on which the Contract time commences to run.

**\*\*\* END OF SECTION \*\*\***

## SECTION 00104

### TESTING LABORATORY SERVICES

#### PART 1 - GENERAL

**1.01** The Contractor shall be responsible for providing materials which meet the requirements indicated. For manufactured materials such as reinforcing steel, expansion joint materials, concrete pipe, cement, miscellaneous steel, cast iron materials, etc., the CONTRACTOR will be required to furnish a manufacturer's certificate that the material meets the requirements specified for this project.

**1.02** The COUNTY shall monitor all materials incorporated into the project and their placement by testing at the COUNTY's expense. The COUNTY does not guarantee the accuracy or validity of the data nor does the COUNTY assume any responsibility for the CONTRACTOR'S interpretation of the data. Materials or work which do not meet the specifications shall be removed or modified.

**1.03** All retesting for work rejected on the basis of the initial test results will be at the expense of the CONTRACTOR and the extent of the retesting shall be determined by the ENGINEER. The ENGINEER may require additional testing for failing tests and may require two passing retests acceptance will be made by the COUNTY.

**1.04** The testing laboratory will be designated by the ENGINEER and shall perform all work in a professional manner and conform to the requirement of ASTM E 329.

**1.05** Inspection, sampling and testing requirements, where applicable, are set forth in, but not necessarily limited to, the following Sections:

Section XXX Earthwork - Excavating, Backfilling and Compacting:

|         |                                       |
|---------|---------------------------------------|
| Section | Compaction Control and Testing.       |
| Section | Sub-grade and Base Construction.      |
| Section | Street Surface Courses.               |
| Section | Concrete and Structures.              |
| Section | Underground Piped Utilities.          |
| Section | Incidental Construction.              |
| Section | Soil Treatment, Termite Control.      |
| Section | Pile Driving, Load Tests.             |
| Section | Metal Fastening: Welding and Bolting. |
| Section | Structural Metal Framing.             |

#### PART 2 - LABORATORY DUTIES AND LIMITS OF AUTHORITY

**2.01** Cooperate with ENGINEER and CONTRACTOR: provide qualified personnel as required promptly on notice.

**2.02** Acquaint ENGINEER'S personnel with testing procedures and with all special conditions encountered at the site.

**2.03** Perform specified inspections sampling and testing of materials and construction methods:

- A. Comply with specified standards, ASTM and other recognized authorities.
- B. Ascertain compliance with contract requirements.

**2.04** Promptly notify the ENGINEER of irregularities or deficiencies of work which are observed during performance of services.

**2.05** Promptly submit 3 copies of reports of observations and tests to the ENGINEER including but not limited to:

**2.06** Perform additional services ordered by the ENGINEER.

**2.07** Laboratory is not authorized to:

- A. Release, revoke, alter or enlarge on contract requirements.
- B. Approve or accept any portion of work.
- C. Perform any duties of the CONTRACTOR.

### **PART 3 - CONTRACTOR'S RESPONSIBILITIES**

**3.01** Furnish product mix design together with the applicable design work sheets and data to meet or exceed contract requirements.

**3.02** Cooperate with COUNTY's laboratory personnel, provide access to the work or to the manufacturer's operations.

**3.03** Provide to laboratory preliminary representative samples of materials to be tested in specified quantities.

**3.04** Furnish copies of mill test reports.

**3.05** Furnish verification of compliance with contract requirements for materials and equipment.

**3.06** Furnish casual labor and facilities:

- A. To provide access to work to be tested.
- B. To obtain and handle samples at site.
- C. To facilitate inspections and tests.
- D. For laboratory's exclusive use for storage and curing of test samples.

**3.07** Notify ENGINEER 24 hours in advance of operations to allow for the assignment of personnel.

**3.08** Notify laboratory 24 hours in advance of operations to allow for the assignment of personnel.

**3.09** Correct work which is defective or which fails to conform to the Contract Documents. Corrective work shall not delay the project or the work of other CONTRACTORS.

**3.10** Pay all costs of retesting when test results indicate non-compliance with contract requirements.

**3.11** Patch all surfaces and areas disturbed by testing operation.

**\* \* \* END OF SECTION \* \* \***



## **SECTION 00105**

### **AVAILABILITY OF LAND, PHYSICAL CONDITIONS AND REFERENCE POINTS**

#### **PART 1 - AVAILABILITY OF LANDS**

**1.01** COUNTY shall furnish, as indicated in the Contract Documents and not later than the date when needed by CONTRACTOR, the lands upon which the Work is done, rights-of-way for access thereto, and such other lands which are designated for the use of CONTRACTOR.

**1.02** Easement for permanent structures or permanent changes in existing facilities will be obtained and paid for by COUNTY, unless otherwise specified in the Contract Documents. If CONTRACTOR believes that any delay in COUNTY's furnishing these lands or easements entitles him to an extension of the Contract Time, he may make a claim therefore in the Contract Documents.

**1.03** CONTRACTOR shall provide for all additional lands and access thereto may be required for temporary construction facilities or storage of materials and equipment.

#### **PART 2 - PHYSICAL CONDITIONS; SURVEYS AND REPORTS**

**2.01** The COUNTY will, upon request, furnish to the CONTRACTOR copies of all boundary surveys, subsurface tests, and other pertinent reports and material which are available in ENGINEER'S office.

**2.02** CONTRACTOR shall promptly notify ENGINEER in writing of any subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents.

**2.03** ENGINEER will promptly investigate those conditions and perform further surveys or subsurface tests deemed necessary. Promptly thereafter OWNER shall obtain the necessary additional surveys and tests and furnish copies to ENGINEER and CONTRACTOR.

**2.04** If ENGINEER finds that the results of such surveys or tests indicate that there are subsurface or latent physical conditions which differ materially from those intended in the Contract Documents and which could not reasonably have been anticipated by CONTRACTOR, a Change Order shall be issued incorporating the necessary revisions.

#### **PART 3 - REFERENCE POINTS**

**3.01** ENGINEER shall provide engineering surveys for construction to establish reference points which, in his judgment, are necessary to enable CONTRACTOR to proceed with the Work.

**3.02** CONTRACTOR shall be responsible for surveying and laying out the Work (unless otherwise provided in the Special Conditions) and shall protect and preserve the established reference point and shall make no changes or relocations without the prior written approval of ENGINEER. He shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations.

**3.03** CONTRACTOR shall replace and accurately relocate all reference points so lost, destroyed or moved.

**\* \* \* END OF SECTION \* \* \***

## **SECTION 00106**

### **SUSPENSION OF WORK AND TERMINATION**

#### **PART 1 - COUNTY SUSPENSION OF WORK**

**1.01** ENGINEER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR which shall fix the date on which work shall be resumed.

**1.02** CONTRACTOR shall resume the work on the date so fixed.

**1.03** CONTRACTOR will be allowed an extension of the contract time directly attributable to any suspension if he makes a claim therefore as provided in Section 107 and the contract documents.

#### **PART 2 - COUNTY TERMINATION OF WORK**

**2.01** If CONTRACTOR is adjudged bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to Subcontractors or for labor, materials, or equipment, or if he disregards laws, ordinances, rules, regulations, or orders of any public body having jurisdiction, or if he disregards the authority of ENGINEER, or if he otherwise violates any provision of the contract Documents, then ENGINEER may, without prejudice to any other right or remedy and after giving CONTRACTOR and his Surety seven day's written notice, terminate the services of CONTRACTOR and take possession of the project and of all materials, equipment, tools, construction equipment and machinery thereon owned by CONTRACTOR and finish the work by whatever method he may deem expedient.

**2.02** 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 the direct and indirect costs of completing the Project, including compensation for additional professional service, such excess shall be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to COUNTY.

**2.03** Such costs incurred by COUNTY shall be determined by ENGINEER and incorporated in a Change Order.

**2.04** Where CONTRACTOR's services have been so terminated by ENGINEER, said terminations shall not affect any rights of COUNTY against CONTRACTOR then existing or which may thereafter accrue.

**2.05** Any retention or payment of monies by COUNTY due CONTRACTOR will not release CONTRACTOR for liability.

**2.06** Upon seven days written notice to CONTRACTOR, COUNTY may, without cause and without prejudice to any other right or remedy, elect to abandon the project and terminate the agreement. In such case, CONTRACTOR shall be paid for all work executed and any expense sustained plus a reasonable profit.

**PART 3 - CONTRACTOR SUSPENSION OR TERMINATION OF WORK:**

**3.01** If, through no act or fault of CONTRACTOR, the work is suspended for a period of more than ninety days by COUNTY or under an order of court or other public authority, or ENGINEER fails to act on any application for payment within thirty days after it is submitted, or COUNTY fails to pay CONTRACTOR any sum approved by ENGINEER or awarded by arbitrators within thirty days written notice to ENGINEER, terminate the agreement and recover from COUNTY payment for all work executed and any expense sustained plus a reasonable profit.

**3.02** In addition and in lieu of terminating the agreement, if ENGINEER has failed to act on an application for payment or COUNTY has failed to make any payment as aforesaid, CONTRACTOR may, upon seven days' notice to ENGINEER, stop the work until he has paid all amounts then due.

**\* \* \* END OF SECTION \* \* \***

## **SECTION 00107**

### **WORK BY OTHERS**

#### **PART 1 - GENERAL**

**1.01** COUNTY may perform additional work related to the Project by itself, or it may let other direct contracts therefore which shall contain General Conditions similar to these. CONTRACTOR shall afford the other contractors who are parties to such direct contracts (or COUNTY, if it is performing the additional work itself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of work and shall properly connect and coordinate his work with theirs.

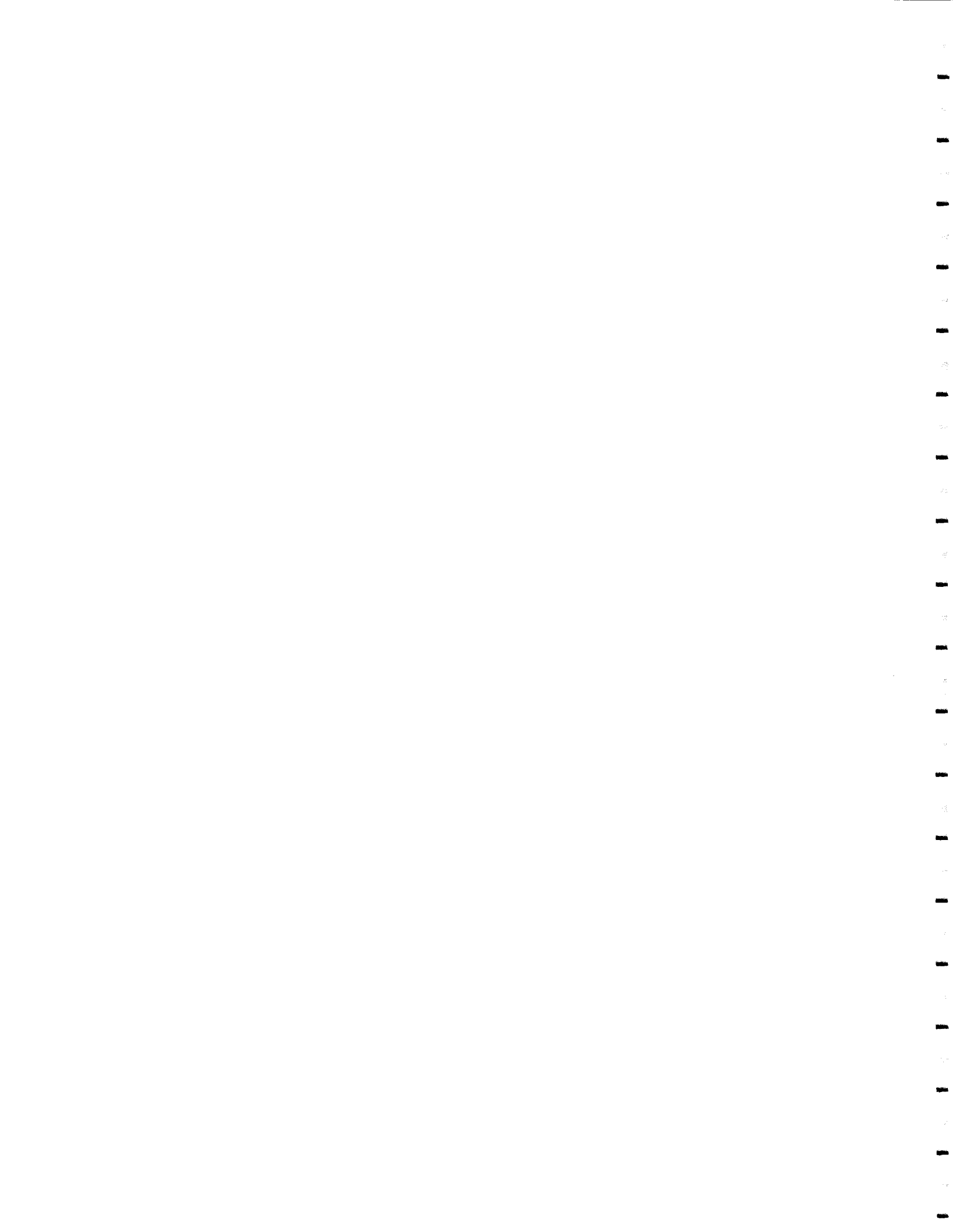
**1.02** If any part of CONTRACTOR'S Work depends for proper execution or results upon the work of any such other contractor (or COUNTY,) CONTRACTOR shall inspect and promptly report to ENGINEER in writing any defects or deficiencies in such work that render it unsuitable for such proper execution and results. His failure so to report shall constitute an acceptance of the work as fit and proper for the relationship of his Work except as to defects and deficiencies which may appear in the other work after the execution of his Work.

**1.03** CONTRACTOR shall do all cutting, fitting, and patching of his Work that may be required to make its several parts come together properly and fit it to receive or be received by such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work with the written consent of ENGINEER and of the other contractors whose work will be affected.

**1.04** If the performance of additional work by other contractors of COUNTY is not noted in the Contract Documents prior to the execution of the contract, written notice thereof shall be given to CONTRACTOR prior to starting any such additional work. If CONTRACTOR believes that the performance of such additional work by COUNTY or others involves him an additional expense or entitles him to an extension of the Contract Time, he may make a claim therefore.

**1.05** Work by the CONTRACTOR and work by others should be coordinated and expedited by the COUNTY or his representative to prevent time delays and additional cost to the CONTRACTORS. Any extension of time and/or additional costs caused by other contractors or utility service companies may be claimed.

**\* \* \* END OF SECTION \* \* \***



## **SECTION 00108**

### **CONTRACTOR'S RESPONSIBILITIES**

#### **PART 1 - SUPERVISION AND SUPERINTENDENCE**

**1.01** CONTRACTOR shall supervise and direct the work efficiently and with his best skill and attention. He shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction; but he shall not be solely responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence, or procedure of construction which is indicated in and required by the contract documents. CONTRACTOR shall be responsible to see that the finished work complies accurately with the contract documents.

**1.02** CONTRACTOR shall keep on the work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to the ENGINEER (Written Notice Only, Not Consent) 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 the superintendent shall be as binding as if given to CONTRACTOR.

#### **PART 2 - LABOR, MATERIALS AND EQUIPMENT**

**2.01** CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the work and perform construction as required by the contract documents. He shall at all times maintain good discipline and order at the site.

**2.02** CONTRACTOR shall furnish all material, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities, and all other facilities and incidentals necessary for the execution, testing, initial operation, and completion of the Work.

**2.03** All materials and equipment shall be new, except as otherwise provided in the contract documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

**2.04** All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, or processors, except as otherwise provided in the contract documents.

#### **PART 3 - SUBCONTRACTORS**

**3.01** If the specifications, laws, ordinances, or applicable rules or regulations permit CONTRACTOR to furnish or use a substitute that is equal to any material or equipment specified, and if CONTRACTOR wishes to furnish or use a proposed substitute, he shall make written application to ENGINEER for approval of such a substitute certifying in writing that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equal substance to the specified, and be suited to the same use and capable of performing the same function as that specified; stating whether or not its incorporation in or use

in connection with the project is subject to the payment of any license fee or royalty; and identifying all variations of the proposed substitute from that specified and indicating available maintenance service. No substitute shall be ordered or installed without the written approval of ENGINEER, who will be the judge of equality and may require CONTRACTOR to furnish such other data about the proposed substitute as he considers pertinent. No substitute shall be ordered or installed without such performance guarantee and bonds as ENGINEER may require which shall be furnished at CONTRACTOR's expense.

#### **PART 4 - SUBCONTRACTORS**

**4.01** CONTRACTOR shall not employ and subcontractor or other person or organization (including those who are to furnish the principal items of materials or equipment), whether initially or as a substitute, against whom COUNTY or ENGINEER may have reasonable objection. A subcontractor or other person or organization identified in writing to COUNTY and ENGINEER by CONTRACTOR prior to the notice of award and not objected to in writing by COUNTY or ENGINEER prior to the Notice of Award will be deemed acceptable to COUNTY and ENGINEER. Acceptance of any subcontractor, other person, or organization by COUNTY or ENGINEER shall not constitute a waiver of any right of COUNTY or ENGINEER to reject defective work or work not in conformance with the contract documents.

**4.02** If COUNTY or ENGINEER, after due investigation, have reasonable objection to any subcontractor, other person, or organization proposed by CONTRACTOR after the notice of award, CONTRACTOR shall submit an acceptable substitute and the contract price shall be increased or decreased by the difference in cost occasioned by such substitution and on appropriate change order shall be issued. CONTRACTOR shall not be required to employ any subcontractor, other person, or organization against whom he has reasonable objection. CONTRACTOR shall not, without the consent of COUNTY and ENGINEER, make any substitution for any subcontractor, other person, organization who has been accepted by COUNTY and ENGINEER unless ENGINEER determines that there is good cause for doing so.

**4.03** CONTRACTOR shall be fully responsible for all acts and omissions of his subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that he is responsible for the contract documents shall create any contractual relationship between COUNTY or ENGINEER and any subcontractor or other person or organization having a direct contract with CONTRACTOR, nor shall it create any obligation on the part of COUNTY or ENGINEER to pay or to see to the payment of any monies due any subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to CONTRACTOR on account of specific work done in accordance with the schedule of values.

**4.04** The sections of the specifications and the identifications of any drawings shall not control CONTRACTOR in dividing the work among subcontractors or delineating the work to be performed by any specific trade.

**4.05** CONTRACTOR agrees to bind specifically every subcontractor to the applicable terms and conditions of the contract documents for the benefit of COUNTY.

#### **PART 5 - PATENT FEES AND ROYALTIES**

**5.01** CONTRACTOR shall pay all license fees and royalties and assume all costs incident to

the use in the performance of 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 two work and if, to the actual knowledge of COUNTY 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 COUNTY in the contract documents.

**5.02** CONTRACTOR shall indemnify and hold harmless COUNTY and ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses, and expenses, including attorneys' fees, arising out of 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 and shall defend all such claims in connection with any alleged infringement of such rights.

## **PART 6 - PERMITS**

**6.01** CONTRACTOR shall obtain and pay for all construction permits and licenses and shall pay all governmental charges and inspection fees necessary for the prosecution of the work, which are applicable at the time of his bid. COUNTY shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACT, when necessary, in obtaining such permits and licenses. CONTRACTOR shall also pay all public utility charges.

## **PART 7 - LAWS, REGULATIONS AND ORDINANCE**

**7.01** Contractor shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the work. If CONTRACTOR observes that the specifications or drawings are at variance therewith, he shall give ENGINEER prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate modification. If CONTRACTOR performs any work knowing it to be contrary to such law, ordinances, rules, and regulations and without such notice to ENGINEER, he shall bear all costs arising there from; however, it shall not be is primary responsibility to make certain that the specifications and drawings are in accordance with such laws, ordinances, rules and regulations.

## **PART 8 - TAXES**

**8.01** CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by him in accordance with the laws and ordinances.

## **PART 9 - USE OF PREMISES**

**9.01** CONTRACTOR shall confine his equipment, the storage of materials and equipment, and the operations of his workmen to areas permitted by law, ordinances, permits, or the requirements of the contract documents and shall not unreasonably encumber the premises with materials or equipment.

**9.02** CONTRACTOR shall not load nor permit any part of any structure to be loaded with weights that will endanger the structure, nor shall he subject any part of the work to stresses or pressures that will endanger it.

## **PART 10 - RECORD DRAWINGS**

**10.01** CONTRACTOR shall keep one record copy of all specifications, drawings, addenda, modifications, and shop drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to ENGINEER and shall be delivered to him for COUNTY upon completion of the project.

## **PART 11 - SAFETY AND PROTECTION**

**11.01** CONTRACTOR shall be responsible for initiating maintaining, and supervising all safety precautions and programs in connection with work. He shall take all necessary precautions for the safety of and provide the necessary protection to prevent damage, injury, or loss to:

- A. All employees on the work and other persons who may be affected thereby:
- B. All the work and materials or equipment to be incorporated there-in whether in storage on or off the site; and
- C. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

**11.02** The CONTRACTOR shall conduct his operations in a manner which will minimize interference with the normal use of property adjacent to the construction work and shall give owners of such property at least 24 hours notice of the commencement of work in the area abutting their property. CONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He shall erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for its safety and protection. He shall notify owners of adjacent utilities at least 48 hours in advance when prospection of the work may effect them. All damage, injury, or loss to any property referred to above caused, directly or indirectly, in whole or in part, by CONTRACTOR, any subcontractor, or anyone directly or indirectly employed by any of them 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 ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault of negligence of CONTRACTOR.

**11.03** CONTRACTOR's duties and responsibilities for the safety and protection of the work shall continue until such time as all the work is completed and ENGINEER has issued a notice to CONTRACTOR that work is acceptable.

**11.04** CONTRACTOR shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's superintendent, unless otherwise designated in writing by CONTRACTOR to OWNER.

## **PART 12 - EMERGENCIES**

**12.01** In emergencies affecting the safety of persons or the work or property at the site or

adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER, is obligated to act, at his discretion, to prevent threatened damage, injury, or loss. He shall give ENGINEER prompt written notice of any significant changes in the work or deviations from the contract documents caused thereby; and a change order shall thereupon be issued covering the changes and deviations involved.

**12.02** If CONTRACTOR believes that additional work done by him in any emergency which arose from causes beyond his control entitles him to an increase in the contract price or an extension of the contract time, he may make a claim there for.

### **PART 13 - SHOP DRAWINGS AND SAMPLES**

**13.01** After checking and verifying all field measurements, CONTRACTOR shall submit to ENGINEER for approval, in accordance with the accepted schedule of shop drawing submissions, five copies (or, to ENGINEER's option, one reproducible copy) of all shop drawings which shall have been checked by and stamped with the approval of CONTRACTOR and identified as ENGINEER may require. The date shown on the shop drawing will be complete with respect to dimensions, design criteria, materials of construction, and the like to enable ENGINEER to review the information as required.

**13.02** CONTRACTOR shall also submit to ENGINEER for approval, with such promptness as to cause no delay in work, all samples required by the contract documents. All samples will have been checked by and stamped with the approval of CONTRACTOR, identified clearly as to material, manufacturer, and pertinent catalog numbers and the use for which intended.

**13.03** At the time of each submission, CONTRACTOR shall in writing call ENGINEER's attention to any deviations that the shop drawings or sample may have from the requirements of the contract documents.

**13.04** ENGINEER will review and approve with reasonable promptness shop drawings and samples, but his review and approval shall be only for conformance with the design concept of the project and for compliance with the information given in the contract documents. The approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make any corrections required by ENGINEER and shall return the required number of corrected copies of shop drawings and resubmit new samples until approved. CONTRACTOR shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections called by the ENGINEER on previous submissions. CONTRACTOR's stamp of approval on any shop drawing or sample shall constitute a representation to ENGINEER that CONTRACTOR has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data or he assumes full responsibility for doing so and that he has reviewed or coordinated each shop drawing or sample with the requirements of the work and the contract documents.

**13.05** Where a shop drawing or sample submission is required by the specifications, no related work shall be commenced until the submission has been approved by ENGINEER. A copy of each approved shop drawing and each approved sample shall be kept in a good order by CONTRACTOR at the site and shall be available to ENGINEER.

**13.06** ENGINEER approval of shop drawings or samples shall not relieve CONTRACTOR from

his responsibility for any deviations from the requirements of the contract documents unless CONTRACTOR has in writing called ENGINEER's attention to such deviation at the time of submission and ENGINEER has given written approval to the specific deviation, nor shall any approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the shop drawings.

#### **PART 14- CLEANING**

**14.01** CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish, and debris from and about the premises, as well as all tools, construction equipment and machinery, and surplus materials and shall leave the site clean and ready for occupancy by COUNTY. CONTRACTOR shall restore to their original condition those portions of the site not designated for alterations by the contract documents, unless the completion of the work is directly affected by the item in dispute.

#### **PART 15 - INDEMNIFICATION**

**15.01** CONTRACTOR shall indemnify and hold harmless COUNTY and ENGINEER and their agents and employees from and against all claims, damages, losses, and expenses including attorneys' fees arising out of or resulting from the performance of the work by the CONTRACTOR, provided that any such claim, damage, loss, or expense (a) 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 there-from and (b) is caused in whole or in part by any negligent act or omission of CONTRACTOR, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

**15.02** In any and all claims against COUNTY or ENGINEER or any of their agents or employees by copy any employees of CONTRACTOR, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 15.01 shall not be limited in any way by any limitation on the amount of type of damages, compensation, or benefits payable by or for CONTRACTOR or any subcontractor under workmen's compensation acts, disability benefit acts, or other employee benefit acts.

**15.03** The obligations of CONTRACTOR under paragraph 15.01 shall not extend to the liability of ENGINEER, his agents, or employees arising out of (a) the preparation or approval of maps, drawings, opinions, reports, surveys change orders, designs, or specifications or (b) the giving of or giving or failure to give is the primary cause of injury or damage.

**\* \* \* END OF SECTION \* \* \***

## **SECTION 00113**

### **SOILS AND SUBSURFACE INVESTIGATION**

#### **PART 1 - GENERAL**

- 1.01** Depending on the project requirements, the ENGINEER may have obtained geotechnical information, which may include subsurface data, logs of soil borings and recommendations from geotechnical consultants.
- 1.02** Any information obtained is solely for use by the ENGINEER in the design of the project and are not part of the contract. If soil borings have been prepared they will be included in the section or on the plans.
- 1.03** Any geotechnical information included is for information only. The COUNTY and the ENGINEER do not guarantee the accuracy or validity of the data, nor do they assume any responsibility for the CONTRACTOR'S interpretation or conclusions drawn from the data.
- 1.04** The CONTRACTOR may, at his option, perform additional subsurface investigations at his own expense.

**\*\*\*END OF SECTION\*\*\***



## **SECTION 02101**

### **PREPARATION OF RIGHT-OF-WAY**

#### **PART 1 - GENERAL**

##### **1.01 GENERAL DESCRIPTION OF WORK:**

- A. Removal and disposal of all obstructions from the right-of-way and from designated easements, as noted in the plans.
- B. Obstructions shall include:
  - 1. Remains of houses not completely removed by others.
  - 2. Concrete, foundations, floorslabs curb and gutter, driveways, and sidewalk.
  - 3. Building materials such as brick, lumber and plaster.
  - 4. Water wells, septic tanks, manholes, inlets , utility pipes and conduits.
  - 5. Underground service station tanks, equipment or other foundations.
  - 6. Fencing and retaining walls.
  - 7. Paved parking areas.
  - 8. Abandoned railroad tracks, ties, and scrap iron.
  - 9. Ancillary structures such as shacks and outhouses.
  - 10. Trees, stumps, bushes, shrubs, roots, limbs and logs.
  - 11. All rubbish and debris whether above or below ground.

#### **PART 2 - PRODUCTS**

##### **2.01 MATERIALS**

- A. Provide materials required to perform work as specified.

#### **PART 3 - EXECUTION**

##### **3.01 GENERAL**

- A. Clear entire project right-of-way and such other areas, including public or corporate lands, specified in the plans of all structures and obstructions.
- B. Trim carefully all trees and shrubs designated for preservation and protect from scarring or other injuries during construction operation.
- C. Removal of all foundations and underground obstructions, unless otherwise specified, shall be removed to the following depths:
  - 1. In embankment areas, two (2) feet below natural ground.
  - 2. In excavation areas, two (2) feet below the lower elevation of excavation.
  - 3. In all other areas, one (1) foot below natural grade.

- D. Backfill all holes, as directed by the ENGINEER, resulting from all removals.
- E. Complete the preparation of right-of-way such that prepared right-of-way is free of holes, ditches and other abrupt changes in elevations and irregularities to contours.
- F. Plug the remaining ends of all abandoned storm sewers, culverts, sanitary sewers, conduits and utility pipes with concrete, as specified by the ENGINEER, to form a tight closure.
- G. On existing concrete where only a portion is to be removed, care shall be exercised to avoid damage to remaining concrete. Where concrete reinforcement is encountered in removed portions, a minimum of one (1) foot of such reinforcement shall be cleaned of old concrete and left in place to tie into new construction. Concrete to be preserved, but subsequently destroyed by the CONTRACTOR'S operations, shall be replaced by the CONTRACTOR at his expense in accordance with County Specifications, or as directed by the ENGINEER.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### **4.01 PREPARATION OF RIGHT-OF-WAY**

- A. Preparation of right-of-way shall be measured on a lump-sum basis with measurement for payment made only on areas indicated and classified on the plans as preparation of right-of-way.
- B. When not listed as a separate contract pay item, preparation of right-of-way shall be considered as incidental work, and the cost thereof shall be included in such contract pay item(s) as are provided in the proposal contract.
- C. Compensation, whether by contract pay item or incidental work will be for furnishing all materials, labor, equipment, tools and incidentals required for the work, all in accordance with the plans and these specifications.

**\*\*\*END OF SECTION\*\*\***

## **SECTION 02102**

### **CLEARING AND GRUBBING**

#### **PART 1 - GENERAL**

##### **1.01 GENERAL DESCRIPTION OF WORK:**

- A. Clearing and grubbing on project site of trees, stumps, brush, roots, vegetation, logs, rubbish and other objectionable matter within limits described in specifications or as shown on plans.
- B. Clearing and grubbing shall be in advance of grading operation except that in cuts over 3 feet in depth, grubbing may be done simultaneously with excavation, provided objectionable matter is removed as specified.
- C. Disposal of all debris resulting from clearing and grubbing work.

##### **1.02 PROTECTION OF ADJACENT WORK:**

- A. Protect all areas outside indicated construction areas.
- B. Protect existing improvements, adjacent property, utilities and other facilities, and trees and plants not to be removed from injury or damage.

#### **PART 2 - PRODUCTS**

##### **2.01 MATERIALS:**

- A. Provide materials required to perform work as specified.

#### **PART 3 - EXECUTION**

##### **3.01 CLEARING:**

- A. Clear all areas covered by dikes, roads, structures and embankments within project limits unless otherwise shown in plans.
- B. Remove all saplings, brush, down-timber and debris unless shown or directed otherwise.
- C. Use tree wound paint to treat scars, gashes or limb stubs on trees not removed.

### 3.02 GRUBBING:

- A. Trees, stumps, root systems, rocks and other obstructions shall be removed to the depths shown when they fall within the construction templates for the following items:
  - 1. Footings 18" below bottom of footing
  - 2. Sidewalks (or other types of walks) 12" below bottom of walk
  - 3. Roadways or Streets 18" below bottom of sub-grade
  - 4. Parking Areas 18" below bottom of sub-grade
  - 5. Grassed Areas 18" below top soil
  - 6. Fills 24" below bottom of fill
- B. Blasting not permitted.

### 3.03 REMOVAL OF DEBRIS AND CLEANUP:

- A. Burn as permitted by regulating agencies or the ENGINEER as work progresses.
- B. Unguarded fires will not be permitted.
- C. Permits will be obtained, where required, for necessary burning or disposal sites.
- D. Dispose of all waste materials not burned by removal from site.
- E. Materials cleared and grubbed shall be the property of the CONTRACTOR and shall be his responsibility for disposal.

## **PART 4 - MEASUREMENT AND PAYMENT**

### 4.01 CLEARING AND GRUBBING:

- A. Clearing and Grubbing shall be measured for payment either in acres or by lump sum only for areas indicated on the plans, or as provided in the proposal and contract.
- B. When not listed as a separate contract pay item, Clearing and Grubbing shall be considered as incidental work, and the cost thereof shall be included in such contract pay items as are provided in the proposal contract.
- C. Compensation, whether by contract pay items or incidental work will be furnishing all materials, labor, equipment, tools and incidentals required for the work, all in accordance with the plans and these specifications.

**\*\*\*END OF SECTION\*\*\***

## **SECTION 02210**

### **SUBGRADE PREPARATION**

#### **PART 1 - GENERAL**

##### **1.01 GENERAL DESCRIPTION OF WORK:**

- A. This work shall consist of scarifying, blading and rolling the sub-grade to obtain a uniform texture and provide as nearly as practical a uniform density for the 6-inches of the sub-grade.

#### **PART 2 - PRODUCTS**

#### **PART 3 - EXECUTION**

##### **3.01 CONSTRUCTION METHODS:**

- A. All preparing of the right-of-way and/or clearing and grubbing shall be complete before starting the sub-grade preparation.
- B. The sub-grade shall be scarified and shaped in conformity with the typical sections and the lines and grades indicated or as established by the ENGINEER by the removal of existing material or addition of approved material.
- C. All unsuitable material shall be removed and replaced with approved material.
- D. All foundations, walls or other objectionable material shall be removed to a minimum depth of 18-inches under all structures and 12-inches under areas to be vegetated. All holes, ruts and depressions shall be filled with approved material.
- E. The surface of the sub-grade shall be finished to the lines and grades as established and be in conformity with the typical sections indicated.
- F. Any deviation in excess of 1/2 inch cross section and in a length of 10 feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and compacting by sprinkling and rolling.
- G. Sufficient sub-grade shall be prepared in advance to insure satisfactory prosecution of the work.
- H. The CONTRACTOR will be required to set blue tops for the sub-grade on centerline, at quarter points and curb lines or edge of pavement at intervals not exceeding 50 feet.
- I. All suitable material removed may be utilized in the sub-grade with the approval of the ENGINEER. All other material required for completion of the sub-grade shall also be subject to approval by the ENGINEER.

- J. Sub-grade materials on which structures shall be placed shall be compacted by approved mechanical tamping equipment to a dry density of the total material of not less than 95 percent nor more than 100 percent of the maximum dry density s determined in accordance with SDHPT test method tex-114-E.
- K. Sub-grade materials on which planting or turf will be established shall be compacted to a minimum of 85 percent of the maximum dry density as determined in accordance with SDHPT test method tex-114-E.
- L. Tests for density will be made as soon as possible after compacting operations are completed. If the material fails to meet the density specified, it shall be reworked as necessary to obtain the density required.
- M. Just prior to placing any base materials, density and moisture content of the top 6-inches of compacted sub-grade shall be checked and if tests show the density to be more than 2 percent below the specified minimum or the moisture content to be more than 3 percent above or below the optimum, the sub-grade shall be reworked as necessary to obtain the specified compaction and moisture content.
- N. When lime stabilization of the sub-grade is specified, the lime is to be added in accordance with Section 02240, Lime Stabilization.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### **4.01 MEASUREMENT:**

- A. All acceptable sub-grade preparation will be measured by the square yard.
- B. The measured area includes the entire width of the roadway for the entire length as indicated.

##### **4.02 PAYMENT**

- A. The accepted quantities of sub-grade preparation will be paid for at contract unit bid price per square yard.
- B. When not listed as a separate contract pay item, sub-grade preparation shall be considered as incidental work, and the cost thereof shall be included in such contract pay item (s) as are provided in the proposal contract.
- C. Compensation, whether by contract pay item or incidental work will be for furnishing all materials, labor, equipment, tools and incidentals required for the work, all in accordance with the plans and these specifications.

**\* \* \* END OF SECTION \* \* \***

## SECTION 02225

### UNCLASSIFIED STREET EXCAVATION

#### PART 1 - GENERAL

##### 1.01 GENERAL DESCRIPTION OF WORK:

- A. Perform all required excavation within the limits of right-of-way and adjacent thereto (except excavations specifically described and provided for elsewhere in the specifications).
- B. Remove, properly use, or dispose of all excavated materials.
- C. Shape and finish all earthwork in conformance with lines and grades as shown on the plans or as specified by the ENGINEER.
- D. Schedule work to avoid property owner inconvenience as practical during construction.
- E. Exercise care in operating applicable equipment beneath or adjacent to trees, sidewalks, poles, and other existing features to prevent damage.
- F. Restore obstructions removed to accommodate construction equipment or to facilitate excavation.

##### 1.02 CLASSIFICATION:

- A. All street excavation shall be unclassified, regardless of material encountered.
- B. Any reference to rock or any other material on the plans, or in these specifications, is not to be construed as classification of the excavation.

#### PART 2 - PRODUCTS

##### 2.01 SUBGRADE:

- A. Use on-site material moved from cut areas to fill areas as approved by ENGINEER.
- B. Use borrow materials from areas designated as needed.

##### 2.02 DRAINAGE PROVISIONS:

- A. Interruptions of natural surface drainage, or flow of artificial drains shall be mitigated by the CONTRACTOR by use of temporary drainage facilities, as approved by the ENGINEER, to prevent damage to public or private interest.

- B. Restore original drainage as soon as the work shall permit.
- C. The CONTRACTOR shall be held liable for all damages which may result from neglect to provide for either natural or artificial drainage which his work may have interrupted.

### **PART 3 - EXECUTION**

#### **3.01 UNCLASSIFIED STREET EXCAVATION:**

- A. Perform all excavation, embankment and grading required for pavement and/or curb and/or gutter as shown on plans.
- B. Move suitable excavated material to areas requiring fill and place in accordance with these specifications. Determination of suitable material will be made by ENGINEER. Haul unsuitable material to waste sites.
- C. Slope cut or fill sections uniformly from curb line to sidewalk or other controlling feature, as designated by ENGINEER. Smooth bank to provide a neat finished appearance.
- D. Remove and replace unstable soils encountered during grading operations with suitable material. Notify ENGINEER of suspected unsuitable material before commencing removal. Authorized replacement with select material will be paid for by change order.
- E. Replace gravel or rock driveway surfaces disturbed by grading with like material at no additional cost to OWNER.
- F. Strip, salvage and stockpile topsoil in sufficient quantity to allow a uniform 6-inch lift over all disturbed areas not otherwise surfaced. Topsoil is included in unclassified excavation.
- G. Removed existing culvert pipe where shown as part of incidental to unclassified excavation.

#### **3.02 UNSTABLE OR UNSUITABLE SUBGRADE:**

- A. Excavate unstable subgrade at least 2 feet below grade where directed by ENGINEER.
- B. Replace with suitable stable material approved by ENGINEER.
- C. Compact to uniform density in 6-inch lifts.
- D. Density of compacted subgrade to be equal to or greater than adjacent undisturbed grade.

- E. Payment will be as specified for unclassified excavation.
- F. Conduct operations in such a manner such that measurements may be taken before any backfill, as required above, is placed.

### **3.03 EXCESS OR UNSUITABLE EXCAVATION:**

- A. Dispose of excavation in excess of that needed or unsuitable for construction. As directed by the ENGINEER, excess or unsuitable excavation may be used for widening of embankments, or flattening of slopes, or as otherwise specified.
- B. Obtain approval of the ENGINEER as to disposition and method for disposal of excess or unsuitable excavation.

### **3.04 GENERAL:**

- A. Provide all labor, equipment and associated materials to excavate areas specified.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.01 UNCLASSIFIED STREET EXCAVATION:**

- A. Unclassified street excavation, as authorized, shall be measured in its original position and the volume determined by the average end area method. All work performed shall be paid for at the contract bid price per cubic yard for unclassified street excavation.
- B. When not listed as a separate contract pay item, unclassified street excavation shall be considered as incidental work, and the cost thereof shall be included in such contract pay items as are provided in the proposal contract.
- C. Compensation, whether by contract pay item or incidental work will be for furnishing all materials, labor, equipment, tools and incidentals required by the work, all in accordance with the plans and these specifications.

**\* \* \* END OF SECTION \* \* \***

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## SECTION 02230

### EXCAVATION

#### PART 1 - GENERAL

##### 1.01 GENERAL DESCRIPTION OF WORK

- A. This work shall consist of excavating and properly utilizing or otherwise satisfactorily disposing of all excavated materials, of whatever character, within the limits of work.
- B. Excavation shall also consist of constructing, compacting, shaping and finishing of all earthwork in designated areas on the plans, as specified herein, and in conformity with the required lines grades and typical cross sections or as directed by the ENGINEER.
- C. When not otherwise included, this item shall include the work described in Section 02101 - Preparation of Right-of Way, Section 02102 - Clearing and Grubbing, Section 02236 - Embankment, Section 02238 - Removal of Concrete, and Section 02210 - Sub-grade Preparation.

#### Introduction

The Occupational Safety and Health Administration (OSHA) issued its first Excavation and Trenching Standard in 1971 to protect workers from excavation hazards. Since then, OSHA has amended the standard several times to increase worker protection and to reduce the frequency and severity of excavation accidents and injuries. Despite these efforts, excavation-related accidents resulting in injuries and fatalities continue to occur.

To better assist excavation firms and contractors, OSHA has completed updated the existing standard to simplify many of the existing provisions, add and clarify definitions, eliminate duplicate provisions and ambiguous language, and give employers added flexibility in providing protection for employees. The standard is effective as of March 5, 1990.

In addition, the standard provides several new appendices. One appendix provides a consistent method of soil classification. Others provide sloping and benching requirements pictorial examples of shoring and shielding devices, timber tables, hydraulic shoring tables, and selection charts that provide a graphic summary of the requirements contained in the standard.

This booklet highlights the requirements in the updated standard excavation and trenching operations, provides methods for protecting employees against cave-ins, and described safe work practices for employees.

#### Scope and Application

OSHA's revised rule applies to all open excavations in the earth's surface, which includes

trenches.

According to the OSHA construction safety and health standards, a trench is referred to as a narrow excavation made below the surface of the ground in which the depth is greater than the width-the width not exceeding 15 feet. An excavation is any man-made cut, cavity, trench, or depression in the earth's surface formed by earth removal. This can include excavations for anything from cellars to highways.

## General Requirements

### Planning for Safety

Many on-the-job accidents are a direct result of inadequate initial planning. Correcting mistakes in shoring and/or sloping after work has begun slows down the operation, adds to the cost, and increases the possibility of an excavation failure. The contractor should build safety into the pre-bid planning in the same way all other pre-bid factors are considered.

It is a good idea for contractors to develop safety checklists before preparing a bid, to make certain there is adequate information about the job site and all needed items are on hand.

These checklists should incorporate elements of the relevant OSHA standards as well as other information necessary for safe operations.

Before preparing a bid, these specific site conditions should be taken into account:

- Traffic,
- Nearness of structures and their conditions,
- Soil,
- Surface and ground water,
- The water table,
- Overhead and underground utilities and
- Weather.

These and other conditions can be determined by job site studies, observations, test borings for soil type or conditions, and consultations with local officials and utility companies.

Before any excavation actually begins, the standard requires the employer to determine the estimated location of utility installations-sewer, telephone, fuel, electric, water lines, or any other underground installations-that may be encountered during digging. Also, before starting the excavation, the contractor must contact the utility companies or owners include and inform them, within established or customary local response times, of the proposed work. The contractor must also ask the utility companies or owners to find the exact location of the underground installations. If they cannot respond within 24 hours (unless the period required by the state or local law is longer), or if they cannot find the exact location of the utility installations, the contractor may proceed with caution. To find the exact location of underground installations, workers must use safe and acceptable means. If underground installations are exposed, OSHA regulations also require that they be removed, protected or properly supported.

When all necessary specific information about the job site is assembled, the contractor is ready

to determine the amount, kind, and cost of safety equipment needed. A careful inventory of the safety items on hand should be made before deciding what additional safety material must be acquired. No matter how many trenching, shoring and backfilling jobs have been done in the past, each job should be approached with the utmost care and preparation.

## **Before Beginning the Job**

It is important, before beginning the job, for the contractor to establish and maintain a safety and health program for the work site that provides adequate systematic policies, procedures, and practices to protect employees from, and allow them to recognize, job-related safety and health hazards.

An effective program includes provisions for the systematic identification, evaluation, and prevention or control of general workplace hazards, specific job hazards, and potential hazards that may arise from foreseeable conditions. The program may be written or verbal but it should reflect the unique characteristics of the job site.

To help contractors develop an effective safety and health program, in 1989 OSHA issued recommended guidelines for the effective management and protection of worker safety and health. The complete original text of the non-mandatory guidelines is found in the Federal Register (54 FR(18):3904-3916, January 26, 1989).

A copy of the guidelines can be obtained from the OSHA Publications Office, U.S. Department of Labor, 20 Constitution Avenue, N.W., Room N-3101, Washington, D.C. 20210, or from the nearest OSHA Regional Office listed in this booklet.

To be sure safety policies are implemented effectively, there must be cooperation among supervisors, employee groups, including union, and individual employees. Each supervisor must understand the degree of responsibility and authority he or she holds in a particular area. For effective labor support, affected unions should be notified of construction plans and asked to cooperate.

It is also important, before beginning work, for employers to provide employees who are exposed to public vehicular traffic with warning vests or other suitable garments marked with or made of reflectorized or high-visibility material and ensure that they wear them. Workers must also be instructed to remove or neutralize surface encumbrances that may create a hazard.

In addition, no employee should operate a piece of equipment, without first being properly trained to handle it and fully alerted to its potential hazards.

In the training and in the site safety and health program, it also is important to incorporate procedures for fast notification and investigation of accidents.

## **On-the-Job Evaluation**

The Standard requires that a competent person inspect, on a daily basis, excavations and the adjacent areas for possible cave-ins, failures of protective systems and equipment, hazardous

atmospheres, or other hazardous conditions. If these conditions are encountered, exposed employees must be removed from the hazardous area until the necessary safety precautions have been taken. Inspections are also required after natural (e.g. heavy rains) or man-made events such as blasting that may increase the potential for hazards.

Larger and more complex operations should have a full-time safety official who makes recommendations to improve the implementation of the safety plan. In a smaller operation, the safety official may be part-time and usually will be a supervisor.

Supervisors are the contractor's representatives on the job. Supervisors should conduct inspections, investigate accidents, and anticipate hazards. They should ensure that employees receive on-the-job safety and health training. They should also review and strengthen overall safety and health precautions to guard against potential hazards, get the necessary worker cooperation in safety manners, and make frequent reports to the contractor.

It is important that managers and supervisors set the example for safety at the job site. It is essential that when visiting the job site, all managers, regardless of status, wear the prescribed protective equipment such as safety shoes, safety glasses, hard hats, and other necessary gear (see CFR 1926.100 and 102).

Employees must also take an active role in job safety. The contractor and supervisor should make certain that workers have been properly trained in the use and fit of the prescribed protective gear and equipment, that they are wearing and using the equipment correctly, and that they are using safe work practices.

### Cave-Ins and Protective Support Systems

#### **Support Systems**

Excavation workers are exposed to many hazards, but the chief hazard is danger of cave-ins. OSHA requires that in all excavation employees exposed to potential cave-ins must be protected by sloping, or benching the sides of the excavation; supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

Designing a protective system can be complex because of the number of factors involved-soil classification, depth of cut, water content of soil, changes due to weather and climate, or other operation in the vicinity. The standard, however, provides several different methods and approaches (four for sloping and four for shoring, including the use of shields)\* for designing protective systems that can be used to provide the required level of protection against cave-ins.

One method of ensuring the safety and health of workers in an excavation is to slope the side to an angle not steeper than one and one-half horizontal to one vertical (34 degrees measured from the horizontal). These slopes must be excavated to form configurations that are in accordance with those for Type C soil found in Appendix B of the standard. A slope of this graduation or less is considered safe for any type soil (see Figure 1).

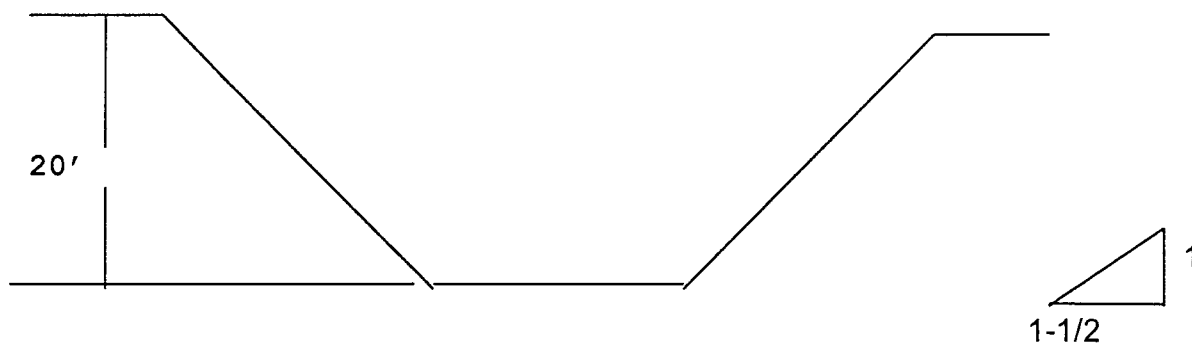


Figure 1. Excavations Made in Type C Soil

All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1 1/2:1.

\*See Appendix F to the standard for a complete overview of all options.

A second design method, which can be applied for both sloping and shoring, involves using tabulated data, such as tables and charts, approved by a registered professional engineer. These data must be in writing and must include sufficient explanatory information to enable the user to make a selection, including the criteria for determining the selection and the limits on the use of the data.

At least one copy of the information, including the identity of the registered professional engineer who approved the data, must be kept at the worksite during construction of the protective system. Upon completion of the system, the data must be stored away from the job site, but a copy must be made available, upon request, to the Assistant Secretary of Labor for OSHA.

Contractors also may use a trench box or shield that is either designed or approved by a registered professional engineer or is based on tabulated data prepared or approved by a registered professional engineer. Timber, aluminum, or other suitable materials may also be used. OSHA standards permit the use of a trench shield (also known as a welder's hut) as long as the protection it provides is equal to or greater than the protection that would be provided by the appropriate shoring system (see Figure 2).

The employer is free to choose the most practical design approach for any particular circumstance. Once an approach has been selected, however, the required performance criteria must be met by that system.

The standard does not require the installation and use of a protective system when an excavation (1) is made entirely in stable rock, or (2) is less than 5 feet deep and a competent person has examined the ground and found no indication of a potential cave-in.

## Safety Precautions

The standard requires the employer to provide support systems such as shoring, bracing, or

underpinning to ensure the stability of adjacent structures such as buildings, walls, sidewalks or pavements.

## Figure 2. Trench Shields

The standard prohibits excavation below the level of the base or footing of any foundation or retaining wall unless (1) a support system such as underpinning is provided, (2) the excavation is in stable rock, or (3) a registered professional engineer determines that the structure is sufficiently removed from the excavation and that excavation will not pose a hazard to employees.

Excavations under sidewalks and pavements are also prohibited unless an appropriately designed support system is provided or another effective method is used.

### Installation and Removal of Protective Systems

The standard requires the following procedures for the protection of employees when installing support systems:

- Securely connect members of support system,
- Safely install support systems,
- Never overload members of support systems, and
- Install other structural members to carry loads imposed on the support system when temporary removal of a individual members is necessary.

In addition, the standard permits excavation of 2 feet or less below the bottom of the members of a support or shield system of a trench if (1) the system is designed to resist the loads calculated for the full depth of the trench, and (2) there are no indications, while the trench is open, of a possible cave-in below the bottom of the support system. Also, the installation of support systems must be closely coordinated with the excavation of trenches.

As soon as work is completed, the excavation should be back-filled as the protective system is designated. After the excavation has been cleared, workers should slowly remove the protective system from the bottom up, taking care to release members slowly.

### Materials and Equipment

The employer is responsible for the safe condition of materials and equipment used for protective systems. Defective and damaged materials and equipment can result in the failure of a protective system and cause excavation hazards.

To avoid possible failure of a protective system, the employer must ensure that (1) materials and equipment are free from damage or defects, (2) manufactured materials and equipment are used and maintained in a manner consistent with the recommendations of the manufacture and in a way that will prevent employee exposure to hazards, and (3) while in operation, damaged materials and equipment are examined by a competent person to determine if they are suitable

for continued use. If the materials and equipment are not safe for use, they must be removed from service. These materials cannot be returned to service without the evaluation and approval of a registered professional engineer.

## **Other Hazards**

### **Falls and Equipment**

In addition to cave-in hazards and secondary hazards related to cave-ins, there are other hazards from which workers must be protected during excavation-related work. These hazards include exposure to falls, falling loads, and mobile equipment. To protect employees from these hazards, OSHA requires the employer to take the following precautions:

- Keep materials or equipment that might fall or roll into an excavation at least 2 feet from the edge of excavations, or have retaining devices, or both.
- Provide warning systems such as mobile equipment, barricades, hand or mechanical signals, or stop logs, to alter operations of the edge of an excavation. If possible, keep the grade away from the excavation.
- Provide scaling to remove loose rock or soil or install protective barricades and other equivalent protection to protect employees from the hazard of falling, rolling, or sliding material or equipment.
- Prohibit employees from working on faces of sloped or benched excavations at levels above other employees unless employees at lower levels are adequately protected from the hazard of falling, rolling, or sliding material or equipment.
- Prohibit employees under loads that are handled by lifting or digging equipment. To avoid being struck by any spillage or falling materials, require employees to stand away from vehicles being loaded or unloaded. If cabs of vehicles provide adequate protection from falling loads during loading and unloading operations, the operators may remain in them.

### **Water Accumulation**

The standard prohibits employees from working in excavations where water has accumulated or is accumulating unless adequate protection has been taken. If water removal equipment is used to control or prevent water from accumulating, the equipment and operations of the equipment must be monitored by a competent person to ensure proper use.

OSHA standards also require that diversion ditches, dikes, or other suitable means be used to prevent surface water from entering an excavation and to provide adequate drainage of the area adjacent to the excavation. Also, a competent person must inspect excavations subject to runoffs from heavy rains.

### **Hazardous Atmospheres**

Under this provision, a competent person must test excavations greater than 4 feet in depth as well as ones where oxygen deficiency or a hazardous atmosphere exists or could reasonably be expected to exist, before an employee enters the excavation. If hazardous conditions exist, controls such as proper respiratory protection or ventilation must be provided. Also, controls

used to reduce atmospheric contaminants to acceptable levels must be tested regularly.

Where adverse atmospheric conditions may exist or develop in an excavation, the employer also must provide and ensure that emergency rescue equipment, (e.g., breathing apparatus, a safety harness and line, basket stretcher, etc.) is readily available. This equipment must be attended when used.

When an employee enters bell-bottom pier holes and similar deep and confined footing excavations, the employee must wear a harness with a lifeline. The lifeline must be securely attached to the harness and must be separate from any line used to handle materials. Also, while the employee wearing a lifeline is in the excavation, an observer must be present to ensure that the lifeline is working properly and to maintain communication with the employee.

## **Access and Egress**

Under the standard, the employer must provide safe access and egress to all excavations. According to OSHA regulations, when employees are required to be in trench excavations 4-feet deep or more, adequate means of exit, such as ladders, steps, ramps or other safe means of egress, must be provided and be within 25 feet of lateral travel. If structure ramps are used as a means of access or egress, they must be designed by a competent person if used for employee access or egress, or a competent person qualified in structural design if used by vehicles. Also, structural members used for ramps or runways must be uniform in thickness and joined in a manner to prevent tripping or displacement.

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## **Related Issues**

### **Hazard Communication**

The Hazard Communication Standard (29 CFR 1910.1200) requires employers to inform employees of the identities, properties, characteristics, and hazards of chemicals they use and the protective measures they can take to prevent adverse effects. The standard covers both physical hazards (e.g., flammability) and health hazards (e.g., lung damage, cancer). Knowledge acquired under the Hazard Communication Standard will help employers provide safer workplaces for their employees, establish proper work practices, and help prevent chemical-related illnesses and injuries.

### **Access to Medical and Exposure Records**

Under the provision of the Access to Medical and Exposure Records standard (29 CFR 1910.20), employees, their designated representatives, and OSHA are permitted direct access to employer-maintained exposure and medical records. This access is designed to yield both direct and indirect improvements in the detection, treatment, and prevention of occupational disease. Also, access to these records will assist employees in the management of their own safety and health.

## Recordkeeping

Each employer must preserve and maintain accurate medical and exposure records for each employee. The standard requires that exposure records be kept for 30 years and medical records be kept for at least the duration of employment plus 30 years. Background data for exposure records such as laboratory reports and work sheets need to be kept only for 1 year. Records of employees who have worked for less than 1 year need not be retained after employment, but the employer must provide these records to the employee upon termination of employment. First-aid records of one-time treatment need not be retained for any specified period.

The employer must inform each employee of the existence, location, and availability of these records. When an employer plans to stop doing business and there is no successor employer to receive and maintain these records, the employer must notify employees of the right to access of the records at least 3 months before the employer ceases to do business. At the same time, the employer also must inform the National Institute for Occupational Safety and Health.

## State Plan States

States administering their own occupational safety and health program (see listing on page ), through plans approved under section 18(b) of the Occupational Safety and Health Act of 1970, must adopt standards and enforce requirements at least as effective as Federal requirements. There are currently 25 State plan States; 23 covering private and public (State and local government) sectors and two covering public sector only.

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### Summary

Trenching and excavation work presents serious risks to all workers involved. The greatest risk, and one of primary concern, is that of cave-ins. Furthermore, when cave-in accidents occur, they are much more likely to result in worker fatalities than other excavation-related accidents. Strict compliance, however, with all sections of the standard will prevent or greatly reduce the risk of cave-ins as well as other excavation-related accidents.

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## **Related Publications**

A single free copy of the following publications can be obtained from the OSHA Publications Office, U.S. Department of Labor, 200 Constitution Avenue, N.W., Room N-301, Washington, D.C., 20210.

Please send a self-addressed label with your request.

All about OSHA - OSHA 2056

Chemical Hazard Communication - OSHA 3084

Construction Industry Digest - OSHA 2207

Consultation Services for the Employer - OSHA 3047

Ground-Fault Protection on Construction Sites - OSHA 3007

OSHA Inspections - OSHA 2098

OSHA: Safety and Health is our Middle Name - OSHA 3076

Personal Protective Equipment - OSHA 3077

Respiratory Protection - OSHA 3079

Safety and Health Program Management Guidelines  
(Federal Register (54 FR (18):3904-3916, January 1989))

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A Hazard Communication Compliance Kit may be ordered from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402 for \$18.00 (\$22.00 for foreign addresses). OSHA Publication 3104, GPO order No. 929-022-00000-9. The kit can be ordered from GPO by phone using Visa or Mastercard; call (202)783-3238.

\* U.S. Government Printing Office: 1991 282-150/45367

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- These states and territories operate their own OSHA-approved job safety and health programs (Connecticut and New York plans cover public employees only). States with

approved programs must have a standard that is identical to or at least as effective as, the federal standard.

## **PART 2 - PRODUCTS**

### **2.01 CLASSIFICATION**

- A. All excavations shall be unclassified as shall include all materials encountered regardless of their nature or the manner in which they are removed.

## **PART 3 - EXECUTION**

### **3.01 CONSTRUCTION METHODS**

- A. Prior to commencing this work, all erosion control and tree protection measures required shall be in place and all utilities located and protected.
- B. Construction equipment shall not be operated within the drip line of trees, unless otherwise indicated.
- C. Construction materials shall not be stockpiled under the canopies of trees. No excavation or embankment shall be placed within the drip line of trees until tree wells are constructed.
- D. All excavation shall be performed as specified herein and shall conform to the established alignment, grades and cross sections.
- E. Suitable excavated materials shall be utilized, in so far as practical, in constructing required embankments.
- F. The construction of all embankments shall conform to Section 02236 - Embankment. No material shall be stockpiled within the banks of a waterway.
- G. Unsuitable excavated materials or excavation in excess of that needed for construction shall be known as "Waste" and shall become the property of the CONTRACTOR and it shall become his sole responsibility to dispose of this material off the limits of the right-of-way in an environmentally sound manner at a permitted disposal site.
- H. Adequate dewatering and drainage of excavation shall be maintained throughout the time required to complete the work.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.01 MEASUREMENT**

- A. Measurement of the volume of excavation in cubic yards by the average end areas. Cross sectional areas shall be computed from the existing ground section to the established line of the sub-grade, as shown on typical sections for the limits

of the right-of-way or other work limits, including parkway slopes and sidewalk areas.

- B. Measurement of the area in square yards of surface area excavated as shown on the typical sections included in the plans.
- C. Measurement of the volume of excavation is in cubic yards, based upon the average end areas taken from pre-construction cross sections and planned grades. The planned quantities for excavation will be used as the measurement for payment for this item.

#### **4.02 PAYMENT**

- A. This item will be paid for at the contract unit price bid for "Excavation", as provided under the measurement method as included in the bid, which price shall be full compensation for all work herein specified including: dewatering, drainage, sub-grade preparation, unless otherwise indicated and the furnishing of all materials, equipment, tools, labor and incidentals necessary to complete the work.
- B. When not listed as a separate contract pay item, excavation shall be considered as incidental work, and the cost thereof shall be included in such contract pay item(s) as are provided in the proposal contract.
- C. Compensation, whether by contract pay item or incidental work will be furnishing all materials, labor, equipment, tools and incidentals required for the work, all in accordance with the plans and these specifications.

**\* \* \* END OF SECTION \* \* \***



## SECTION 02238

### REMOVAL OF CONCRETE

#### PART 1 - GENERAL

##### 1.01 GENERAL DESCRIPTION OF WORK:

- A. This work shall consist of breaking up, removing and satisfactorily disposing of existing concrete, as classified, at locations indicated or as directed by the Engineer.
- B. Existing concrete, when under this section, will be classified as follows:
  - 1. Concrete Curb will include curb, curb and gutter combinations thereof.
  - 2. Concrete Slabs will include, but not be limited to, patio slabs, porch slabs, concrete riprap and concrete pavement.
  - 3. Sidewalks and Driveways will include concrete sidewalks and driveways.
  - 4. Concrete Walls will include all walls regardless of height and wall footings.
  - 5. Concrete Steps will include all steps and combinations of walls and steps.
  - 6. Abandoned Foundations will include abandoned Electric Department foundations.
  - 7. Miscellaneous Concrete shall include but not be limited to manholes, inlets, junction boxes and headwalls.

#### PART 2 PRODUCTS

##### 2.01 MORTAR:

- A. Mortar, for repair of existing concrete structures, shall conform to the requirements thereof in Section 03300 - Cast-In-Place Concrete.

#### PART 3 - EXECUTION

##### 3.01 CONSTRUCTION METHODS:

- A. Prior to commencing this work, all erosion control and tree protection measures required shall be in place and all utilities located and protected. The existing concrete shall be broken up, removed to conform to Section 02101 - "Preparing Right-of-Way" and disposed of by the Contractor and deposited at a permitted disposal site.
- B. Where only a portion of the existing concrete is to be removed and that remaining will continue to serve in its purpose, care shall be exercised to avoid damage to that portion to remain in place.
- C. The existing concrete shall be cut to the neat lines when indicated or as established by the Engineer, by sawing with an appropriate type circular concrete

saw to a minimum depth of 1/2 inch.

- D. Any reinforcing steel encountered shall be cut off 1 inch inside of concrete sawed line. Any existing concrete which is damaged or destroyed beyond the neat lines so established shall be replaced at the Contractor's expense.
- E. Remaining concrete shall be mortared to protect the reinforcing steel and provide a neat clean appearance.
- F. Where reinforcement is encountered in the removed portions of structures to be modified, a minimum of 1 foot of steel length shall be cleaned of all old concrete and left in place to tie into the new construction where applicable.
- G. All unsuitable material shall be removed and replaced with approved material.
- H. All foundation, walls or other objectionable material shall be removed to a minimum depth of 18 inches below all structures and 12 inches below areas to be vegetated.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### **4.01 MEASUREMENT:**

- A. Concrete curb and concrete wall removed as prescribed above will be measured by the linear foot in its original position regardless of the dimensions or size.
- B. Concrete slabs and concrete sidewalks and driveways removed as prescribed above will be measured by the square foot in original position, regardless of the thickness and reinforcing.
- C. Concrete steps removed will be measured per linear foot of each individual step tread including the bottom step.
- D. Concrete foundation removed will be measured per each.
- E. Miscellaneous concrete removed will be measured per each.

##### **4.02 PAYMENT:**

- A. This item will be paid for at the contract unit price bid for "Removed Concrete Curb", "Removed Concrete Slab", "Remove Concrete Sidewalks and Driveways", "Removed Concrete Foundations" and "Remove Miscellaneous Concrete" which price shall be full compensation for all work herein specified, including the disposal of all material not required in the work, the furnishing of all materials, equipment, tools, labor and incidentals necessary to complete the work.
- B. When not listed as a separate contract pay item, removal of concrete shall be considered as incidental work, and the cost thereof shall be included in such contract pay item(s) as are provided in the proposal contract.

- C. Compensation, whether by contract pay item or incidental work will be for furnishing all materials, labor, equipment, tools and incidentals required for the work, all in accordance with the plans and these specifications.

**\* \* \* END OF SECTION \* \* \***



## **SECTION 02242**

### **ROAD STABILIZER**

#### **PART 1 – GENERAL**

This Item includes the scarifying, reclaiming, mixing, stabilizing, addition of Roadbond EN-1™ stabilizer, and/or approved equal, compacting of the existing reclaimed base material or subgrade, with or without adding new base material, and pavement surface conforming to the lines, grades, thickness, and typical sections shown on the Plans.

#### **PART 2 – DESCRIPTION**

This specification shall govern for any liquid stabilizer equal or approved equal to patented EN-1 intended primarily as a material stabilizer for mixing and compacting material in accordance with specifications governing base and/or subgrade courses. The approved stabilizer must be able to enhance the compressive strength, increase load bearing capacity of soil, increase Triaxial strength, reduce swelling, shrinkage and permeability, insure proper compaction and reduce maintenance upkeep through reduction of potential failures.

#### **PART 3 – MATERIAL**

The soil stabilizer will be a sulfonated D-limonene bioenzyme containing a strong oxidizer, a powerful solvent and natural dispersant that interacts with natural road materials. This material is a corrosive in its concentrated state; once mixed with required volume of water it becomes a non-corrosive, which has been approved by the EPA.

#### **PART 4 – EQUIPEMNT**

The Contractor is to furnish a pulverizing machine, approved by the Engineer, which has the capability of pulverizing and mixing existing materials and additives, in place, to depth shown on the Plans. The equipment must also have the capability of grading crushed material to sizes less than one and one-half (1½) inches. The machine will use two (2) passes in establishing the reworked base and/or subgrade, if applicable. (Not to be exceeded without Engineers approval; minimum of one (1) pass).

The Contractor is to furnish a water distributor truck equipped with and/or without an agitator, which will keep the stabilizer liquid and water in consistent mixture.

The machinery, tools and equipment necessary for proper prosecution of the work to be on the project and approved by the Engineer prior to the beginning of construction operations. All machinery, tools and equipment used to be maintained in a satisfactory working condition. The Contractor is to employ adequate methods in performing the work and is to conduct his operations in a satisfactory and workmen like manner.

#### **PART 5 – DELIVERY STORAGE AND HADALING**

The liquid stabilizer shall be stored in closed, weatherproof containers until immediate distribution on the

road. If storage bins are used, they are to be completely enclosed. Road bond containers, to be stored under cover with adequate ventilated protection from flooding or damage. For mixing ease and safety, round up to the nearest 5-gallon increment (i.e. 72 gallons rounds up to 75 gallons). Insure manufacturer's safety and mixing instructions are followed without exception.

## **PART 6 – CONSTRUCTION METHODS**

### **6:01 GENERAL:**

Provide a completed course of treated materials containing a uniform mixture, free from loose or segregated areas, of uniform density and moisture content, well bound for its full depth, and with a smooth surface and suitable for placement of subsequent courses.

Regulate sequence work, use proper amounts of road stabilizer, maintain the work and rework the courses as necessary to meet the requirements of this specification.

Construct and shape roadbed to conform with typical sections, lines and grades as shown on the plans, or as directed by the ENGINEER.

Excavate materials to be treated to the proposed bottom of treatment grade, or secondary grade and remove or window to expose.

Correct any wet or unstable material below the secondary grade by scarifying, adding road stabilizer and compacting until uniform stability is achieved.

Use a cutting or pulverizing machine, as applicable, to remove subgrade material accurately to secondary grade and to pulverize the material at the same time. When cutting or pulverizing machine is used, the requirement for exposing and windowing the material is waived.

Roll subgrade before use of pulverizing machinery and correct any soft areas that rolling operations shall reveal.

Materials for new bases and sub-bases shall be delivered, placed and spread in the required amount per station. The material shall be thoroughly mixed prior in the same working day.

### **6:02 PREPERATION:**

Clean existing base material and pavement surface of all foreign (i.e. loose dirt, organics), unstable and objectionable material by means of blading, brooming or other approved methods, prior to scarifying.

Scarify the existing base material and pavement surface to the width and depth and to conform with the typical sections as shown on the Plans. Unless otherwise shown on the Plans, the existing base material and pavement surface to be pulverized into particles of no more than one and one-half (1½) inches in size. However, in no case, shall the underlying subgrade be disturbed, unless soft spots are encountered. Bring to the attention of the Engineer for approval to rework section before proceeding.

Additional new base material, when needed to meet depth requirements, to be placed and uniformly incorporated with scarified material. The scarified material to be mixed and shaped to

conform to the lines, grades, and typical sections as shown on the Plans. Correct or remove and replace areas of segregated material with well-graded material.

#### **6:03 APPLICATION:**

Liquid stabilizer is to be sprayed only on that area where the mixing operation can be completed during the same working day.

The application and mixing of the liquid stabilizer with the material shall be accomplished by the methods hereinafter described as Stabilizer Mix Spray Placing.

When Roadbond EN-1™ Stabilizer or approved equal is specified, the Contractor may use only method specified, unless otherwise noted on the Plans. Spray Placing, where Road Bond Stabilizer is specified and spray placement is to be used, the road bond to be mixed with water to form a mixture as specified below.

Roadbond is a concentrated liquid packaged in 5-gallon containers. The concentrate should be poured directly into the water of any standard water truck at the ratio of 300 gallons of water to one gallon of concentrate. The empty container should be rinsed three times with water and the rinse water should be poured back into the truck. The truck should be driven slowly and the brakes pumped gently to create a sloshing motion to mix the Roadbond EN-1™ with the water. The mixed solution will stay mixed and should not require agitation or circulation.

The stabilizer should be distributed evenly over the treated area until the proper amount of solution is in place. This application may require more than one distribution of solution until the proper amount of solution is in place.

#### **6:04 APPLICATION RATE:**

One gallon of stabilizer concentrate when diluted treats 30 cubic yards of base/subgrade material.

#### **6:05 MIXING:**

After application of the stabilizer in the proper amount, the treated material should be thoroughly mixed to the specified depth. At any time during installation, normal untreated water may be applied to the reacted area to obtain and maintain 1% to 2% (+) Optimum Moisture Content.

#### **6:06 COMPACTING:**

Unless otherwise shown on Plans, the scarified material is to be sprinkled with water as required and compacted to the extent necessary to provide not less than 95 percent of the optimum density as determined by TxDOT Test Tex-113-E. Subgrade density testing will be conducted in accordance with TxDOT Test Tex-114-E. Use sheepfoot roller or pneumatic rollers, or a combination for compacting the material to required density. A flat steel wheel may be used for final smoothing only. If reshaped base material fails to meet the density requirement or should the reshaped material, due to any reason or cause, lose the required stability, density or finish before the next course is placed, or the project is accepted, it is to be reworked by scarifying adding regular water, re-compacted, and refinished as necessary to obtain the required stability and density at the sole expense of the Contractor.

#### **6:07 MAINTENANCE:**

Maintain the completed lime treated material within the limits of contract, in condition satisfactory

to the ENGINEER as to grade, crown and cross section until surface course is constructed.

Immediately repair all irregularities and defects that may occur at no cost to the County and as directed by the ENGINEER.

#### **PART 7 – MEASUREMENT**

Measure by square yard at thickness specified on the Plans. Any reworked material found not meeting this thickness is to be removed and replaced at sole expense of the Contractor.

#### **PART 8 – PAYMENT**

The work performed and material furnished including all freight involved; for all unloading, storing and hauling; and for all labor, equipment, fuels, tools, and incidentals necessary to complete the work in accordance with this Item and measured as provided under "Measurement" will be made at the unit price bid for "Road Stabilizer", which price shall be full compensation for cleaning and scarifying the existing base material and pavement surface; for all manipulations including mixing, spreading, blading, shaping and finishing of new and scarified base material; and for furnishing all labor, tools, equipment, materials (including EN-1 additive), supplies, and incidentals necessary to complete the work. In the event that completion of work is delayed or postponed by adverse weather, no separate pay will be made to the Contractor to rework the base material to meet this Specification Item.

**\* \* \* END OF SECTION \* \* \***

## **SECTION 02601**

### **FLEXIBLE BASE**

#### **PART I - GENERAL**

##### **1.01 GENERAL DESCRIPTION OF WORK:**

- A. This work shall consist of furnishing and placing a foundation course for surface courses or for other base courses.
- B. Flexible base shall be composed of either caliche (argillaceous limestone, calcareous or calcareous clay particles, with or without stone, conglomerate, gravel, sand or other granular materials), crushed stone, gravel, iron ore topsoil, shell, or crushed slag.
- C. Flexible base shall be constructed as specified herein in one or more courses in conformance with details, lines and grades shown on the plans, and as established by the ENGINEER.

#### **PART 2 -PRODUCTS**

##### **2.01 MATERIALS:**

- A. Materials for flexible base shall be crushed or un-crushed as necessary to comply with the requirements hereinafter specified.
- B. Materials shall consist of durable course aggregate particles mixed with approved binding materials.

##### **2.02 LIME STABILIZATION:**

- A. Where shown on the plans, or directed by the ENGINEER, material for flexible base shall be lime stabilized in accordance with the provisions of Section 02240.

##### **2.03 TYPES:**

- A. Type A - Crushed or broken aggregate (excluding gravel aggregate).
- B. Type B - Gravel Aggregate
- C. Type C - Iron Ore Topsoil
- D. Type D - Shell Aggregate with Sand Admixture
- E. Type E - Shell Aggregate with Sand and Caliche Admixture
- F. Type F - Caliche

G. Type G - Crushed Slag

- H. Unless otherwise noted on the plans, the CONTRACTOR may use any one type of these types provided the material used meet the requirements set forth in the specification test limits herein.

**2.04 GRADES:**

- A. Unless otherwise shown on the plans or directed by the ENGINEER, the final course of base material shall consist of Grades 1,2,3, or 4, as specified in Table 02601-1.
- B. Base courses or sub-base materials, unless otherwise noted on the plans or directed by the ENGINEER, may consist of Grades 1, 2, 3, or 4, as specified in Table 02601-1.
- C. All grades shall, when tested in accordance with standard laboratory test procedures, meet the physical requirements set forth in Table 02601-1.
- D. Testing of flexible base materials shall be in accordance with the following test procedures:

| <u>TEST</u>                                       | <u>TESTING PROCEDURE</u>  |
|---------------------------------------------------|---------------------------|
| Preparation for soil constants and sieve analysis | TEX-101-E                 |
| Liquid Limit                                      | TEX-104-E                 |
| Plastic Limit                                     | TEX-105-E                 |
| Plasticity Limit                                  | TEX-106-E                 |
| Sieve Analysis                                    | TEX-110-E                 |
| Wet Ball Mill                                     | TEX-116-E                 |
| Triaxial Tests                                    | TEX-117-E ( Part I or II) |

- E. Unless otherwise specified on the plans, samples for testing the material for Soil constants, Gradation and Wet Ball Mill shall be taken prior to the compaction operations.
- F. Unless otherwise specified on the plans, samples for triaxial tests shall be taken from the stockpile or from production, as directed by the ENGINEER, where stockpiling is required and from production where stockpiling is not required.

TABLE 02601-1

**PHYSICAL REQUIREMENTS FOR FLEXIBLE BASE MATERIALS**

| GRADES                                                                  |                                                                                                                                                                                                                                 |                                                                                                                                                                                                |                                                                                                                                                                             |                            |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| TYPES                                                                   | GRADE 1:                                                                                                                                                                                                                        | GRADE 2:                                                                                                                                                                                       | GRADE 3:                                                                                                                                                                    | GRADE 4:                   |
|                                                                         | (Triaxial Class 1 Min compressive strength, psi: 45 at 0 psi lateral pressure and 175 at 15 psi lateral pressure.                                                                                                               | (Triaxial class 1 to 2.3) Min. compressive strength, psi: 35 at 0 psi lateral pressure and 175 at 15 psi lateral pressure.                                                                     | (Unspecified Triaxial Class)                                                                                                                                                |                            |
| TYPE A                                                                  | Retained on<br>Sq. Sieve                      %                                                                                                                                                                                 | Retained on<br>Sq. Sieve                      %                                                                                                                                                | Retained on<br>Sq. Sieve                      %                                                                                                                             |                            |
| Crushed or<br>Broken<br>Aggregate<br>(excluding<br>gravel<br>aggregate) | 1-3/4"..... 0<br>7/8"..... 10-35<br>3/8"..... 30-50<br>No. 4 ..... 45-65<br>No. 40 ..... 70-85<br>Max LL ..... 35<br>Max PI..... 10<br><b>Wet Ball Mill</b><br>Max Amt..... 40<br>Max Increase in<br>Passing<br>No. 40 ..... 20 | 1-3/4"..... 0-10<br>No. 4 ..... 45-75<br>No. 40 ..... 60-85<br>Max LL ..... 40<br>Max PI ..... 12<br><b>Wet Ball Mill</b><br>Max. Amt..... 50<br>Max Increase in<br>Passing<br>No. 40 ..... 20 | 1-3/4" ..... 0-10<br>No. 40 ..... 60-85<br>Max LL ..... 45<br>Max PI ..... 15<br><b>Wet Ball Mill</b><br>Max. Amt..... 55<br>Max. Increase in<br>Passing<br>No. 40 ..... 20 | As<br>Shown<br>On<br>Plans |
| TYPE B                                                                  | Retained on<br>Sq. Sieve                      %                                                                                                                                                                                 | Retained on<br>Sq. Sieve                      %                                                                                                                                                | Retained on<br>Sq. Sieve                      %                                                                                                                             |                            |
| Gravel<br>Aggregate                                                     |                                                                                                                                                                                                                                 | 1-3/4"..... 0-10<br>No. 4 ..... 30-75<br>No. 40 ..... 70-85<br>Max LL ..... 35<br>Max PI ..... 12                                                                                              | 1-3/4" ..... 0-5<br>No. 4 ..... 30-75<br>No. 40 ..... 65-85<br>Max. LL ..... 35<br>Max. PI ..... 12                                                                         | As<br>Shown<br>On<br>Plans |
| TYPE C                                                                  | Retained on<br>Sq. Sieve                      %                                                                                                                                                                                 | Retained on<br>Sq. Sieve                      %                                                                                                                                                | Retained on<br>Sq. Sieve                      %                                                                                                                             |                            |
| Iron Ore<br>Topsoil                                                     |                                                                                                                                                                                                                                 | 2-1/2"..... 0<br>No. 40 ..... 50-85<br>Max. LL ..... 35<br>Max. PI ..... 12                                                                                                                    | 2-3/4" ..... 0<br>No. 40 ..... 45-85<br>Max. LL ..... 35<br>Max. PI ..... 12                                                                                                | As<br>Shown<br>On<br>Plans |

**TABLE 02601-1 CONT'D**

| <b>TYPE D</b>                       |                                                                                                | <b>Retained on<br/>Sq. Sieve          %</b>                                 | <b>Retained on<br/>Sq. Sieve          %</b> |                            |
|-------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------|----------------------------|
| Sand-Shell                          | 1-3/4".....0-10<br>No. 4 .....45-65<br>No. 40 .....50-70<br>Max. LL .....35<br>Max. PI .....12 | 1-3/4" .....0-10<br>No. 40 .....45-65<br>Max. LL .....35<br>Max. PI .....12 |                                             | As<br>Shown<br>On<br>Plans |
| <b>TYPE E</b>                       |                                                                                                | <b>Retained on<br/>Sq. Sieve          %</b>                                 | <b>Retained on<br/>Sq. Sieve          %</b> |                            |
| Shell with<br>Sand and<br>Caliche   | 1-3/4".....0<br>No. 40 .....45-65<br>Max. LL .....35<br>Max. PI .....10                        | 1-3/4" .....0<br>No. 40 .....45-65<br>Max. LL .....35<br>Max. PI .....12    |                                             | As<br>Shown<br>On<br>Plans |
| <b>TYPE F</b>                       |                                                                                                | <b>Retained on<br/>Sq. Sieve          %</b>                                 | <b>Retained on<br/>Sq. Sieve          %</b> |                            |
| Caliche                             | 1-3/4".....0<br>No. 4 .....45-75<br>No. 40 .....50-85<br>Max. LL .....40<br>Max. PI .....12    | 1-3/4" .....0<br>No. 40 .....50-85<br>Max. LL .....40<br>Max. PI .....12    |                                             | As<br>Shown<br>On<br>Plans |
| <b>TYPE G</b>                       |                                                                                                |                                                                             |                                             |                            |
| Crushed<br>Blast<br>Furnace<br>Slag |                                                                                                |                                                                             |                                             | As<br>Shown<br>On<br>Plans |

G. The limits establishing reasonable close conformity with the specified gradation and plasticity index are defined by the following:

1. The ENGINEER may accept the material, providing not more than 2 of 10 consecutive gradation tests performed are outside the specified limits on any individual or combination of sieves by no more than 5% and where no two consecutive tests are outside the specified limits.
2. The ENGINEER may accept the material providing not more than 2 of 10 consecutive plasticity index samples tested are outside the specified limit by no more than two points and where no two consecutive tests are outside the specified limit.

## **2.05 STOCKPILING:**

- A. When specified on the plans, the material shall be stockpiled prior to delivery on the road. The stockpile shall be not less than the height indicated and shall be made up of layers of material not to exceed the depth shown on the plans.
- B. After a sufficient stockpile has been constructed as specified on the plans, the CONTRACTOR may proceed with loading from the stock- pile for delivery to the road.
- C. In loading from the stockpile for delivery to the road, the material shall be loaded by making successive vertical cuts through the entire depth of the stockpile.
- D. If the CONTRACTOR elects to produce the Type a material from more than one material or more than one source, each material shall be crushed separately and placed in separate stockpiles so that at least 75 percent of the material in the course aggregate stockpiles will be retained on the No. 4 sieve and at least 70 percent of the material in the fine aggregate stockpile will pass the No. 4 sieve.
- E. The materials shall be combined in a central mixing plant in the proportions determined by the ENGINEER to produce a uniform mixture which meets all of the requirements of the specification. In the event that combinations of the materials produced fail to meet all of the specification requirements, the CONTRACTOR will be required to secure other materials which will meet specifications requirements.
- F. The central mixing plant shall be either the batch or continuous flow type, and shall be equipped with feeding and metering devices which will add the materials into the mixer in the specified quantities.
- G. Mixing shall continue until a uniform mixture is obtained.

## **PART 3 - EXECUTION**

### **3.01 PREPARATION OF SUBGRADE:**

- A. Type roadbed shall be excavated and shaped in conformity with the typical sections shown on the plans and to the lines and grades as established by the ENGINEER.
- B. All unstable or otherwise objectionable material shall be removed from the sub-grade and replaced with approved material.
- C. All holes, ruts and depressions shall be filled with approved material and, if required, the sub-grade shall be thoroughly wetted with water and reshaped and rolled to the extent directed in order to place the sub-grade in an acceptable condition to receive the base material.
- D. The surface of the sub-grade shall be finished to line and grade as established and in conformity with the typical section shown on plans, and any deviation in

excess of 1/2 inch in cross section and in a length of 16-feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and re-compacting by sprinkling and rolling.

- E. Sufficient sub-grade shall be prepared in advance to insure satisfactory prosecution of the work.
- F. Material excavated in the preparation of the sub-grade shall be utilized in the construction of adjacent shoulders and slopes or otherwise disposed on as directed, and any additional material required for the completion of the shoulders and slopes shall be secured from sources indicated on plans or as directed by the Engineer.

### **3.02 PLACEMENT OF FIRST COURSE - TYPE A, TYPE B, TYPE C, TYPE F, AND TYPE G MATERIAL:**

- A. Immediately before placing the base material, the sub-grade shall be checked as to conformity with grade and section.
- B. The material shall be delivered in approved vehicles of a uniform capacity, and it shall be the charge of the CONTRACTOR that the required amount of specified material shall be delivered in each 100- foot station.
- C. Material deposited upon the sub-grade shall be spread and shaped the same day.
- D. In the event inclement weather or other unforeseen circumstances render impractical the spreading of the material during the first 24-hour period, the materials shall be scarified and spread as directed by the Engineer.
- E. The material shall be sprinkled, if directed, and shall then be bladed, dragged and shaped to conform to typical sections as shown on plans.
- F. All areas and "nests" of segregated coarse or fine material shall be corrected to removed and replaced with well graded material, as directed by the ENGINEER.
- G. If additional binder is considered desirable or necessary after the material is spread and shaped, it shall be furnished and supplies in the amount directed by the ENGINEER. Such binder material shall be carefully and evenly incorporated with the material in place by scarifying, harrowing, brooming or by other approved methods.
- H. The course shall be compacted by method of compaction hereinafter specified as the "Ordinary Compaction" method or the "Density Control" method of compaction as indicated on the plans, or as directed by the ENGINEER.
  - 1. When the "Ordinary Compaction" method is to be used, the following provisions shall apply:
    - a) The course shall be sprinkled as required and rolled as directed until a uniform compaction is secured. Throughout this entire operation,

the shape of the course shall be maintained by blading and the surface upon completion shall be smooth and in conformity with the typical sections shown on plans and to the established lines and grades.

- b) In that area on which pavement is to be placed, any deviation in excess of 1/4 inch in cross section in a length of 16-feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and re-compacting by sprinkling and rolling.
  - c) All irregularities, depressions or weak spots which develop shall be corrected immediately by scarifying the areas affected, adding suitable material as required, reshaping and re-compacting by sprinkling and rolling.
2. When the "Density Control" method of compaction is to be used, the following provisions shall apply:
- a) The course shall be sprinkled as required and compacted to the extent necessary to provide not less than the percent density as hereinafter specified under "Density".
  - b) In addition to the requirement specified for density, the full depth of the flexible base shown on the plans shall be compacted to the extent necessary to remain firm and stable under construction equipment.
  - c) After each section of flexible base is completed, tests as necessary will be made by the ENGINEER. If the material fails to meet the density requirements, it shall be reworked as necessary to meet these requirements.
  - d) Throughout this entire operation, the shape of the course shall be maintained by blading, and the surface upon completion shall be smooth and in conformity with the typical sections shown on the plans and to established lined and grades.
  - e) In that area on which pavement is to be placed, any deviation in excess of 1/4 inch in cross section in a length of 16 feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and re-compacting by sprinkling and rolling.
  - f) All irregularities, depressions or weak spots which develop shall be corrected immediately by scarifying the areas affected, adding suitable material as required, reshaping and re-compacting by sprinkling and rolling.
- I. Should the base course, due to any reason or cause, lose the required stability, density or finish before the surfacing is complete, it shall be re-compacted and refinished at the sole expense of the CONTRACTOR.

- J. Where Type C material is used, the material shall be scarified, thoroughly wetted, mixed, manipulated, and bladed so as to secure a uniformly wetted material, and pulled in over the sub-grade in courses and set under the action of blading and rolling. The work of mixing, blading, rolling, shaping, and subsequent maintenance shall be performed by the continuous use of sufficient number of satisfactory rollers and power maintainers with adequate scarifier attachments.

### **3.03 PLACEMENT OF FIRST COURSE - TYPE D MATERIAL:**

- A. Immediately before placing the base material, the sub-grade shall be checked as to conformity with grade and section, and corrections made if necessary.
- B. All materials shall be delivered in approved vehicles of a uniform capacity.
- C. The required amount of shell shall be uniformly spread across the section and allowed to dry sufficiently to insure proper slaking and mixing of the binder material. Immediately upon completion of the drying period, as determined by the ENGINEER, the specified amount of sand admixture as required to produce a combined material meeting the requirements hereinbefore specified, shall be spread uniformly across the shell.
- D. The material shall then be sprinkled as required and thoroughly mixed by blading and harrowing, or other approved methods.
- E. Failure to proceed with the placing of sand admixture or mixing and placing operations will be grounds for the suspension of placing of shell.
- F. Under no conditions will the CONTRACTOR be allowed to place an excessive amount of shell without proceeding with the mixing and placing operations.
- G. The course shall be compacted by the method of compaction hereinafter specified as the "Ordinary Compaction" method or the "Density Control" method of compaction as indicated on the plans, or as directed by the ENGINEER.
  - 1. When the plans indicate that the "Ordinary Compaction" method is to be used, the following provisions shall apply:
    - a) After mixing, all material shall be windrowed, and then spread over the section in layers.
    - b) The layer shall not exceed 2 inches in loose depth.
    - c) If necessary to prevent segregation, the material shall be wetted in the window prior to spreading.
    - d) After each lift is spread, it shall be sprinkled and rolled to secure maximum compaction as directed by the ENGINEER. Succeeding layers shall then be placed similarly until the course is completed.

- e) All areas and "nest of segregated coarse or fine material shall be corrected or removed and replaced with well graded material, as directed by the ENGINEER.
  - f) The course shall then be sprinkled as required and rolled as directed until a uniform compaction is secured.
  - g) Throughout this entire operation, the shape of the course shall be maintained by blading; and the surface, upon completion, shall be smooth and in conformity with the typical sections shown on plans, and to the established lines and grades.
  - h) In that area on which pavement is to be place, any deviation in excess of 1/4 inch in cross section in a length of 16-feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and re-compacting by sprinkling and rolling.
  - i) All irregularities, depressions or weak spots which develop shall be corrected immediately by scarifying the areas affected, adding suitable material as required, reshaping and re-compacting by sprinkling and rolling.
2. When the plans indicate that the "Density Control" method of compaction is to be used, the compaction method shall be the same as prescribed for Type A, Type B, Type C, Type F and Type G material.
- H. When indicated on the plans or permitted by the ENGINEER, Type D material may be mixed in a central mixing plant and delivered to the road as a combined mixture. When this method is used, the combined mixture shall meet the requirements for type D material as hereinbefore specified and the placing and compaction requirement shall be the same as prescribed for Type A, Type B, Type C, Type F and Type G material.

### **3.04 PLACEMENT OF FIRST COURSE - TYPE E MATERIAL:**

- A. The construction methods for placing the first course of Type E material shall be the same as prescribed for Type D material except that after the shell and sand have been placed, the prescribed amount of caliche shall then be spread across the sand and shell.
- B. The composite mixture shall then be sprinkled as required and thoroughly mixed by blading and harrowing or other approved methods.
- C. Compaction of the first course of Type E material shall be the same as prescribed above for Type D material.
- D. Failure to proceed with placing the sand and caliche admixture or mixing and placing operations will be grounds for the suspension of placing of shell.

- E. Under no conditions will the CONTRACTOR be allowed to place an excessive amount of shell without proceeding with the mixing and placing operations.

### **3.05 PLACEMENT OF SUCCEEDING COURSES - ALL MATERIAL TYPES:**

- A. Construction methods shall be the same as prescribed for the first course.
- B. Prior to placing the surfacing on the completed base, the base shall be "dry cured" to the extent directed by the ENGINEER.

### **3.06 DENSITY CONTROL:**

- A. When the "Density Control" method of compaction is indicated on the plans, each course of flexible base shall be compacted to the percent density shown on the plans.
- B. The testing will be as outlined in Test Method Tex-114-E.
- C. It is the intent of this specification to provide in that part of the base included in the top 8 inches immediately below the finished surface of the roadway not less than 100 percent of the density as determined by the compaction ratio method.
- D. Field density determination shall be made in accordance with Test Method Tex-115-E.

### **3.07 TOLERANCES:**

- A. When tolerances are permitted by the plans, the limits establishing reasonable close conformity with percent density specified are defined by the following:
  - 1. The ENGINEER may accept the work providing not more than 25 percent of the density tests performed each day are outside the specified density by no more than three pounds per cubic foot and where no two consecutive tests on continuous work are outside the specified limits.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.01 MEASUREMENT:**

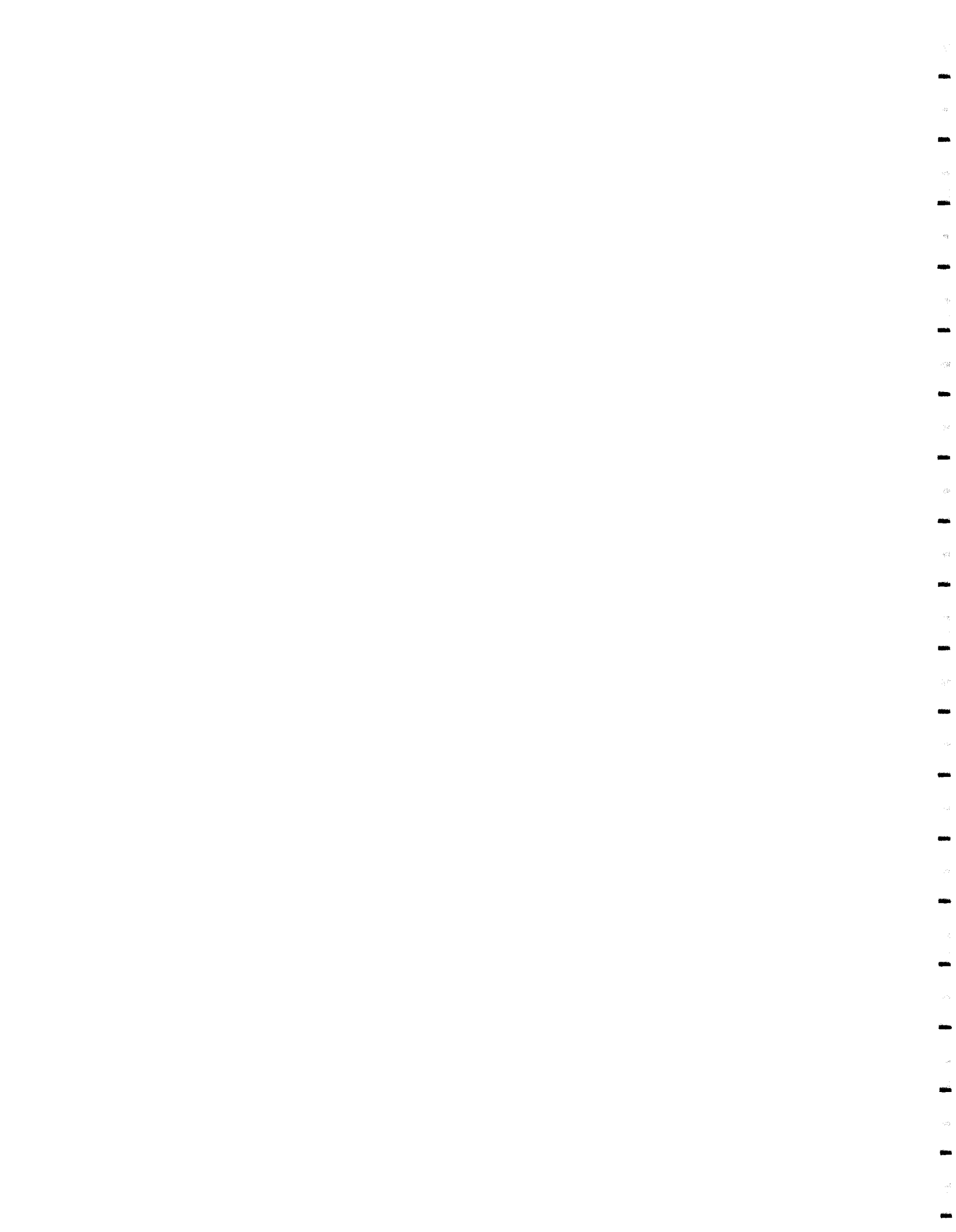
- A. Flexible base will be measure by the square yard of surface area of completed and accepted work based on the width of flexible base as shown on the plans.
  - 1. The flexible base shall be measured for depth by the units of 2000 square yards, with one measurement taken at a location selected by the ENGINEER.
  - 2. In that unit where flexible base is deficient by more than 1/2 inch in thickness, the deficiency shall be corrected by scarifying, adding material as required, reshaping and re-compacting by sprinkling and rolling.

3. No additional payment over the contract unit price will be made for any flexible base of a thickness exceeding that required by plans.
- B. The CONTRACTOR shall schedule his operations in such a manner as to facilitate the measurement of the pay item.
- C. The ENGINEER may accept the work provided no more than 2 out of 10 depth tests performed are deficient by not more 1/2 inch and where no two consecutive tests on continuous work are outside the specified depth.

#### **4.02 PAYMENT:**

- A. The accepted quantities of flexible base of the type, grade, and compaction method specified will be paid at the contract unit bid price per square yard, complete in place.
- B. Where "Ordinary Compaction" is used, all sprinkling, rolling, and manipulation required will not be paid for directly, but will be incidental to other bid items.
- C. The unit prices bid shall each be full compensation for shaping and fine grading the roadbed; for securing and furnishing all materials, including all royalty and freight involved; for furnishing scales and labor involved in weighing the material when required; for loosening, blasting, excavating, screening, crushing and temporary stockpiling when required; for loading all materials for all hauling and delivering on the road; for spreading, mixing, blading, dragging, shaping and finishing and for all manipulation, labor, tools and incidentals necessary to complete the work.

**\* \* \* END OF SECTION \* \* \***



## SECTION 02610

### PRIME COAT

#### PART 1 - GENERAL

##### 1.01 GENERAL DESCRIPTION:

- A. Prime coat shall consist of application of asphaltic materials on completed base course and/or other approved area, which shall be applied in accordance with these specifications, as shown on the plans, and as directed by the ENGINEER.

##### 1.02 QUALITY ASSURANCE:

- A. Test and Certification of Bituminous Materials.

- 1. Bituminous material is to be tested in accordance with the requirements of AASHTO M-82 and sampled in conformance with AASHTO T-40.
- 2. Supply, at the time of delivery of each shipment of asphalt, two certified copies of test reports, from supplying vendor, to the ENGINEER.
- 3. Test reports shall indicate name of vendor, type and grade of asphalt delivered, date and point of delivery, quantity delivered, delivery ticket number, purchase order number, and result of specified tests.

The test report, signed by an authorized representative of the vendor, shall certify that the product delivered conforms to the specifications for type and grade indicated.

Certified test reports and the testing required in the preparation of such report shall be at no cost to the COUNTY.

- 4. Final acceptance of bituminous materials shall be dependent on the determination by the ENGINEER that the material meets prescribed standards.

#### PART 2- PRODUCTS

##### 2.01 MEDIUM CURING CUTBACK ASPHALT:

- A. Medium-curing liquid asphalt, designated by the letters MC, shall consist of an uncracked petroleum base stock, produced by the processing of asphaltic or semi-asphaltic base crude petroleum, blended with a kerosene-type solvent. The base stock for all MC materials shall be straight run asphalt produced within the penetration range of 100 to 300, and the end point of the kerosene type solvent shall not exceed 525 degrees F. Medium curing liquid cutback asphalt shall be free from water and show no separation.
- B. Medium curing cutback asphalt shall consist of materials specified above and

conforming to the requirements set forth in Table 2610-1.

- C. Unless otherwise noted on the plans or directed by the ENGINEER, cutback asphalt Grade MC-30 shall be used.

## **2.02 BLOTTER MATERIAL:**

- A. Supply blotter material consisting of native sand and/or sweepings from base course.
- B. Native sand shall be local material obtained from approved sources as approved by the ENGINEER.

## **PART 3 - EXECUTION**

### **3.01 CONSTRUCTION METHODS:**

- A. Unless otherwise specified on the plans or, required by the ENGINEER, only asphaltic material shall be used. Where required, a combination of asphaltic and blotter material shall be used.
- B. Application of Asphaltic Materials Only.
  - 1. Apply prime coat to prepared surface when ambient air temperature is above 40 degrees F. and is rising and shall not be applied when the ambient air temperature is below 50 degrees F. and falling.
  - 2. Apply prime coat to surfaces that have been cleaned by sweeping or other approved methods and where base is thoroughly dry and satisfactory for receiving prime coat.
  - 3. Apply prime coat to cleaned base, at a rate of 0.2 to 0.5 gallons per square yard of surface area, using an approved type of self-propelled pressure distributor so constructed and operated to distribute the material evenly and smoothly.
  - 4. Provide necessary facilities for the determination of temperature of asphaltic material in all heating equipment and distributors; and for determination of rate at which it is applied; and for securing uniformity at the junction of two distributor loads.
  - 5. Keep in clean and good working condition all storage tanks, piping, reports, booster tanks and distributors used in the storage and handling of asphaltic materials.
  - 6. Operate all associated equipment in a manner such that there is no contamination of asphaltic material with foreign material.
  - 7. Calibrate distributor and furnish ENGINEER with an accurate and satisfactory record of such calibrations.

TABLE 2610-1

| Specification Designation                                                            | Test | AASHTO Test Method | ASTM MC Method | MC 30            | Grade MC 70      | MC 250           | 800             | MC 3000     |
|--------------------------------------------------------------------------------------|------|--------------------|----------------|------------------|------------------|------------------|-----------------|-------------|
| Flash Point (Open Cleve) oF, Min.                                                    |      | T 48               | D 92           | 100              | 100              | 150              | 150             | 150         |
| Viscosity 140oF, Kinematic, CS                                                       |      | T 201              | D 2170         | 60               | 30 to 140        | 70 to 500        | 250 to 1600     | 800 to 6000 |
| Furol Viscosity at 77 F. (Secs.)                                                     |      | T 72               | D 88           | 75-150           |                  |                  |                 |             |
| at 122 F. (Secs.)                                                                    |      |                    |                | 60-120           | 300              |                  |                 |             |
| at 140 F. (Secs.)                                                                    |      |                    |                | 125-250          | to               |                  |                 |             |
| at 180 F. (Secs.)                                                                    |      |                    |                | 100-200          | 600              |                  |                 |             |
| Distillation Distillate (% of Total Distillate to 680 F) to 437 F) to 500 F to 600 F |      | T 78               | D 402          | 0-25 40-70 75-93 | 0-20 25-60 75-90 | 0-10 20-55 70-85 | -0- 10-35 65-80 | -0- 15 75   |
| Residue from Distillation to 680 F Volume % by Difference Min.                       |      |                    |                | 50               | 55               | 67               | 75              | 80          |
| Tests on Residue From Distillation Penetration at 77 F                               |      | T 49               | D 5            | 120 to 250       | 120 to 250       | 120 to 250       | 120 to 250      | 120 to 250  |
| *Ductility 77 F cm., Min.                                                            |      | T 51               | D 113          | 100              | 100              | 100              | 100             | 100         |
| Solubility in CC1 4, % Min.                                                          |      | T44                | NONE           | 99.5             | 99.5             | 99.5             | 99.5            | 99.5        |

|                          |         |      |     |     |     |     |     |
|--------------------------|---------|------|-----|-----|-----|-----|-----|
| Water, % Min.            | T 55    | D 95 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Reaction to<br>Spot Test | T 102** | -0-  | -0- | -0- | -0- | -0- | -0- |

\* If penetration of residue is more than 200 and its ductility at 77 F is less than 100, the material will be acceptable if the ductility at 60 F is greater than 100.

\*\* Using 85% Standard Naphtha and 15% Xylene.

NOTE: Viscosity tests may be made by either Kinematic or Furol test methods.

8. Recalibrates distributor, in a manner satisfactory to the ENGINEER, after the beginning of work, should the yield on the asphaltic material applied appear to be in error.
9. No traffic, hauling or placing of subsequent courses shall be permitted over freshly applied prime coat until authorized by the ENGINEER.
10. Apply asphaltic material at a temperature within 15 F of temperature of application selected by the ENGINEER based on temperature viscosity relationship noted in Table 2610-1.
11. Maintain surface until work is Blotter Material.

C. Application of Asphaltic and Blotter Material

1. Haul blotter material in vehicles of uniform capacity and placed on shoulders at spacings designated by the ENGINEER.
2. After application of asphaltic material as specified above, cover surface with blotter material as directed by the ENGINEER.
3. After application of blotter material, drag surface with approved drag broom, evenly and smoothly distributing the blotter material.  
Brooming or dragging operation shall continue, as directed by the ENGINEER, until the course has properly cured under traffic.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.01 PRIME COAT:**

- A. Asphaltic material for prime coat will be measured for payment at point of delivery on the project in gallons at applied temperature. Payment will be paid at the unit bid price for "Prime Coat".
- B. When not listed as a separate contract pay item, prime coat shall be considered as incidental work, and the cost thereof shall be included in such contract pay item(s) as are provided in the proposal contract.
- C. Compensation, whether by contract pay item or incidental work will be for furnishing all material, labor, equipment, tools and incidentals required for the work, all in accordance with the plans and these specifications.

#### **4.02 BLOTTER MATERIALS:**

- A. Blotter mater will be considered incidental to asphaltic material for prime coat with no direct payment or payment therefor.

**\* \* \* \* END OF SECTION \* \* \* \***



## **SECTION 02612**

### **HOT MIX ASPHALT CONCRETE PAVEMENT**

#### **PART 1 - GENERAL**

##### **1.01 DESCRIPTION:**

- A. Hot mix asphalt concrete (HMAC) pavement shall consist of a binder course, a leveling up course, a surface course or a combination of the courses as shown on the plans, or as directed by the ENGINEER.
- B. HMAC pavement shall be composed of a compacted mixture of mineral aggregate and asphaltic material, constructed on previously completed and approved sub-grade, sub-base course, base course, or existing pavement.
- C. HMAC pavement shall be in accordance with the specifications herein and in conformity with the lines, grades, quantities and typical sections in the contract and/or as directed by the ENGINEER.

##### **1.02 QUALITY CONTROL:**

- A. HMAC pavement and its constituent part shall conform to the ASTM, AASHTO and/or Texas SDHPT test methods noted below.

#### **PART 2 PRODUCTS**

##### **2.01 ASPHALTIC MATERIALS**

- A. Asphalt cement binders shall be un-cracked petroleum asphalt and shall be carefully refined, by steam, vacuum, or solvent, from asphaltic or semi-asphaltic base crude petroleum at a temperature not to exceed 700 degrees F. Asphalt cements shall be free from thermal decomposition products and shall not be blended with any materials which have been subjected to cracking or produced from a crude petroleum source other than that of the original material. The asphalt cement shall not contain residues from non-asphaltic sources. Asphalt cement shall be homogeneous, free from water, and shall not foam when heated to 347 degrees F.
- B. Paving asphalt shall be classified by penetration or viscosity and shall conform to the requirements set forth in one of the following tables as designated by the ENGINEER. The CONTRACTOR may supply asphalt meeting the requirements of one of the following tables provided that he obtains prior approval of the ENGINEER and with the provision that once approval has been obtained, that the CONTRACTOR will remain with that grade throughout the project.

TABLE 02612-1

|                                                                      | AASHTO | ASTM   | 40             | 60             | 85              | 120              | 150              | 200              |
|----------------------------------------------------------------------|--------|--------|----------------|----------------|-----------------|------------------|------------------|------------------|
| Specification                                                        | Test   | Test   | to             | to             | to              | to               | to               | to               |
| Designation                                                          | Method | Method | 50             | 70             | 100             | 150              | 200              | 250              |
| Flash Point<br>(Open Cup Min.)                                       | T48    | D92    |                | 450            | 450             | 450              | 425              | 350              |
| Penetration of<br>Original Sample<br>at 77 F                         | T49    | D5     | 40<br>to<br>50 | 60<br>to<br>70 | 85<br>to<br>100 | 120<br>to<br>150 | 150<br>to<br>200 | 200<br>to<br>250 |
| Thin-Film Oven Loss<br>Hours at 325 F, % Max                         | T179   | D1754  | 0.7<br>5       | 0.7<br>5       | 0.7<br>5        | 0.7<br>5         | 1.0<br>0         | 1.0<br>0         |
| Test of Residue from<br>Thin-Film Oven Test<br>% or Orig. Pen., Min. | T49    | D5     | 52             | 50             | 50              | 50               | 50               | 50               |
| Ductility at 77 F, cm.<br>after Loss at 325 F, Min.                  | T51    | D113   | 50             | 50             | 100             | 100              | 100              | 100              |
| Solubility in<br>CC1 4 Min.                                          | T44*   | None   | 99.<br>5       | 99.<br>5       | 99.<br>5        | 99.<br>5         | 99.<br>5         | 99.<br>5         |
| Reaction to Spot Test                                                | T102** | None   | -0-            | -0-            | -0-             | -0-              | -0-              | -0-              |

\* Procedure No. 1 with CC1 4 substituted for CS2.

\*\* Using 85% Standard Naphtha Solvent and 15% xylene,

TABLE 02612-2

|                                                                         | OA-30       |      | OA-175*8    |      | OA-400      |      |
|-------------------------------------------------------------------------|-------------|------|-------------|------|-------------|------|
| TYPE-GRADE                                                              | MIN.        | MAX. | MIN.        | MAX. | MIN.        | MAX. |
| Penetration at 32 F, 200g.,<br>60 sec.                                  | 15          | --   | --          | --   | --          | --   |
| <b>Penetration at 77 F, 100g.,<br/>5 sec.</b>                           | 25          | 35   | 150         | 200  | --          | --   |
| Penetration at 115 F, 50g.,<br>5 sec.                                   | --          | 65   | --          | --   | --          | --   |
| Ductility at 77 F, 5<br>Original OA                                     | 2           | --   | 70          | --   | --          | --   |
| Flash Point C.O.C., F                                                   | 450         | --   | 425         | --   | 425         | --   |
| Softening Point, R. & B., F                                             | 185         | --   | 95          | 130  | --          | --   |
| Thin Film Oven Test, 1/8 in. Film<br>50g., 5 hrs., 325 F, % Loss by Wt. | --          | 0.4  | --          | 1.4  | --          | 2.0  |
| Penetration of Residue, at 77 F,<br>100g., 5 sec. % of Original Pen     | --          | --   | 40          | --   | --          | --   |
| Ductility of Residue at 77 F,<br>5 cm/min., cms                         | --          | --   | --          | 100  | --          | --   |
| Solubility in Trichloroethylene, %                                      | 99.0        | ---  | 99.0        | ---  | 99.0        | ---  |
| Spot Test on Original OA                                                | <b>Neg.</b> |      | <b>Neg.</b> |      | <b>Neg.</b> |      |
| Float Test at 122 F, sec.                                               | --          | --   | --          | --   | 120         | 150  |
| Test on 85 to 115 Pen. Residue*<br>Residue by Wt., %                    | --          | --   | --          | --   | --          | 75   |
| Ductility, 77 F, 5 cm/min.:<br>Original Res., cms.                      | --          | --   | --          | --   | 100         | ---  |
| Subjected to Thin Film Test, cms                                        | --          | --   | --          | --   | 100         | --   |

\* Determined by Vacuum Distillation (by evaporation if unable to reduce by vacuum).

\*\* For use with Latex Additive only

**TABLE 02612-3**

| PROPERTIES                                        | AC-1.5                  |     | AC-3 |     | AC-5 |     | AC-10 |     | AC-20 |     | AC-20 |       |
|---------------------------------------------------|-------------------------|-----|------|-----|------|-----|-------|-----|-------|-----|-------|-------|
|                                                   | MIN                     | MAX | MIN  | MAX | MIN  | MAX | MIN   | MAX | MIN   | MAX | MIN   | MAX   |
| Viscosity, 140 F stokes...                        | 150                     | 50  | 300  | 100 | 500  | 100 | 1000  | 200 | 2000  | 400 | 4000  | 800   |
| Viscosity, 275 F stokes.....                      | 0.7                     | --  | 1.1  | --  | 1.4  | --  | 1.9   | --  | 2.5   | --  | 3.5   | --    |
| Penetration, 77 F 100 g, 5 sec                    | 250                     | --  | 210  | --  | 135  | --  | 85    | --  | 55    | --  | 35    | --    |
| Flash Point, C.O.C., F...                         | 425                     | --  | 425  | --  | 425  | --  | 450   | --  | 450   | --  | 450   | --    |
| Solubility in trichloroethylene percent.....      | 99.0                    | --  | 99.0 | --  | 99.0 | --  | 99.0  | --  | 99.0  | --  | 99.0  | --    |
| <b>Test on residues from thin film oven test:</b> |                         |     |      |     |      |     |       |     |       |     |       |       |
| Viscosity, 140 F stokes.....                      | --                      | 450 | --   | 900 | 1500 | --  | 3000  | --  | 6000  | --  | --    | 12000 |
| Ductility, 77 F, 5 cms per min, cms               | 100                     | --  | 100  | --  | 100  | --  | 70    | --  | 50    | --  | 30    | --    |
| Spot Test.. . . .                                 | Negative for all grades |     |      |     |      |     |       |     |       |     |       |       |

- C. A minimum of two percent, by weight, latex additive (solid basis) shall be added to the OA-175 Asphalt or to AC-5 Asphalt when specified in the contract. The latex additive shall be governed by the following specifications:

The latex is to be an anionic emulsion of butadiene-styrene low-temperature copolymer in water, stabilized with fatty-acid soap so as to have good storage stability, and possessing the following properties:

Monomer ration, B/S..... 70/30  
 Minimum solids content..... 67%

Solids content per gal. @ 67%..... 5.3 lbs.  
 Coagulum on 80-mesh screen..... 0.01% max.  
 Type Anti-oxidant.....staining  
 Mooney viscosity of Polymer(M/L 4@212F) 100 min.

PH of Latex .....9.4 - 10.5  
 Surface tension..... 28 - 42 dynes/cm2

The finished latex-asphalt blend shall met the following requirements:

Viscosity at 140 F, stokes. .... 1500 max.  
 Ductility at 39.2 F. 1 cm. per., cm ..... 100 min.

D. Asphalt content shall be within the limits noted below:

| <b>HMAC Type</b> | <b>Percent of<br/>Mixture by Weight</b> | <b>Percent of<br/>Mixture by Volume</b> |
|------------------|-----------------------------------------|-----------------------------------------|
| "A"              | 3.5 - 7.0                               | 8.0 - 16.0                              |
| "B"              | 3.5 - 7.0                               | 8.0 - 16.0                              |
| "C"              | 3.5 - 7.0                               | 8.0 - 16.0                              |
| "D"              | 4.0 - 8.0                               | 9.0 - 19.0                              |
| "F"              | 3.5 - 6.5                               | 8.0 - 16.0                              |

- E. At the time of delivery of each shipment of asphalt, the vendor supplying the material shall deliver to the purchaser certified copies of the test report which shall indicate the name of the vendor, type and grade of asphalt delivered, date and point of delivery, quantity delivered, delivery ticket number, and results of the above-specified tests. The test report shall be certified and signed by an authorized representative of the vendor that the product delivered conforms to the specifications for the type and grade indicated.
- F. Until the certified test reports and samples of the material have been checked by the ENGINEER to determine their conformity with the prescribed requirements, the material to which such report relates an any work in which it may have been incorporated as an integral component will be only tentatively accepted by the COUNTY. Final acceptance will be dependent upon the determination of the ENGINEER that the material involved fulfills the requirements prescribed therefor. The certified test reports and the testing required in connection with the reports will be at the expense to the COUNTY.
- G. Unless otherwise specified in these specifications or in the Supplementary Specifications, the various grades of paving asphalt shall be applied at a temperature range of from 210 F, the exact temperature to be determined by the ENGINEER.
- H. Paving asphalt shall be heated in such a manner that steam or hot oils will not be introduced directly into the paving asphalt during heating. The CONTRACTOR shall furnish and keep on the site, at all times, an accurate thermometer suitable for determining the temperature of the paving asphalt.
- I. HMAC asphalt shall be the grade having the highest penetration, within specified

limits, to produce a mix having a maximum stability of the compacted mixtures.

- J. Only one (1) grade of asphalt shall be required unless otherwise shown on the plans or as required by the ENGINEER.

## 2.02 AGGREGATES:

- A. HMAC aggregate will be tested in accordance with the following test:

|                     |                                                                            |
|---------------------|----------------------------------------------------------------------------|
| AASHTO T-30         | Mechanic Testing                                                           |
| AASHTO T-27         | Passing No. 200 Sieve                                                      |
| AASHTO T-89         | Liquid Limit                                                               |
| AASHTO T-96         | Los Angeles Abrasion                                                       |
| AASHTO T-104        | Soundness ( Magnesium Sulfate)                                             |
| ASTM C - 131        | Resistance to Degradation                                                  |
| ASTM C - 136        | Sieve Analysis                                                             |
| ASTM C -2419        | Sand Equivalence Value                                                     |
| SDHPT Tex - 416 - E | Method of Calculating Plasticity<br>Index of Solids                        |
| SDHPT Tex - 217 - F | (I & II) Determination of<br>Deleterious Materials and<br>Decantation Test |
| SDHPT Tex - 203 - F | Quality Test for Mineral<br>Aggregates                                     |

- B. Aggregates shall have an abrasion of not more than 40 for all course except the non-skid surface course, which shall have an abrasion of not more than 35.
- C. When properly proportioned, HMAC aggregate shall produce a gradation which will conform to the limitations for classification for HMAC type shown below, or as directed by the ENGINEER.
- D. Course aggregate to be crushed limestone rock or crushed gravel with hydrated lime or limestone filler. (Crushed gravel shall be per Highway Department Specifications.)
- E. Binder aggregate to be composed of 15% crushed limestone screening or as directed by the ENGINEER.

### 1. Type "A" - Course Graded Base Course

Percent Aggregate by

## Weight or Volume

|                                                       |           |
|-------------------------------------------------------|-----------|
| Passing 2" sieve .....                                | 100       |
| Passing 1-3/4" sieve .....                            | 95 to 100 |
| Passing 1-3/4" sieve, retained on 7/8" sieve .....    | 16 to 42  |
| Passing 7/8" sieve, retained on 3/8" sieve .....      | 16 to 42  |
| Passing 3/8" sieve, retained on No. 4 sieve .....     | 10 to 26  |
| Passing No. 40 sieve, retained on No. 10 sieve .....  | 5 to 21   |
| Total retained on No. 10 sieve .....                  | 68 to 84  |
| Passing No. 10 sieve, retained on No. 40 sieve .....  | 5 to 21   |
| Passing No. 40 sieve, retained on No. 80 sieve .....  | 3 to 16   |
| Passing No. 80 sieve, retained on No. 200 sieve ..... | 2 to 16   |
| Passing No. 200 sieve .....                           | 1 to 8    |

### 2. Type "B" - Fine Graded or Leveling-Up Course

#### Percent Aggregate by Weight or Volume

|                                                       |           |
|-------------------------------------------------------|-----------|
| Passing 1" sieve .....                                | 100       |
| Passing 7/8" sieve .....                              | 95 to 100 |
| Passing 7/8" sieve .....                              | 21 to 53  |
| Passing 3/8" sieve, retained on 3/8" sieve .....      | 11 to 42  |
| Passing No. 4 sieve, retained on NO. 10 sieve .....   | 5 to 26   |
| Total retained on No. 10 sieve .....                  | 58 to 74  |
| Passing No. 10 sieve, retained on No. 40 sieve .....  | 6 to 32   |
| Passing No. 40 sieve, retained on NO. 80 sieve .....  | 4 to 21   |
| Passing No. 80 sieve, retained on No. 200 sieve ..... | 3 to 21   |
| Passing No. 200 sieve .....                           | 1 to 8    |

### 3. Type "C" - Course Graded Surface Course

#### Percent Aggregate by Weight or Volume

|                                                       |           |
|-------------------------------------------------------|-----------|
| Passing 7/8" sieve .....                              | 100       |
| Passing 5/8" sieve, retained on 3/8" sieve .....      | 95 to 100 |
| Passing 3/8" sieve, retained on No. 4 sieve .....     | 11 to 37  |
| Passing No. 4 sieve, retained on No. 10 sieve .....   | 11 to 32  |
| Total retained on No.10 sieve .....                   | 54 to 74  |
| Passing No. 10 sieve, retained on No. 40 sieve .....  | 6 to 32   |
| Passing No. 40 sieve, retained on No. 80 sieve .....  | 4 to 27   |
| Passing No. 80 sieve, retained on No. 200 sieve ..... | 3 to 27   |
| Passing No. 200 sieve .....                           | 1 to 8    |

#### 4. Type "D" - Fine Graded Surface Course

Percent Aggregate by  
Weight or Volume

|                                                       |           |
|-------------------------------------------------------|-----------|
| Passing 1/2" sieve .....                              | to 100    |
| Passing 3/8" sieve .....                              | 85 to 100 |
| Passing 3/8" sieve, retained on No. 4 sieve .....     | 21 to 53  |
| Passing No. 4 sieve, retained on No. 10 sieve .....   | 11 to 32  |
| Total retained on No. 10 sieve.....                   | 54 to 74  |
| Passing No. 10 sieve, retained on No. 40 sieve .....  | 6 to 32   |
| Passing No. 40 sieve, retained on No. 80 sieve .....  | 4 to 27   |
| Passing No. 80 sieve, retained on No. 200 sieve ..... | 3 to 27   |
| Passing No. 200 sieve .....                           | 1 to 8    |

#### 5. Type "F" - Fine Graded Surface Course

Percent Aggregate by  
Weight or Volume

|                                                       |           |
|-------------------------------------------------------|-----------|
| Passing 3/8" sieve .....                              | 100       |
| Passing No. 4 sieve .....                             | 95 to 100 |
| Passing No. 4 sieve, retained on No.10 sieve .....    | 58 to 73  |
| Passing No. 10 sieve, retained on No. 40 sieve .....  | 6 to 26   |
| Passing No. 40 sieve, retained on No. 80 sieve .....  | 3 to 13   |
| Passing No. 80 sieve, retained on No. 200 sieve ..... | 2 to 11   |
| Passing No. 200 sieve .....                           | 1 to 8    |

#### 2.03 PRIME COAT:

- A. Prime coat, when specified on the plans, or as directed by the ENGINEER, shall be in accordance with Section 02610 - Prime Coat, and as specified herein.
- B. Prime coat shall be applied to surfaces of bases at least 12 hours prior to placing the HMAC unless otherwise directed by the ENGINEER.
- C. Asphalt prime shall be applied uniformly at the rate of 0.10 to 0.30 gallon per square yard or as directed by the ENGINEER. It shall be applied only when permitted by the ENGINEER and when the air temperature is not less than 40 F.
- D. In order to prevent lapping at the junction of two applications, the distributor shall be promptly shut off. A hand spray shall be used to touch up all spots unavoidably missed by the distributor.
- E. Immediately prior to application of the asphalt prime, an inspection will be made by the ENGINEER to verify that the base course has been constructed as specified. Also, all loose and foreign material shall be removed by light sweeping. Material so removed shall not be mixed with cover aggregate.

- F. The surface to be primed shall be in a smooth and well-compacted condition, true to grade and cross section, and free from ruts and inequalities.
- G. The pressure distributor used for applying prime coat material shall be equipped with pneumatic tires and shall be so designed and operated as to distribute the prime material in a uniform spray without atomization, in the amount and between the limits of temperature specified. It shall be equipped with a speed tachometer registering feet per minute and so located as to be visible to the truck driver to enable him to maintain the constant speed required for application at the specified rate.
- H. The pressure distributor shall be equipped with a tachometer registering the pump speed, pressure gauge, and a volume gauge. The rates of application shall not vary from the rates specified by the ENGINEER by more than 10%. Suitable means for accurately indicating at all times the temperature of the prime material shall be provided. The thermometer well shall be so placed as not to be in contact with a heating tube.
- I. The distributor shall be so designed that the normal width of application shall not be less than 6 feet, with provisions for the application of lesser width when necessary. If provided with heating attachments, the distributor shall be so equipped and operated that the prime material shall be circulated or agitated through the entire heating process.
- J. The asphalt prime coat should preferably be entirely absorbed by the base course and, therefore, require no sand cover. If, however, it has not been completely absorbed prior to the start of placing the asphalt concrete mixture and in the meantime it is necessary to permit traffic thereon, just sufficient sand shall be spread over the surface to blot up the excess liquid asphalt and prevent picking it up under traffic. Also, sand shall be used in areas where traffic may pass over the prime coat. Prior to placing the asphalt concrete, loose or excess sand shall be swept from the base. If a sand cover is specified in the Supplementary Specifications or noted on the plans to cover asphalt prime, it shall be applied within 4 hours after the application of said prime coat, unless otherwise ordered by the ENGINEER.
- K. Liquid asphalt shall be prevented from spraying upon adjacent pavements, structures, guard rails, guide posts, culvert markers, trees, and shrubbery that are not to be removed; adjacent property and improvements; and other facilities or that portion of the traveled way being used by traffic.
- L. The CONTRACTOR shall protect the prime coat against all damage and markings, both from and other traffic. Barricades shall be placed where necessary to protect the prime coat. If, after prime coat has been applied to the satisfaction of the ENGINEER and has been accepted by him, it is damaged by negligence on the part of the CONTRACTOR, it shall be restored at his expense to its condition at the time of acceptance. No material shall be placed until the prime coat is in a condition satisfactory to the ENGINEER.

## 2.04 TACK COAT:

- A. If the asphalt concrete pavement is being constructed directly upon an existing hard-surfaces pavement, a tack coat shall be evenly and uniformly applied to such existing pavement preceding the placing of the asphalt concrete. The surface shall be free of water, all foreign material, or dust when the tack coat is applied. No greater area shall be treated in any one day than will be covered by the asphalt concrete during the same day. Traffic will not be permitted over tack coating.
- B. Tack coat for HMAC shall consist of either rapid curing cut-back asphalt RC-2 diluted by addition of (not to exceed 15 percent by volume) an approved grade of gasoline and/or kerosene; emulsified asphalt, EA-11M diluted with 50 percent water, or a cut-back asphalt made by combining 50 to 70 percent of the asphaltic materials specified for the paving mixture with 30 to 50 percent gasoline and/or kerosene by volume.
- C. Tack coat shall conform to the requirements of Section 02620 - Tack Coat, or as specified herein.
- D. Application rate shall be 0.10 to 0.15 gallons per square yard as directed by the ENGINEER.
- E. A similar tack coat shall be applied to the surface of any course if, in the opinion of the ENGINEER, the surface is such that a satisfactory bond cannot be obtained between it and the succeeding course.
- F. When required, the contact surfaces of all cold pavement joints, curbs, gutters, manholes, and the like shall be painted with a tack coat immediately before the adjoining asphalt concrete is placed. Asphalt tack coat shall be applied in controlled amounts as shown on the plans or determined by the ENGINEER. Surfaces where a tack coat is required shall be cleaned to the satisfaction of the ENGINEER before the tack coat is applied.

## 2.05 MINERAL FILLER:

- A. Mineral filler, other than hydrated lime, shall consist of a thoroughly dry stone dust, portland cement or other mineral dust approved by the ENGINEER.
- B. The mineral filler shall be free from foreign or other deleterious matter.
- C. When tested by the method outlines in SDHPT Test Method Tex-200-F (Part 1 or 3), mineral filler shall meet the following gradations by weight:

|                       |            |
|-----------------------|------------|
| Passing No. 30 Sieve  | 95 to 100% |
| Passing No. 80 Sieve  | 75%        |
| Passing No. 200 Sieve | 55%        |

- 2.06 Anti-Stripping compound, as required in the job mix formula, shall be furnished in the amounts calculated therein.

## 2.07 JOB MIX FORMULA:

- A. A job mix formula based on representative samples, including filler if required, shall be determined by the ENGINEER, or submitted by the CONTRACTOR for approval of the ENGINEER.
- B. The resultant job mix formula shall be within the master range for the specified type of HMAC.
- C. The job mix formula for each mixture shall establish a single percentage of aggregate passing each required sieve size, and a single percentage of bituminous material to be added to the aggregate and shall provide for 3 to 5% air voids in the resultant design mix. During the mix design process the ENGINEER will consider other factors, in addition to air voids and Marshall stability, such as durability, water resistance and asphalt film thickness when developing the mix design.
- D. After the job mix formula is established, mixtures for the project shall conform thereto within the following tolerances which may fall outside of the specified master range:

Passing 1-3/4" sieve, retained on 7/8" sieve ..... Plus or minus 5  
 Passing 7/8" sieve, retained on 3/8" sieve..... Plus or minus 5  
 Passing 5/8" sieve, retained on 3/8" sieve..... Plus or minus 5  
 Passing 3/8" sieve, retained on No. 4 sieve ..... Plus or minus 5  
 Passing No. 4 sieve, retained on No. 10 sieve ..... Plus or minus 5  
 Total retained on No. 10 sieve..... Plus or minus 5  
 Passing No. 10 sieve, retained on No. 40 sieve ..... Plus or minus 3  
 Passing No. 40 sieve, retained on No. 80 sieve ..... Plus or minus 3  
 Passing No. 80 sieve, retained on No. 200 sieve ..... Plus or minus 3  
 Passing No. 200 sieve ..... Plus or minus 3

Asphaltic Material ..... Plus or minus 0.05 by weight or 1.2 by volume

Mixing Temperature..... Plus or minus 20 F

- E. Asphaltic mixture shall be tested in accordance with SDHPT Test Method Tex-200-4 (Part I or Part III) and shall have the following laboratory values:

|                   | <u>Surface Course</u> | <u>Base Course</u> |
|-------------------|-----------------------|--------------------|
| Density - Minimum | 95%                   | 95%                |
| Maximum           | 99%                   | 99%                |
| Optimum           | 97%                   | 97%                |

|                                          |           |             |
|------------------------------------------|-----------|-------------|
| Stability - (Hveem)                      |           |             |
| Minimum                                  | 30%       | 30%         |
| Maximum                                  | 45%       | 45%         |
| Stability (Marshall - 75 Blow Briquette) | 1500 lbs. | 1500 - lbs. |
| Voids                                    | 3 - 7%    | 4 - 7%      |
| Voids Filled With Asphalt                | 75 - 85%  | 65 - 80%    |
| Sand Equivalent                          | 40        | 40          |

## **2.08 EQUIPMENT:**

- A. All equipment for the handling of all material, mixing, and placing of HMAC shall be in accordance with the provisions of Texas SDHPT Item 340.

## **2.09 STOCKPILING, STORAGE, PROPORTIONING AND MIXING:**

- A. Stockpiling, storage proportioning and mixing operations shall be in accordance with the Provisions of Texas SDHPT Item 340.

## **PART 3 - EXECUTION**

### **3.01 WEATHER AND TEMPERATURE LIMITATIONS:**

- A. Asphaltic mixture, when placed with a spreading and finishing machine, or the tack coat shall not be placed when the air temperature is 50 F and falling, but may be placed when the air temperature is 40 F and rising.
- B. Asphaltic mixture, when placed with a motor grader, shall not be placed when the air temperature is 60 F and falling, but may be placed when the air temperature is 50 F and rising.
- C. Mat thicknesses of 1" or less shall not be placed when the temperature on which the mat is to be laid is below 50 F.
- D. No tack coat or asphaltic mixture shall be placed when the humidity, general weather conditions and temperature and moisture condition of the base, in the opinion of the ENGINEER, are unsuitable.
- E. If, after being discharged from the mixer and prior to placing, the temperature of the asphaltic mixture is 50 F or more below the temperature established by the ENGINEER, all or any part of the load may be rejected and payment will not be made for the rejected material.

### 3.02 EQUIPMENT

#### A. Hauling Equipment:

1. Trucks used for hauling asphaltic mixtures shall have tight, clean, smooth metal beds which have been thinly coated with a minimal amount of paraffin oil, lime slurry, lime solution or other approved material to prevent mixture adhesion to the bed.
2. The dispatching of hauling equipment shall be arranged so that all material delivered may be placed and all rolling completed during daylight hours, unless otherwise directed by the ENGINEER.
3. All trucks shall be equipped with a cover of canvas, or other suitable material to protect the mixture from weather or on hauls where the temperature of the mixture will fall below specified level. Use of covers will be as directed by the ENGINEER.

#### B. Rollers:

1. Pneumatic Tire Roller. This roller shall consist of not less than seven pneumatic tire wheels, running on axles in such manner that the rear group of tires shall cover the entire gap between adjacent tires of the forward group; mounted in a rigid frame; and provided with a loading platform or body suitable for ballast loading. The front axle shall be attached to the frame in such manner that the roller may be turned within a minimum circle. The tire shall afford surface contact pressures up to 90 pounds per square inch or more. The roller shall be so constructed as to operate in both a forward and a reverse direction with suitable provisions for moistening the surface of the tires while suitable provisions for moistening the surface of the tires while operating; and shall be approved by the ENGINEER.
2. Two Axle Tandem Roller. This roller shall be acceptable power-driven, steel-wheel, tandem roller weighing not less than eight tons. It must operate in forward and reverse directions; contain provision for moistening the surface of the wheels while in motion; and shall be approved by the ENGINEER.
3. Three Wheel Roller. This roller shall be an acceptable power-driven, all steel three wheel roller weighing not less than 10 tons. It must operate in forward and reverse directions; contain provisions for moistening the surface of the wheel while in motion; and shall be approved by the ENGINEER.
4. Vibratory Steel Wheel Roller. If approved for use by the OWNER, this roller shall have a minimum weight of six tons. The compactor shall be equipped with amplitude and frequency controls and shall be specifically designed to compact the material on which it is used. It shall be operated in accordance with the manufacturer's recommendations.

#### C. Straight Edges:

1. The CONTRACTOR shall provide an acceptable 16-foot straight-edges for surface testing. Satisfactory templates shall be provided as required by the ENGINEER.

D. Spreading and Finishing Machine:

1. Bituminous pavers shall be self-contained, power-propelled units, provided with an activated screed or a strike-off assembly, heated if necessary, and capable of spreading and finishing courses of bituminous plant mix material in lane widths applicable to the specified typical section and thickness shown on the plans.
2. The paver shall be equipped with a receiving hopper having sufficient capacity for a uniform spreading operation. The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed. Design will be such that no part of the truck weight will be supported by the paver.
3. The screed or strike-off assembly shall effectively produce a finished surface of the required evenness and texture without tearing, shoving or gouging the mixture. When laying mixtures, the paver shall be capable of being operated at forward speeds consistent with satisfactory laying of the mixture. The screed shall be adjustable for both height and crown and shall be equipped with a controlled heating device.
4. The bituminous paver shall be equipped with an automatic leveling device controlled from an external guide. The initial pass for each course shall be made using a paver equipped with a 40-foot minimum external reference, except that this requirements will not apply when asphalt concrete is placed adjacent to portland cement concrete pavement. Subsequent passes may utilize the matching device of one foot minimum length riding on the adjacent lay.

**3.03 CONSTRUCTION METHODS:**

A. Spreading and Finishing:

1. The asphalt concrete mixture shall be laid on the approved surface, spread and struck off to the grade and elevation established. It shall be spread and compacted in layers as shown on the plans or as directed by the ENGINEER. Bituminous pavers shall be used to distribute the mixture either over the entire width or over such partial width as may be practicable.
2. The ENGINEER will determine a minimum placement temperature, which is measured immediately behind the laydown machine, shall not vary more than 20 F.
3. A conventional paver or suitable equipment approved by the ENGINEER may be used to place asphalt concrete material on shoulders depressed from the traveled lanes in order to establish a uniform typical section. Approval of the equipment used will be based upon the results obtained.
4. The asphalt concrete may be dumped from the hauling vehicles directly into the paving machine or it may be dumped upon the surface being paved and subsequently loaded into the paving machine; however, no asphaltic concrete shall be dumped from the hauling vehicles at a distance greater than 250 feet in

front of the paving machine. When asphaltic concrete is dumped first upon the surface being paved, the loading equipment shall be self-supporting and shall not exert any vertical load on the paving machine. Substantially all of the asphaltic concrete dumped shall be picked up and loaded into the paving machine.

5. To achieve, as far as practicable, a continuous operation, the speed of the paving machine shall be coordinated with the production of the plant. Sufficient hauling equipment shall be available to insure continuous operation.
6. The control system shall control the elevation of the screed at each end by controlling the elevation of one end directly and the other indirectly either through controlling the transverse slope or alternately when directed, by controlling the elevation of each end independently, including any screed attachment used for widening, etc. Failure of the control system to function properly shall be cause for the suspension of the asphaltic concrete operations.
7. When dumping directly into the paving machine from trucks, care shall be taken to avoid jarring the machine or moving it out of alignment.
8. All courses of asphaltic concrete shall be placed and finished by means of self-propelled paving machines except under certain conditions or at certain locations where the ENGINEER deems the use of self-propelled paving machines impracticable.
9. Self-propelled paving machines shall spread the asphaltic concrete without segregation or tearing within the specified tolerances, true to the line, grade, and crown indicated on the plans. Pavers shall be equipped with hoppers and augers which will place the asphaltic concrete evenly in front of adjustable screeds without segregation. Screeds shall include any strike-off device operated by tamping or vibrating action which is effective without tearing, shoving or gouging the asphaltic concrete and which produces a finished surface of an even and uniform texture for the full width being paved. Screeds shall be adjustable as to height and crown and shall be equipped with a controlled heating device for use when required.
10. On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable, the mixture shall be spread, raked, fluted and compacted with hand tools. For such areas the mixture shall be dumped, spread and screed to give the required compacted thickness.

B. Compaction:

1. Rolling with the 3-wheel and tandem roller shall start longitudinally at the sides and proceed toward the center of the surface course, overlapping on successive trips by at least half the width of the rear wheels.
2. Alternate trips of the roller shall be slightly different in length.
3. Rolling with a pneumatic tired roller shall be as directed by the ENGINEER.
4. Rolling shall continue with no further compression can be obtained and all roller marks are eliminated
5. The motion of the roller shall be slow enough at all times to avoid displacement of asphaltic materials. If displacement occurs, it shall be

corrected immediately by use of rakes and fresh asphaltic mixtures, where required.

6. The roller shall not be allowed to stand on the surface course when it has not been fully compacted and allowed to cool.
7. To prevent adhesion of the surface course to the roller, the wheels shall be kept thoroughly moistened with water; however, excess water shall not be allowed.
8. All precautions shall be taken to prevent dripping of gasoline, oil, grease, or other foreign substances on the surface or base courses during rolling operations or while rollers are standing.
9. With the approval of the ENGINEER, a vibratory steel wheeled roller may be substituted for the 3-wheel roller and tandem roller.
10. Along forms, curbs, headers, walls and other places not accessible to the rollers, the mixture shall be thoroughly compacted with hot hand tampers, smoothing irons, or with mechanical tampers. On depressed areas, a trench roller may be used or cleated compression strips may be used under the roller to transmit compression to the depressed area.
11. Any mixture that becomes loose, broken, mixed with dirt, segregated, or is in any way defective shall be removed and replaced with fresh hot bituminous mixture, which shall be compacted to conform with the surrounding area. Any area showing excess or deficiency of bituminous material shall be corrected immediately as directed by the ENGINEER.

C. In-Place Density:

1. In-place density shall be required for all mixtures except thin irregular depth leveling courses.
2. Each course, after final compaction, shall have a density of not less than 95 percent of the density developed in the laboratory test method outlines in Texas SDHPT Bulletin C-14.
3. Density shall be determined with a portable nuclear test device in conformity with ASTM D-2950.76.
4. Calibration of the portable nuclear device will be established by the ENGINEER from cut pavement samples tested in accordance with AASHTO T-166 (weight, volume method). The density readings of the cut pavement samples determined in accordance with AASHTO T-166 (weight, volume method), and the density readings of the pavement samples determined by the portable nuclear test device in conformity with ASTM D 2950 will be correlated by the ENGINEER.
5. Other methods of determining in-place density may be used as deemed necessary by the ENGINEER.
6. It is intended that acceptance density testing will be done while the bituminous mixture is hot enough to permit further compaction if necessary. If the density of an acceptance section does not meet the specified requirements, the CONTRACTOR shall continue the compaction effort until the optimum density is obtained, but rolling for any compactive effort will not be allowed when the temperature of the mix is below 175 F unless authorized in writing by the ENGINEER. Rerolling the paved surface after it has initially cooled will not be allowed.

7. If in-place density tests of the mixture produce a value lower than specified and in the opinion of the ENGINEER is not due to a change in the quality of the material, production may proceed with subsequent changes in the mix and/or construction procedures until in-place density equals or exceeds the specified density.
8. In-place density tests will be provided by the ENGINEER unless otherwise specified.

D. Joints:

1. Placing of the asphalt concrete shall be as continuous as possible. Rollers shall not pass over the unprotected end of a freshly laid mixture unless authorized by the ENGINEER.
2. When plant mix bituminous pavement is placed over plant mix bituminous treated base or when plant mixed seal coat is placed over plant mix bituminous pavement, longitudinal joints shall be staggered at least 6 inches with relation to the longitudinal joints of the underlying course.
3. Transverse joints shall have two foot or 12:1 minimum taper. Longitudinal joints shall have a one foot or 6:1 minimum taper. All transverse tapers shall be cut and squared off prior to commencing new work. Tapered longitudinal joints from previous operations shall be cleaned and tack coated if directed by the ENGINEER. All joints shall be completely bonded. The surface of each course at all joints shall be smooth and shall not show any deviations in excess of 3/16 of an inch when tested with a 10-foot straightedge in any direction.
4. When paving under traffic the CONTRACTOR shall plan his daily surfacing operations on a schedule which will result in not more than one (1) day's operation of exposed longitudinal joints. The longitudinal joints shall not have a height greater than two (2) inches and shall not be left exposed longer than 24 hours.

E. Surface Tolerance:

1. Upon completion, the pavement shall be true to grade and cross section. Except at intersections or any changes of grade, when a 16 foot straight edge is laid on the finished surface parallel to the centerline of the roadway, the surface shall not vary from the edge of the straight edge more than 1/16-inch per foot. Areas that are not within this tolerance shall be brought to grade immediately following the initial rolling. After the completion of final rolling, the smoothness of the course shall be checked, and the irregularities that exceed the specified tolerances or that retain water on the surface shall be corrected by removing the defective work and replacing with new material as directed by the ENGINEER at the expense of the CONTRACTOR.

F. Manholes and Valve Covers:

1. Manhole frames and valve covers shall be adjusted prior to placing the surface course.

G. Compacted Thickness of HMAC surface and Base Courses:

1. Surface Courses. The compacted thickness or depth of the asphaltic concrete surface course shall be as shown on the plans. Where the plans require a depth or thickness of the surface course greater than two inches compacted depth, same shall be placed in multiple courses of equal depth, each of which shall not exceed two inches compacted depth. If, in the opinion of the ENGINEER, an additional tack coat is considered necessary between any of the multiple courses, it shall be applied at the rate as directed.
2. Base Courses. The compacted thickness or depth of each base course shall be as shown on the plans. Where the plans require a depth or thickness of the course greater than 4 inches, same shall be accomplished by constructing multiple lifts of approximately equal depth, each of which shall not exceed these maximum compacted depths. If, in the opinion of the ENGINEER, an additional tack coat is considered necessary between any of the multiple lifts, it shall be applied as herein before specified and at the rate as directed.

H. Pavement Thickness Tests:

1. Pavement Thickness Test. Upon completion of the work and before final acceptance and final payment shall be made, pavement thickness test shall be made by the ENGINEER or his authorized representative unless otherwise specified in the special provisions or in the plans. The number and location of tests shall be at the discretion of the OWNER. The cost for the initial pavement thickness test shall be at the expense of the ENGINEER. In the event a deficiency in the thickness of pavement is revealed during normal testing operations, subsequent tests necessary to isolate the deficiency shall be at the CONTRACTOR's expense. The cost for the additional coring test shall be at the same rate charged by commercial laboratories.

I. Price Adjustment for Roadway Density:

1. The pavement of the unit price will be adjusted for roadway density as outlined in the following table. The adjustment will be applied on a lot by lot basis for each lift. The adjustment will be based on the average of five density tests. The price adjustment will be applied to the entire asphalt concrete mix which includes the HMAC aggregate, the asphalt cement and anti-stripping compound, is used.

| <u>Average Density</u><br><u>% of Lab Density</u> | <u>Percent of Contract</u><br><u>Price To Be Paid</u> |
|---------------------------------------------------|-------------------------------------------------------|
| Above 95%                                         | 100%                                                  |
| 94.0 to 94.99                                     | 96%                                                   |
| 93.0 to 93.99                                     | 91%                                                   |

92.0 to 92.99

85%

Less than 92.0

\*

\* This lot shall be removed and replaced to meet specification requirements as ordered by the ENGINEER. In lieu thereof, the CONTRACTOR and the ENGINEER may agree in writing that for practical purposes, the lot shall not be removed and will be paid for at 50% of the contract price.

#### **PART 4 - MEASUREMENT AND PAYMENT**

##### **4.01 INCIDENTAL WORK:**

- A. Prime coat, anti-stripping compound, where used and tack coat shall not be measured for direct payment, but shall be considered as subsidiary work pertaining to the placing of asphaltic mixtures of the contract price.

##### **4.02 MEASUREMENT:**

- A. Hot-mix asphalt concrete material shall be measured by the ton of 2,000 pounds or by the square yard of the type or types used in the completed and accepted work.
- B. Weight shall be determined by a certified scale approved by the OWNER and recorded serially numbered weight tickets, identifying the vehicle and presented to the ENGINEER's representative on the job.

##### **4.03 PAYMENT:**

- A. Work performed and materials furnished, as prescribed by this item, measured as provided herein, shall be paid at the unit bid price per ton or square yard for the type or types of hot mix asphalt concrete pavement shown on the proposal.
- B. Unit bid price shall be payment in full for quarrying; furnishing all materials; for all heating; mixing; hauling; cleaning existing base course or pavement; placing asphaltic mixtures; rolling and finishing; and for all labor, tools, equipment and incidentals necessary to complete the work, including the work and materials involved in the application of prime coat and tack coat.

**\* \* \* END OF SECTION \* \* \***



## SECTION 02780

### FLAT WHEEL ROLLING

#### PART 1- GENERAL

##### 1.01 GENERAL DESCRIPTION OF WORK:

- A. This work shall consist of the compaction of subgrade, embankment, flexible base, surface treatments and asphalt surfaces by the operation of approved power roller as herein specified and as directed by the ENGINEER.

#### PART 2 - PRODUCTS

##### 2.01 EQUIPMENT:

###### A. Embankments and Flexible Bases

- 1. Power rollers shall be of the 3-wheel, self-propelled type, weighing not less than 10 tons and shall provide a compression on the rear wheels of not less than 325 pounds per linear of wheel width. All wheels shall be flat.
- 2. The rear wheels shall have a diameter of not less than 48 inches and each shall have a wheel width of not less than 20 inches.

###### B. Surface Treatments and Pavements

- 1. Power rollers shall be the 3-wheel or tandem, self-propelled type, weighing not less than 3 tons nor more than 6 tons. All wheels shall be flat.
- 2. Rollers shall be equipped with an adequate scraping or cleaning device on each wheel.
- 3. Rollers used to compact asphalt mixture shall be equipped with a water system which will keep all tires uniformly wet.
- 4. In lieu of the rolling equipment specified, the CONTRACTOR may, upon written permission from the ENGINEER, operate other compacting in the same period of time as the specified equipment. If the substituted compaction within the same period of time as would be expected of the specified equipment, as determined by the ENGINEER, its use shall be discontinued.
- 5. Rollers shall be maintained in good repair and operating condition and shall be approved by the ENGINEER.

### **PART 3 - EXECUTION**

#### **3.01 CONSTRUCTION METHODS:**

##### **A. Subgrades, Embankments and Flexible Base**

1. The subgrade or embankment layer or the base course shall be sprinkled if directed and rolling with a power roller shall start longitudinally at the sides and proceed towards the center, overlapping on successive trips by at least 1/2 the width of the rear wheel of the power roller.
2. On super-elevated curves, rolling shall begin at the low sides and progress toward the high sides. Alternate trips of the roller shall be slightly different in length.
3. The rollers, unless otherwise directed, shall be operated at a speed between 2 and 3 miles per hour.

##### **B. Surface Treatments and Pavements**

1. Rolling shall be done to produce a satisfactory surface as called for in surface treatment and pavement items.
2. The sequence of work shall be as indicated for embankment layer or base course.
3. The operating speed shall be determined by the CONTRACTOR.

### **PART 4 - MEASUREMENT AND PAYMENT**

#### **4.01 MEASUREMENT AND PAYMENT:**

- A. No additional compensation will be made for materials, equipment or labor required by this item, but shall be considered incidental to the other items included in the contract.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 02782**

### **PNEUMATIC TIRE ROLLING**

#### **PART 1 - GENERAL**

##### **1.01 GENERAL DESCRIPTION OF WORK:**

- A. This work shall consist of the compaction of embankment, flexible base, surface treatments or pavements by the operation of approved pneumatic tire rollers.

#### **PART 2 - PRODUCTS**

##### **2.01 GENERAL REQUIREMENTS:**

- A. When used on seal coats, asphaltic surface treatments and bituminous mixture pavements, the roller shall be self propelled and equipped with smooth tread tires with 45 psi tire pressure.
- B. The roller shall be so constructed as to be capable of being operated in both a forward and a reverse direction.
- C. When used on bituminous mixture pavements, the roller shall have suitable provision for moistening the surface of the tires while operating.
- D. When turning is impractical or detrimental to the work and when specifically directed by the ENGINEER, the roller shall be of the self-propelled type.
- E. In lieu of the rolling equipment specified, the CONTRACTOR may operate other compacting equipment that will produce equivalent relative compaction in the same period of time as the specified equipment. If the substituted compaction equipment fails to produce the desired compaction within the same period of time, its use shall be discontinued.
- F. Rollers shall be maintained in good repair and operating condition and shall be approved by the ENGINEER.

##### **2.02 LIGHT PNEUMATIC TIRE ROLLER:**

- A. The light pneumatic tire roller shall consist of not less than 9 pneumatic tire wheels, running on axles in such manner that the rear group of tires will cover the entire gap between adjacent tires of the forward group and mounted in a rigid frame and provided with a loading platform or body suitable for ballast loading.
- B. The front axle shall be attached to the frame in such manner that the roller may be turned within a minimum circle.

- C. The pneumatic tire roller under working conditions shall have an effective rolling width of approximately 60 inches and shall be so designed that by ballast loading the total load be varied uniformly from 9,000 pounds or less to 18,000 pounds or more.
- D. The roller shall be equipped with tires that will afford ground contact pressures to 45 pounds per square inch or more. The operating load and tire air pressure shall be within the range of the manufacturer's chart. The roller under working conditions shall provide a uniform compression under all wheels.
- E. Individual tire inflation pressures shall be within +5 psi of each other.
- F. The pneumatic tire roller shall be drawn by either a suitable crawler type tractor, a pneumatic tired tractor, a truck of adequate tractive effort or may be of the self-propelled type and the roller, when drawn or propelled by either type of equipment, shall be considered a light pneumatic tire roller unit.

### **2.03 MEDIUM PNEUMATIC TIRE ROLLER (TYPE A):**

- A. The medium pneumatic tire roller (Type A) shall consist of not less than 7 pneumatic tired wheels, running on axles in such manner that the rear group of tires will cover the entire gap between adjacent tires of the forward group and mounted in a rigid frame and provided with a loading platform or body suitable for ballast loading.
- B. The front axles shall be attached to the frame in such a manner that the roller may be turned within a minimum circle. The pneumatic tire roller, under working conditions, shall have an effective rolling width of approximately 84 inches and shall be so designed that, by ballast loading, the total load may be varied uniformly from 23,500 pounds or less to 50,000 pounds or more.
- C. The roller shall be equipped with tires that will afford ground contact pressures to 80 pounds per square inch or more. Individual tire inflation pressures shall be within +5 psi of each other.
- D. The operating load and tire air pressure shall be within the range of the manufacturer's chart.
- E. The pneumatic tire roller shall be drawn by either a suitable crawler type tractor, a pneumatic tired tractor, a truck of adequate tractive effort or may be of the self-propelled type.
- F. The roller, when drawn or propelled by any type of equipment, shall be considered a medium pneumatic tire roller unit.
- G. The power unit shall have adequate tractive effort to properly move the operating roller at variable uniform speeds up to approximately 5 miles per hour.

## **2.04 MEDIUM PNEUMATIC TIRE ROLLER (Type B):**

- A. The medium pneumatic tire roller (Type B) shall conform to the requirements for Medium Pneumatic Tire Roller (Type A) as specified above, except that the roller shall be equipped with tires that will afford ground contact pressures to 90 psi or more.

## **PART 3 -EXECUTION**

### **3.01 CONSTRUCTION METHODS:**

- A. The embankment layer or the base course be sprinkled if directed and rolling with a pneumatic tire roller shall start longitudinally at the sides and proceed towards the center, overlapping on successive trips by at least 1/2 of width of the pneumatic tire roller.
- B. On super-elevated curves, rolling shall begin at the low sides and progress towards the high sides.
- C. Alternative trips of the roller shall be slightly different in length.
- D. The light pneumatic tire roller shall be operated at speeds between 2 and 6 miles per hour for asphalt surfacing work and all other work.
- E. The medium pneumatic tire roller shall be operated at speeds which produce a satisfactory product.
- F. Sufficient rollers shall be provided to compact the material in a satisfactory manner. When operations are so isolated from one another that 1 roller unit cannot perform the required compaction satisfactorily, additional roller units shall be provided.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.01 MEASUREMENT AND PAYMENT:**

- A. No additional compensation will be made for materials, equipment or labor required by this item, but shall be considered subsidiary to the various items of the contract.

**\* \* \* END OF SECTION \* \* \***



## SECTION 02786

### PROOF ROLLING

#### PART 1 - GENERAL

##### 1.01 GENERAL DESCRIPTION WORK:

- A. This work shall consist of furnishing and operating heavy pneumatic tired compaction equipment for testing the compaction of embankment, sub-grade or flexible base.
- B. Proof roll is to be used to locate unstable areas.

#### PART 2 - PRODUCTS

##### 2.01 EQUIPMENT:

- A. The proof rolling equipment shall consist of not less than 4 pneumatic tired wheels, running on axles carrying not more than 2 wheels and mounted in a rigid frame and provided with loading platform or body suitable for ballast loading.
- B. All wheels shall be arranged so that they will carry approximately equal loads when operating on uneven surfaces.
- C. The proof roller under working conditions shall have a rolling width of from 8 feet to 10 feet and shall be so designed that, by ballast loading, the gross load may be varied uniformly from 25 tons to 50 tons.
- D. The tires shall be capable of operating under the various loads with variable air pressure up to 150 pounds per square inch. The operating load and tire pressure shall be within the range of the manufacturer's chart as directed by the ENGINEER.
- E. The proof roller shall be drawn by a suitable crawler type tractor or rubber tire tractor of adequate tractive effort or may be of self-propelled type. There shall be a sufficient quantity of ballast available to load the equipment to a maximum gross weight of 50 tons.
- F. Rubber tired tractive equipment shall be used on base courses.
- G. Other type tractive equipment may be used on embankment sub-grade.
- H. The heavy pneumatic tire roller unit shall be capable of turning 180 degrees in the crown width.

- I. In lieu of the rolling equipment specified, the CONTRACTOR may, upon written permission from the ENGINEER, operate other equipment that will produce equivalent results as the specified equipment. If the substituted equipment fails to produce the desired results as would be expected of the specified equipment as determined by the ENGINEER, its use shall be discontinued.

### **PART 3 - EXECUTION**

#### **3.01 CONSTRUCTION METHODS:**

- A. This work shall be done to proof all prepared sub-grades and flexible base courses or as directed by the ENGINEER.
- B. On embankment compaction, each layer will be placed to specified thickness at optimum moisture and compacted with conventional equipment to comply with the requirements of the governing embankment item.
- C. Prior to placing the overlaying course, the layer shall be proof rolled as directed by the ENGINEER.
- D. When the operation of the proof rolling unit shows an area to be unstable or non-uniform, such area shall be brought to satisfactory stability and uniformity by additional compaction, by removal of unsuitable materials or replacement with suitable materials and re-compaction.
- E. The surface tested shall then be checked for conformity with line and grade and any irregularities corrected.
- F. Roller shall be operated at speeds between 2 and 6 miles per hour or as directed by the ENGINEER.

### **PART 4 - MEASUREMENT AND PAYMENT**

#### **4.01 MEASUREMENT AND PAYMENT:**

- A. No additional payment will be made for the materials, equipment or labor required by this item, but shall be considered subsidiary to the various items included in the contract.

**\* \* \* END OF SECTION \* \* \***

## **SECTION 09100**

### **CONSTRUCTION TRAFFIC CONTROL**

#### **PART 1 - GENERAL**

##### **1.01 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 for Street and Highways and as indicated or directed by the ENGINEER.

#### **PART 2 - PRODUCTS**

##### **2.01 CONSTRUCTION TRAFFIC CONTROL SIGNS:**

- A. Construction traffic control signs shall conform to the provisions of Section 9000 except as noted in the plans or as directed by the ENGINEER.
- B. Construction traffic control signs used herein shall be fabricated using sheeting conforming to the requirements of Table 9000-3.
- C. 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 plane.

##### **2.02 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 to the details shown on the plans.

### **2.03 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.

### **2.04 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.
- B. Barricade rails shall be fabricated using S4S grade #2 fir or yellow pine and reflectorized sheeting conforming to the requirements shown in Table 9000-3.

### **2.05 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 of the TMUTCD and Table 9000-3.

### **2.06 CONSTRUCTION TRAFFIC MARKINGS:**

- A. Construction traffic markings shall comply with Section 9990 and the details shown in the plans.

### **2.07 ABBREVIATED PAVEMENT MARKINGS FOR CONSTRUCTION:**

- A. The pavement-marking material shall consist of an adhesive-backed reflective tape which can be applied to the pavement. Markings shall be of good 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 for a minimum of 300 feet unless sight distance is restricted by geometric roadway features.
- b) The pavement markings (when illuminated by automobile low beam headlights at night) shall be distinctly 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.

## **2.08 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 and white reflective sheeting or tape in accordance with the requirements of TMUTCD and Table 9000-3. 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 lights 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 a 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.
- b) Other methods approved by the ENGINEER prior to initiating the work may be used; however, said approval does not abrogate the CONTRACTOR'S responsibility of effecting the temporary or permanent installation.

#### **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 Section 9000. The color of reflective material shall be as shown in the plans.

### **2.09 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 an 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.

### **2.10 MATERIALS FOR CONSTRUCTION DETOURS**

#### **A. FLEXIBLE BASE**

- 1. Flexible base shall conform to Section 2601.

**B. ASPHALT TREATED BASE**

1. Asphalt treated base shall conform to Section 2604.

**C. PRIME COAT**

1. Prime Coat shall conform to Section 2610.

**D. TACK COAT**

1. Tack Coat shall conform to Section 2620.

**E. SEAL COAT**

1. Seal Coat shall conform to Section 2617 or Section 2645.

**F. HOT MIX ASPHALTIC CONCRETE PAVEMENT**

1. Hot Mix shall be Type D conforming to Section 2612.

**G. SEEDING**

1. Seeding shall conform to Section 0000.

**PART 3 - EXECUTION**

**3.01 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.

**3.02 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.

**3.03 BARRICADES:**

- A. Barricades shall be installed in conformity with the details noted on the plans or as directed by the ENGINEER.

### 3.04 VERTICAL PANELS:

- A. Vertical panels shall be installed in conformity with the details noted on the plans or as directed by the ENGINEER.

### 3.05 CONSTRUCTION TRAFFIC MARKINGS:

- A. Construction traffic markings shall be installed in conformity with Section 9990 and the details shown on the plans or as directed by the ENGINEER.

### 3.06 ABBREVIATED PAVEMENT MARKING 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:

| <u>Condition</u>                   | <u>Spacing</u>        | <u>Length of Stripe</u> |
|------------------------------------|-----------------------|-------------------------|
| 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 spacing 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 place.

### 3.07 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 County.
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 additional cost to the COUNTY.

- E. Channelization devices shall be and installed in accordance with the details shown on the plans, except that barrels shall be as noted herein.

**3.08 SEQUENTIAL ARROW DISPLAY:**

- A. Sequential arrow displays shall be used according to the requirements shown on the plans and shown in TMUTCD.

**3.09 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.

## **PART 4 - MEASUREMENT AND PAYMENT**

### **4.01 MEASUREMENT:**

- A. Measurement of various items described in this specification complete in place will be made as follows:
  - 1. Construction traffic control sign assemblies, consisting of the applicable signage mounted on either sign supports or portable sign supports, shall be measured per each or lump sum.
  - 2. Barricades shall be measured by the type per each.
  - 3. Vertical panels shall be measured per each. Supports required for vertical panels will not be measured for payment but will be considered incidental to the completion of the work.
  - 4. Construction traffic markings shall be measured per linear foot.
  - 5. Abbreviated pavement markings for construction shall be measured per linear foot.
  - 6. Channelization devices shall be measured per each for the category and type shown.
  - 7. Sequential arrow display shall be measured per each.
  - 8. Construction detours shall be measured per each or considered incidental to completion of construction.
  - 9. Construction traffic control plan, consisting of any or all of the items described herein, shall be measured lump sum or incidental to completion of construction.

### **4.02 PAYMENT:**

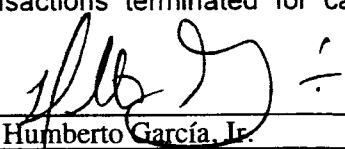
- A. The accepted quantities of construction traffic control devices shall be paid at the contract unit bid price per the unit of measurement noted above.
- B. Compensation will be for furnishing all materials, labor, equipment, tools and incidentals required for the work, all in accordance with the plans and these specifications.

**\* \* \* END OF SECTION \* \* \***

**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: Humberto García, Jr.  
Title: Member  
Telephone Number: (956) 424-3414  
Date: October 14, 2015

If the bidder is unable to certify to all of the statements in this Certification, such bidder should attach an explanation to this proposal.

## Request for Taxpayer Identification Number and Certification

Give form to the  
requester. Do not  
send to the IRS.

|                                                       |                                                                                                                                                                                                      |                                                            |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Print or type<br>See Specific Instructions on page 2. | Name (as shown on your income tax return)                                                                                                                                                            |                                                            |
|                                                       | Business name, if different from above<br><b>2GS, LLC</b>                                                                                                                                            |                                                            |
|                                                       | Check appropriate box: <input type="checkbox"/> Individual/<br>Sole proprietor <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Other ▶ | <input type="checkbox"/> Exempt from backup<br>withholding |
|                                                       | Address (number, street, and apt. or suite no.)<br><b>P. O. Box 595</b>                                                                                                                              |                                                            |
|                                                       | City, state, and ZIP code<br><b>Peñitas, TX 78576</b>                                                                                                                                                |                                                            |
| List account number(s) here (optional)                |                                                                                                                                                                                                      |                                                            |
| Requester's name and address (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 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.

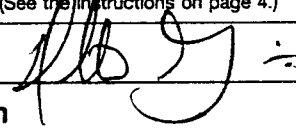
|                                |   |   |   |   |   |   |   |   |
|--------------------------------|---|---|---|---|---|---|---|---|
| Social security number         |   |   |   |   |   |   |   |   |
|                                |   |   |   |   |   |   |   |   |
| or                             |   |   |   |   |   |   |   |   |
| Employer identification number |   |   |   |   |   |   |   |   |
| 4                              | 5 | 4 | 3 | 3 | 8 | 9 | 1 | 1 |

### Part II Certification

Under penalties of perjury, I certify that:

- 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
- 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
- I am a U.S. person (including a U.S. resident alien).

**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 ▶ **October 14, 2015**

### 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.

**U.S. person.** 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:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee.

In 3 above, 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.

For federal tax purposes, you are considered a person if you are:

- An individual who is a citizen or resident of the United States,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States, or
- Any estate (other than a foreign estate) or trust. See Regulations sections 301.7701-6(a) and 7(a) for additional information.

**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 recipient 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 28% of such payments (after December 31, 2002). This is called "backup withholding." Payments that may be subject to backup withholding include 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 4 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 regarding partnerships* on page 1.

## 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" line.

**Limited liability company (LLC).** If you are a single-member LLC (including a foreign LLC with a domestic owner) that is disregarded as an entity separate from its owner under Treasury regulations section 301.7701-3, enter the owner's name on the "Name" line. Enter the LLC's name on the "Business name" line. Check the appropriate box for your filing status (sole proprietor, corporation, etc.), then check the box for "Other" and enter "LLC" in the space provided.

**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" line.

**Note.** You are requested to check the appropriate box for your status (individual/sole proprietor, corporation, etc.).

### Exempt From Backup Withholding

If you are exempt, enter your name as described above and check the appropriate box for your status, then check the "Exempt from backup withholding" box in the line following the business 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.

**Exempt payees.** Backup withholding is not required on any payments made to the following payees:

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 chart below shows types of payments that may be exempt from backup withholding. The chart applies to the exempt recipients listed above, 1 through 15.

| IF the payment is for . . .                                                            | THEN the payment is exempt for . . .                                                                                               |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Interest and dividend payments                                                         | All exempt recipients except for 9                                                                                                 |
| Broker transactions                                                                    | Exempt recipients 1 through 13. Also, a person registered under the Investment Advisers Act of 1940 who regularly acts as a broker |
| Barter exchange transactions and patronage dividends                                   | Exempt recipients 1 through 5                                                                                                      |
| Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup> | Generally, exempt recipients 1 through 7 <sup>2</sup>                                                                              |

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation (including gross proceeds paid to an attorney under section 6045(f), even if the attorney is a corporation) and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees; 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-owner LLC that is disregarded as an entity separate from its owner (see *Limited liability company (LLC)* on page 2), enter your SSN (or EIN, if you have one). If the LLC is a corporation, partnership, etc., 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.socialsecurity.gov](http://www.socialsecurity.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](http://www.irs.gov/businesses) and clicking on Employer ID Numbers under Related Topics. You can get Forms W-7 and SS-4 from the IRS by visiting [www.irs.gov](http://www.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.** Writing "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 items 1, 4, and 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). Exempt recipients, see *Exempt From Backup Withholding* on page 2.

**Signature requirements.** Complete the certification as indicated in 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 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 <sup>1</sup> |
| 3. Custodian account of a minor (Uniform Gift to Minors Act)                                                                                                                                | The minor <sup>2</sup>                                                                                  |
| 4. a. The usual revocable savings trust (grantor is also trustee)                                                                                                                           | The grantor-trustee <sup>1</sup>                                                                        |
| b. So-called trust account that is not a legal or valid trust under state law                                                                                                               | The actual owner <sup>1</sup>                                                                           |
| 5. Sole proprietorship or single-owner LLC                                                                                                                                                  | The owner <sup>3</sup>                                                                                  |
| For this type of account:                                                                                                                                                                   | Give name and EIN of:                                                                                   |
| 6. Sole proprietorship or single-owner LLC                                                                                                                                                  | The owner <sup>3</sup>                                                                                  |
| 7. A valid trust, estate, or pension trust                                                                                                                                                  | Legal entity <sup>4</sup>                                                                               |
| 8. Corporate or LLC electing corporate status on Form 8832                                                                                                                                  | The corporation                                                                                         |
| 9. Association, club, religious, charitable, educational, or other tax-exempt organization                                                                                                  | The organization                                                                                        |
| 10. Partnership or multi-member LLC                                                                                                                                                         | The partnership                                                                                         |
| 11. A broker or registered nominee                                                                                                                                                          | The broker or nominee                                                                                   |
| 12. 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                                                                                       |

<sup>1</sup> 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.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or "DBA" name on the second name line. You may use either your SSN or EIN (if you have one). If you are a sole proprietor, IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the legal 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 regarding partnerships* on page 1.

**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.

## Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA, or Archer MSA or HSA. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation, and to cities, states, the District of Columbia, and U.S. possessions to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, to federal and state agencies to enforce federal nontax 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. Payers must generally withhold 28% of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to a payer. Certain penalties may also apply.

# 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](mailto:purchasing@co.hidalgo.tx.us)

|                                                                                                                                                                                     |  |                                                       |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------|--|
| Company Name: 2GS, LLC                                                                                                                                                              |  | Telephone No. ( 956 ) 424-3414                        |  |
| dba Name:                                                                                                                                                                           |  |                                                       |  |
| Legal Name:                                                                                                                                                                         |  |                                                       |  |
| Mailing Address : P. O. Box 595                                                                                                                                                     |  | Fax No. ( 956 ) 683-6149                              |  |
| Physical Address: 1307 West Expressway 83, Suite C                                                                                                                                  |  |                                                       |  |
| City, State, Zip Peñitas, TX 78576                                                                                                                                                  |  | Tax I.D. No. 45-4338911                               |  |
| Remit to Address : P. O. Box 595                                                                                                                                                    |  | City, State, Zip Peñitas, TX 78576                    |  |
| E-Mail Address: omar@2gsllc.com                                                                                                                                                     |  |                                                       |  |
| Representative(s) Name(s) & Title(s) Humberto García, Jr., Managing Member                                                                                                          |  |                                                       |  |
| Type of Organization (check one): <input type="checkbox"/> Individual <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Non-Profit |  |                                                       |  |
| <input checked="" type="checkbox"/> LLC <input type="checkbox"/> Sole Proprietor <input type="checkbox"/> 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: Texas                                                                                                                                                       |  | Date: 1/20/14 Other: _____                            |  |
| Type of Business (check one): <input type="checkbox"/> Manufacturer <input type="checkbox"/> Wholesaler <input type="checkbox"/> Retailer <input type="checkbox"/> Broker           |  |                                                       |  |
| <input type="checkbox"/> Distributor <input type="checkbox"/> Service Organization <input checked="" type="checkbox"/> Other, Specify Paving and Drainage Contractor                |  |                                                       |  |
| Name & Title of Person(s) Authorized to Sign Bids, Proposals, and/or Contracts:                                                                                                     |  |                                                       |  |
| Humberto García, Jr., Managing Member                                                                                                                                               |  |                                                       |  |
| <b>Small and/or Disadvantaged Business Information (check application criteria)</b>                                                                                                 |  |                                                       |  |
| Small Business:                                                                                                                                                                     |  | Disadvantaged Business (At Least 51% Ownership)       |  |
| Less than 125,000 annual gross receipt                                                                                                                                              |  | Black American                                        |  |
| Less than 250,000 annual gross receipt                                                                                                                                              |  | <input checked="" type="checkbox"/> Hispanic American |  |
| Less than 499,000 annual gross receipt                                                                                                                                              |  | Asian Pacific American                                |  |
| <input checked="" type="checkbox"/> More than 500,000 annual gross receipt                                                                                                          |  | Native American                                       |  |
|                                                                                                                                                                                     |  | Women                                                 |  |
|                                                                                                                                                                                     |  | Other                                                 |  |
| Have you been certified as a HUB or an MBE/WBE source?: <input checked="" type="radio"/> Yes <input type="radio"/> No                                                               |  |                                                       |  |
| Indicate Certification No.(s): 1454338911900 or are Certificate(s) attached?: Yes <input checked="" type="radio"/> 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 <input checked="" type="radio"/> 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): 1454338911900 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?: 0 %  
(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: \_\_\_\_\_

---

## **DISCLOSURE OF CONFLICT OF INTEREST**

Effective January 1, 2006, 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 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.

**Please Submit completed forms 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 BIDDER.**

**CONFLICT OF INTEREST QUESTIONNAIRE****FORM CIQ**

For vendor or other person doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person 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 person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

**OFFICE USE ONLY**

Date Received

**1** Name of person who has a business relationship with local governmental entity.

2GS, 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 the originally filed questionnaire becomes incomplete or inaccurate.)

**3** Name of local government officer with whom filer has employment or business relationship.\_\_\_\_\_  
Name of Officer

This section (item 3 including subparts A, B, C &amp; D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?

☐ Yes☒ No

B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

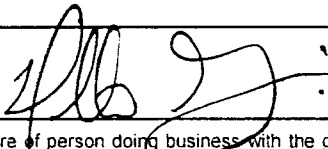
☐ Yes☒ No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

☐ Yes☒ No

D. Describe each employment or business relationship with the local government officer named in this section.

N/A

**4**   
\_\_\_\_\_  
Signature of person doing business with the governmental entity

October 14, 2015

\_\_\_\_\_  
Date

## 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 statutes of Texas, and Article 1066 ©, entitle Local Sales and Use Tax, revised civil statutes 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 14th day of October, 2015.

2GS, LLC, Humberto García, Jr.

Contractor

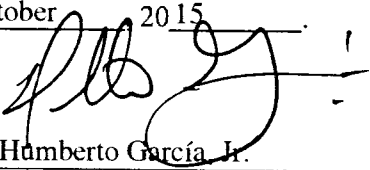


## SALES TAX AND LOCAL SALES TAX EXEMPTION CERTIFICATE FOR CONTRACTORS

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 statutes of Texas, and Article 1066 ©, entitle Local Sales and Use Tax, revised civil statutes 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 14th day of October 2015.

  
2GS, LLC, Humberto Garcia Jr.

Contractor

## 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**



General Decision Number: TX140008 01/03/2014 TX8

Superseded General Decision Number: TX20130008

State: Texas

Construction Types: Heavy and Highway

Counties: Cameron, Hidalgo and Webb Counties in Texas.

# HEAVY & HIGHWAY CONSTRUCTION PROJECTS

|                     |                  |
|---------------------|------------------|
| Modification Number | Publication Date |
| 0                   | 01/03/2014       |

\* 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,            |          |         |

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

#### Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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#### 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

# CHANGE ORDER NUMBER ONE(1)

Project: \_\_\_\_\_

DATE OF ISSUANCE: \_\_\_\_\_ EFFECTIVE DATE: \_\_\_\_\_

OWNER: \_\_\_\_\_

OWNER'S CONTRACT NO: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ ENGINEER: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

You are 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                        |                                                        | Original Contract Time for                    |  |
| \$ 0.00                                        |                                                        | Substantial Completion: 0                     |  |
|                                                |                                                        | calendar days or dates                        |  |
| Net Changes from previous Change Order         |                                                        | Net Change from previous Change Orders        |  |
| \$ 0.00                                        |                                                        | 0                                             |  |
|                                                |                                                        | calendar days                                 |  |
| Contract Price prior to this Change Order      |                                                        | Contract Time prior to this Change Order      |  |
| \$ 0.00                                        |                                                        | Substantial Completion: 0                     |  |
|                                                |                                                        | calendar days or dates                        |  |
| Net Increase(decrease) of this Change Order    |                                                        | Net Increase(decrease) of this Change Order   |  |
| \$ 0.00                                        |                                                        | 0                                             |  |
|                                                |                                                        | calendar days                                 |  |
| Contract Price with all approved Change Orders | Net % increase(decrease) from original contract price. | Contract Time with all approved Change Orders |  |
| \$ 0.00                                        | #DIV/O! %                                              | Substantial Completion: 0                     |  |
|                                                |                                                        | calendar days or dates                        |  |

RECOMMENDED:

APPROVED:

ACCEPTED:

By: \_\_\_\_\_  
Engineer (Authorized Signature)

By: \_\_\_\_\_  
Owner (Authorized Signature)

By: \_\_\_\_\_  
Contractor (Authorized Signature)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**SAMPLE --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 \_\_\_\_\_ through \_\_\_\_\_ inclusive; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed and covered by this Application for Payment will pass to OWNER at time of payment free and clear of all 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 Payment is in accordance with the Contract Documents and not defective.

Date \_\_\_\_\_

State of \_\_\_\_\_

County of \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_

\_\_\_\_\_  
CONTRACTOR

By: \_\_\_\_\_

\_\_\_\_\_  
Notary Public

My Commission expires: \_\_\_\_\_

Payment of the above AMOUNT DUE THIS APPLICATION is recommended.

Date \_\_\_\_\_

\_\_\_\_\_  
ENGINEER

By: \_\_\_\_\_

**Exhibit E-C**

# Estimate Quantity Update Worksheet

Date:

Contractor: ?  
 Contract Price: 120  
 Work Done this Mo.: 90  
 % Complete: 75.00%

Colonias:  
 Roadway: #DJV/01  
 Control:  
 Project No.:  
 County:  
 Est. No.: 1  
 Work Type: Paving & Drainage  
 Limits:  
 From:  
 To:

Prepared and Checked By:

Signature:

|                                |                                          |      |             |            |                | FIRST MONTH      |             |                     | SECOND MONTH     |             |                     | THIRD MONTH      |             |                     |
|--------------------------------|------------------------------------------|------|-------------|------------|----------------|------------------|-------------|---------------------|------------------|-------------|---------------------|------------------|-------------|---------------------|
|                                |                                          |      |             |            |                |                  |             |                     |                  |             |                     |                  |             |                     |
| ITEM NO.                       | DESCRIPTION                              | UNIT | PROJECT QTY | Unit Price | Project Amount | MONTHLY QUANTITY | QTY to Date | Item Cost (Monthly) | MONTHLY QUANTITY | QTY to Date | Item Cost (Monthly) | MONTHLY QUANTITY | QTY to Date | Item Cost (Monthly) |
| (901)ADMINISTRATIVE            |                                          |      |             |            |                |                  |             |                     |                  |             |                     |                  |             |                     |
| (902) PRELIMINARY ENGINEERING  |                                          |      |             |            |                |                  |             |                     |                  |             |                     |                  |             |                     |
| (903) CONSTRUCTION ENGINEERING |                                          |      |             |            |                |                  |             |                     |                  |             |                     |                  |             |                     |
| (904) RIGHT-OF-WAY             |                                          |      |             |            |                |                  |             |                     |                  |             |                     |                  |             |                     |
| (905) ROADWAY CONSTRUCTION     |                                          |      |             |            |                |                  |             |                     |                  |             |                     |                  |             |                     |
| 100                            | PREP ROW                                 | Sta. | 1.100       | \$1,800.00 | \$1,980.00     | 1.000            | 1.000       | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 110                            | BACKFILL (TY A)                          | Sta. | 1.000       | \$600.00   | \$600.00       | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 247                            | FLEX BASE (RDWY DELTY D GR 6 CL 4)       | CY   | 76.000      | \$28.00    | \$2,128.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 260                            | LIME (TY A SLURRY) OR (TY B)             | TON  | 1036.000    | \$2.00     | \$2,072.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 260                            | LIME TREAT SUBGR (DC)(12")               | SY   | 0.000       | \$6,000.00 | \$0.00         | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 262                            | LIME (TY A SLURRY) OR (TY B)             | TON  | 7.800       | \$3,000.00 | \$23,400.00    | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 262                            | LIME TRT FOR BS CRS (NEW/EXT BS)(DC)(6") | SY   | 1277.800    | \$6.00     | \$7,666.80     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 310                            | ASPH MATRL (MC-30)                       | GAL  | 246.7       | \$6.00     | \$1,480.20     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 500                            | MOBILIZATION                             | LS   | 1.000       | \$3,000.00 | \$3,000.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 502                            | BARRICADES, SIGNS, AND TRAF HANDLE       | MO   | 1.000       | \$1,000.00 | \$1,000.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 529                            | CONC CURB AND GUTTER (TY A)(BARRIER)     | LF   | 600.000     | \$7.50     | \$4,500.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 644                            | SMALL RDS SGN ASSM (TY A)                | EA   | 2.000       | \$300.00   | \$600.00       | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 644                            | SMALL RDS SGN ASSM (TY F)                | EA   | 2.000       | \$500.00   | \$1,000.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 658                            | DEL ASM TY A (D-SY)                      | EA   | 4.000       | \$100.00   | \$400.00       | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 666                            | REFL PAV MKR TY I (Y)(SLD)(4")           | LF   | 400.000     | \$0.25     | \$100.00       | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 666                            | REFL PAV MKR TY I (Y)(BRK)(4")           | LF   | 140.000     | \$0.25     | \$35.00        | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 672                            | RAIS PAV MKR CL B (REFL)(TY II-A-A)      | EA   | 24.000      | \$3.50     | \$84.00        | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 3146                           | HOT MIX (TY D)                           | TON  | 105.5       | \$34.00    | \$3,587.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 5249                           | TEMP SEDMT CONT FENCE                    | LF   | 70.000      | \$3.00     | \$210.00       | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| (906) DRAINAGE                 |                                          |      |             |            |                |                  |             |                     |                  |             |                     |                  |             |                     |
| 464                            | RC PIPE (CL III)(18")                    | LF   | 404.800     | \$25.00    | \$10,120.00    | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 464                            | RC PIPE (CL III)(24")                    | LF   | 120.000     | \$30.00    | \$3,600.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 465                            | INLET (COMPL)(TY A)                      | EA   | 2.000       | \$2,000.00 | \$4,000.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 465                            | INLET (COMPL)(TY C)                      | EA   | 2.000       | \$1,900.00 | \$3,800.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 465                            | MANH (COMPL)(TYM)                        | EA   | 1.000       | \$2,000.00 | \$2,000.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 465                            | INLET EXT.                               | EA   | 2.000       | \$700.00   | \$1,400.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 467                            | SET (TY II)(18")/RCP(1-6)                | EA   | 4.000       | \$550.00   | \$2,200.00     | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |
| 467                            | SET (TY II)(24")/RCP(1-6)                | EA   | 1.000       | \$650.00   | \$650.00       | 0.000            | 0           | \$0.00              |                  | 0           | \$0.00              |                  | 0           | 0.00                |

|                                |  |        |        |        |
|--------------------------------|--|--------|--------|--------|
| Monthly Totals:                |  | \$0.00 | \$0.00 | \$0.00 |
| ADMINISTRATIVE (901)           |  |        |        |        |
| PRELIMINARY ENGINEERING (902)  |  |        |        |        |
| CONSTRUCTION ENGINEERING (903) |  |        |        |        |
| RIGHT-OF-WAY (904)             |  |        |        |        |
| Roadway (905):                 |  | \$0.00 | \$0.00 | \$0.00 |
| Drainage (906):                |  | \$0.00 | \$0.00 | \$0.00 |

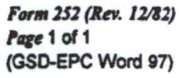
Total to Date  
 Roadway (905): \$0.00  
 Drainage (906): \$0.00  
 Total \$0.00

Prepared and Checked By: \_\_\_\_\_ Date: \_\_\_\_\_

|                     |  |
|---------------------|--|
| Contractor Name     |  |
| Starting Date       |  |
| Project Ending Date |  |
| Retainage Percent   |  |

Application No.: \_\_\_\_\_  
Application Date: \_\_\_\_\_  
Period To: \_\_\_\_\_  
Engineer Firm: \_\_\_\_\_

[illegible]



ESTIMATE NO. 0 CONTRACTOR \_\_\_\_\_  
PROJECT NO. \_\_\_\_\_ COUNTY \_\_\_\_\_ DATE WORK BEGAN \_\_\_\_\_  
TIME COMPUTED FROM \_\_\_\_\_ DATE WORK COMPLETED \_\_\_\_\_

[illegible]

RESIDENT ENGINEER

INSTRUCTIONS: PROJECT IDENTIFICATION SHOULD COVER CONTRACT, TIME CREDITED AND REASONS THEREFORE MUST CONFORM TO PROVISIONS OF CONTRACT. NO HOLIDAY CREDIT ALLOWED FOR DAYS PRECEDING OR FOLLOWING LEGAL HOLIDAYS. TIME SUSPENDED AND RESUMED MUST BE SUPPORTED BY COPY EACH OF LETTERS TO CONTRACTOR DATED ON OR BEFORE EFFECTIVE DATES. TIME EXTENSION MUST BE INDICATED AND REFERENCED TO RELATED PROVISION OF CONTRACT. SEE BOOKLET OF INSTRUCTIONS, CONSTRUCTION ESTIMATES DATED SEPTEMBER 1, 1956

(Company Letterhead)

(Date)

County of Hidalgo  
Attn.: Mr. Raul E. Sesin, P.E.  
1304 S. 25<sup>th</sup> St.  
Edinburg, TX 78539

RE: Hidalgo County Precinct No. 2  
Gearhart Drive Paving & Drainage Improvements  
Contract No.: C-14-032-xx-xxx

Mr. Sesin:

The following is the list of suppliers used in the above mentioned projects as per the County's request:

Hidalgo County Pipe 2605 US Exp. 281 Edinburg, TX 78542 (956)318-2840

If you have any questions, please call me at (956) 607-0741

Best regards,

\_\_\_\_\_  
(name), Manger

(Company Letterhead)

(Date)

County of Hidalgo  
Attn.: Mr. Jose Noe Saldivar, P.E.  
902 N. Doolittle Rd.  
Edinburg, TX 78542

RE: Hidalgo County Precinct No. 1  
Road Construction for Tijerina Subdivision  
Contract No.: C-14-032-xx-xxx

Mr. Saldivar:

The following is the list of suppliers used in the above mentioned projects as per the County's request:

Hidalgo County Pipe 2605 US Exp. 281 Edinburg, TX 78542 (956)318-2840

If you have any questions, please call me at (956) 607-0741

Best regards,

\_\_\_\_\_  
(name), Manger

**PARTIAL/FINAL WAIVER OF LIEN**

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.

\_\_\_\_\_  
SUPPLIER

BY: \_\_\_\_\_  
TITLE

SWORN TO AND SUBSCRIBED BEFORE ME, on this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ to  
certify which witness my hand and seal of office.

My Commission Expires: \_\_\_\_\_  
NOTARY PUBLIC in and for the State of Texas

**CONTRACTOR'S AFFIDAVIT OF  
PAYMENTS OF DEBTS AND CLAIMS**

**PROJECT:**

**PROJECT NO.**

**OWNER:**

**CONTRACTOR:**

**ENGINEER:**

The Contractor 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 otherwise 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

## CERTIFICATE OF CONSTRUCTION COMPLETION

THIS IS TO CERTIFY THAT ON \_\_\_\_\_ DAY OF \_\_\_\_\_ 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 \_\_\_\_\_  
AMOUNT OF FINAL PAYMENT \_\_\_\_\_

6. That the final payment in the amount of \_\_\_\_\_  
\_\_\_\_\_ is now due and payable.

\_\_\_\_\_  
Engineer's Signature

**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:

Contractor Name  
Starting Date  
Project Ending Date  
Engineer's / County Project Description

Application No.:  
Application Date:  
Period To:  
Engineer's / County Project No.:

| No.           | Item Code | Description                               | Unit | Original Rates | Original Schedule Value |         | Revised Rates | Value        |             | First Month         |              | Second Month |                     | Third Month  |             | Total to Date | Balance To Finish |         |
|---------------|-----------|-------------------------------------------|------|----------------|-------------------------|---------|---------------|--------------|-------------|---------------------|--------------|--------------|---------------------|--------------|-------------|---------------|-------------------|---------|
|               |           |                                           |      |                | Quan                    | Dollars |               | Monthly Quan | QTY to Date | Item Cost (Monthly) | Monthly Quan | QTY to Date  | Item Cost (Monthly) | Monthly Quan | QTY to Date |               | Quan              | Dollars |
| (905) ROADWAY |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
| 1             | 100       | Preparation of Right-of-Way               | Sq   | \$ -           | 0.0                     | -       | \$ -          | 0.0          | -           | 0                   | 0            | 0            | 0                   | -            | -           | -             | 0.0               | 0.0     |
| 2             | 152       | 6" road Grader Work(Dems Cont.) Subgrade  | S.Y  | \$ -           | 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. Matrt. (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      | Term Sedimt Cont Fence (Installed)        | L.F. | \$ -           | 0.0                     | -       | \$ -          | 0.0          | -           | 0                   | 0            | 0            | 0                   | -            | -           | -             | 0.0               | 0.0     |
| 10            | 5249      | Term Sedimt Cont Fence Handling (Removed) | L.F. | \$ -           | 0.0                     | -       | \$ -          | 0.0          | -           | 0                   | 0            | 0            | 0                   | -            | -           | -             | 0.0               | 0.0     |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |
|               |           |                                           |      |                |                         |         |               |              |             |                     |              |              |                     |              |             |               |                   |         |

Print Name

Date

Signature

## **CONSTRUCTION IDENTIFICATION SIGN:**

Size, 4' – 0" X 8' – 0"

Letters to be brown with beige background

Construction Identification Signs To Be Erected Prior To Beginning of Actual Construction

Wood for Signs Shall Be ¼" Waterproofing Resin Bonded Exterior Grade Plywood (Douglas Fir Plywood Association or Equal)

Payment for Furnishing, Erecting, Maintenance and Removing Construction Identification Signs Will Not Be made Directly. Such Costs Shall be Included in the Overall Bid Submitted.

To Be Erected as Indicated on title Sheet.

Precinct Logo

# Your Tax Dollars at Work

## BORDER COLONIA ACCESS PROGRAM

### HIDALGO COUNTY PRECINCT NO. 1 – ROAD CONSTRUCTION FOR TIJERINA ESTATES SUBDIVISION

#### 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 |

Project Contractor: \_\_\_\_\_

Project Engineer: Jose Noe Saldivar, P.E.