HIDALGO COUNTY
Professional Engineering Services
Contract # C-14-364-05-05
Work Authorization Form

WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Article 1 of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, **L&G Consulting Engineers, Inc.** *d/b/a* **L&G Engineering**, professional engineers of Mercedes, Texas hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide Engineering Services required for Construction Management Services, Construction Inspection and Construction Material Testing for the Mile 2 North Roadway Reconstruction project from La Homa (SH 364) to Moorefield Road.

The scope of services to be provided by the **Owner** is identified in ***EXHIBIT "A" – Scope of Services to be provided by the Owner*** attached hereto.

The scope of services to be provided by the **Engineer** is identified in ***EXHIBIT "B" – Scope of Services to be provided by the Engineer*** attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **$226,373.22**. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as ***EXHIBIT "D-1" – Estimated Man-hour Breakdown.***

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with **Article 6** of the Agreement.

PART 4. FUNDING

This Work Authorization No. 1 shall be funded through funding source:

Account No. _____

Requisition Number _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization, as identified on *EXHIBIT "C" – Work Schedule.*

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by Hidalgo County Precinct No. 3, Commissioner Joe Flores as to the content and detail of this Work Authorization No. 1.

HIDALGO COUNTY
COMMISSIONER PRECINCT NO. 3

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on 5-5-15 as indicated below.

THE ENGINEER:
L&G ENGINEERING

_____
By: Jacinto Garza, P.E.
President

THE OWNER:
HIDALGO COUNTY

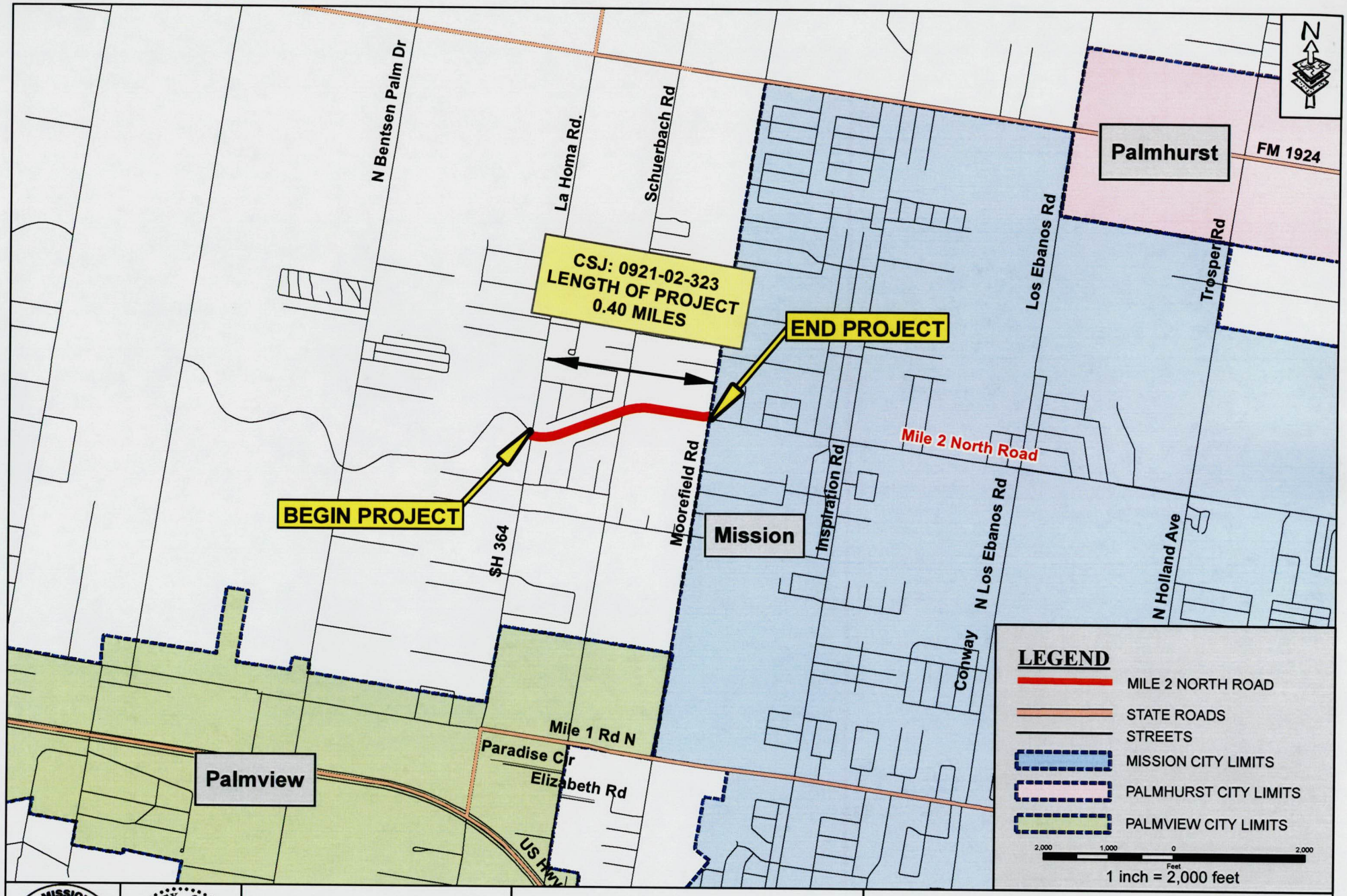
_____
By: Ramon Garcia,
County Judge

ATTEST:

_____
By: Arturo Guajardo, Jr., County Clerk

LIST OF EXHIBITS

Location Map
Exhibit A – Services to be provided by Owner
Exhibit B – Services to be provided by Engineer
Exhibit C – Work Schedule
Exhibit D-1 – Estimated Man-hour Breakdown



CITY OF MISSION, TEXAS FOUNDED IN 1908

THE COUNTY OF HIDALGO TEXAS

L&G Engineering
Transportation Consulting Engineers

MILE 2 NORTH ROAD PROJECT LOCATION MAP

APPROX. LENGTH: 0.60 MILES

CSJ: 0921-02-323 - FROM LA HOMA RD TO MOOREFILED RD APPROX. LENGTH: 0.60 MILES

Document Path: G:\EA MAPS\Mile 2 Lahoma-Conway\2015\Mile2N_LOCATION LA HOMA TO MOOREFILED.mxd

EXHIBIT "A"

SERVICES TO BE PROVIDED BY THE OWNER

The following provides an outline of the services to be provided by the **County** in the development of the **Project**.

The **County** will provide to the **Engineer** the following:

1) Authorization to the Engineer to begin.

2) Payment for work performed by the Engineer.

3) Assistance to the Engineer, as necessary, to obtain required data and information from other local, regional, and state agencies that the Engineer cannot easily obtain.

4) Provide timely review and decisions in response to the Engineers request for information and/or submittals and deliverables.

5) Attend and participate in progress meetings as required and as coordinated and conducted by the Engineer.

6) Attend pre-construction conferences coordinated and conducted by the Engineer.

7) Review and approve monthly and final estimates, developed by the Engineer, for payment to the Contractor.

8) Compensate and pay the Contractor for work performed as identified in the approved monthly and final estimates.

PROJECT DESCRIPTION

The services designated herein as "Services provided by the ENGINEER" shall include the performance of all engineering services for the following described facility:

County/City: Hidalgo County

Control: _____

Project/Description: Construction Management Services, Construction Inspection and Construction Material Testing for the Mile 2 North Roadway Reconstruction Project

Length: 0.60 Miles

Highway: Mile 2 North

Limits: from SH 364 (La Homa) to Moorefield Road

PROJECT CLASSIFICATION

___ Surface Treatment
___ Overlay
___ Rehabilitation Existing Road (Scarify & Reshape)
___ Convert Non-Freeway to Freeway
___ Widen Freeway
___ Widen Non-Freeway
___ New Location Toll Freeway
X New Location Non-Freeway
___ Interchange (New or Reconstruct)
___ Bridge Widening or Rehabilitation
___ Bridge Replacement
___ Upgrade to Standards - Freeway
___ Upgrade to Standards - Non-Freeway
___ Miscellaneous Studies (Use Function Code 110 for All Tasks)

NOTES

ENGINEER shall mean L&G Engineering.

STATE shall mean Texas Department of Transportation.

COUNTY shall mean the Hidalgo County.

CONSTRUCTION PHASE SERVICES
(Function Code 320)

Services Provided By:
ENGINEER COUNTY

YES NO **CONSTRUCTION MANAGEMENT SERVICES:**

The ENGINEER will provide engineering, geotechnical testing and support services for and during the construction of the Project or portions of the Project approved by the COUNTY. Specific (basic and special) services for CONSTRUCTION MANAGEMENT AND SUPPORT by the ENGINEER will include the following:

N/A N/A **Construction Bidding:**

1) The ~~ENGINEER~~ will furnish the COUNTY the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.

2) The ~~ENGINEER~~ will assist the COUNTY on the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.

COMPLETED BY THE COUNTY

YES NO **Construction Contract Administration and Inspection:**

3) In general, the ENGINEER will provide the management and engineering support/data required for consultation and advisement to the COUNTY and act as the COUNTY's representative as provided in the General Condition of the Construction Contract.

4) The ENGINEER will coordinate and conduct a pre-construction conference (as required).

5) Defects and Deficiencies. The ENGINEER will use his best efforts to protect the COUNTY against defects and deficiencies in the work of the Contractor. The ENGINEER will promptly notify the COUNTY of any such defect or deficiency, and take all steps possible to require the Contractor to correct the defect or deficiency.

6) Contractor Payment. The ENGINEER will review quantities as submitted by the Contractor and will coordinate with the COUNTY for the preparation of the monthly and final estimates for payment to the Contractor.

7) The ENGINEER will provide Project site inspection of the authorized construction contract as follows:

   a) Project Engineer. The ENGINEER will provide visits by the Project Engineer or a competent representative of the ENGINEER to the site of construction for the purpose of monitoring the Contractor's progress and conformance to the construction contract plans and specifications.

   b) Resident Engineer and/or Construction Inspector(s). The ENGINEER will furnish the services of a Resident Engineer and/or Construction Inspector(s) for on the site inspection construction to monitor/inspect the Contractor's daily progress and conformance to TxDOT's PS&E specifications.

YES NO **Miscellaneous Technical Activities:**

8) Shop Drawings. The ENGINEER will review and check all shop or working drawings furnished by the Contractor.

9) Control of Materials & Equipment. The ENGINEER will provide inspection of all materials and equipment furnished/used by the Contractor as follows:

   a) Review and record all laboratory, shop and mill tests of materials and equipment for compliance with the construction contract specifications.

   b) Observe and/or perform Project record testing and/or independent assurance testing as outlined in the construction contract specifications.

   c) Verify the concrete and asphalt design to assure it is in accordance with TxDOT specifications to be developed by the contractor.

10) Change Orders. When applicable the ENGINEER will prepare the engineering data, including plan sheet drawings, specifications, and estimates, for the preparation of construction contract change orders, which may be required due to actual field conditions encountered or new requirements directed by the COUNTY.

11) Final Acceptance. Following the completion of construction by the Contractor, the Engineer will provide the services required for the final inspection and recommendation for project acceptance. This will include coordinating the activities required for the inspection for conformance and recordkeeping of the necessary performance tests required by the construction contract specification. The Engineer will also review and approve all as-built drawings (to show the work as actually constructed) and furnish to the county three sets (3) of prints of the as-built drawings.

YES NO **CONSTRUCTION MATERIAL TESTING:**

The ENGINEER will provide the COUNTY with construction material testing services for the Project. The services to be provided include sampling and testing of all construction materials as required by the project plans and specifications. All sampling frequencies and test procedures will be performed in general accordance with the Texas Department of Transportation TEX methods (or ASTM methods as required) as outlined in the Guide Schedule for Sampling and Testing. The construction material testing includes, but is not limited to the following:

(a) Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/Misc.) to determine compliance of these materials with project plans and specifications.
(b) Field density testing of soils and base materials to ensure proper compaction as required by project plans and specifications.
(c) Field sampling and testing of fresh concrete, and laboratory testing of hardened concrete to determine compliance with project plans and specifications.
(d) Field compaction testing of asphalt to ensure proper compaction during lay down operations.
(e) Field sampling and laboratory testing of asphalt materials to determine their material properties and their compliance with project plans and specifications.
(f) Concrete batching as well as the asphalt testing at the plants to insure delivery of acceptable material to the job site (as required).

Exhibit "B"
Scope of Services
Services to be Provided by the Engineer

General Project Information

B2Z, through this scope of services, shall provide Assistant Project Management Activities w/ Respect to Laboratory Operations. The scope of said services is anticipated to be geared towards Construction Material Testing & Geotechnical Engineering Oversight for the Mile 2 roadway improvement project from SH 364 (La Homa) to Moorefield Rd. in Hidalgo County, hereinafter denoted as the **Project.**

B2Z shall provide all engineering services as noted under this scope of services for the **Engineer**. **B2Z** shall maintain a direct line of communication and coordinate with the **Engineer** throughout the project.

B2Z shall furnish all equipment, materials, supplies, and incidentals as needed to perform the services required, except as otherwise specified to be provided by the **Engineer**.

Specific activities to be performed by **B2Z** include the following:

Task 1 – Field Visits & Record Audits (Bi-Monthly)

Field Visits:
B2Z will conduct field visits on the **Project** to assure that acceptable tolerance limits specified for the following materials are being met in accordance with TxDOT requirements (this may include verification testing):

- Embankment, Existing Subgrade, Flexible Base
- Asphalt Concrete Pavement (ACP)
- Concrete (Structural & Non-Structural)

Record Audits:
B2Z will perform random audits of the **Engineer's** records to ensure that full documentation exists for accepting all materials on the job. These may include but not be limited to the following:

- Documentation required to support payment of "Material on Hand" requests
- Material Certifications received from manufactures (i.e. pipes, boxes, etc.)
- Verification that materials received on the **Project** are from TxDOT Approved Sources
- Ensure that all material sourcing documents are available for all materials brought to the **Project**
- All required tests on structural concrete components have either been performed or are originated from TxDOT approved sources (Quality Monitoring Program)
- Review of Mix Designs Certifications and Batching Reports for ACP & Concrete
- Ensure that all failing test reports are documented and retested in accordance with ASTM and/or TxDOT testing procedures

Task 2 – Assist in Construction Related Issues (Geotechnical & Structural)

B2Z will provide necessary guidance to the **Engineer** on all construction related issues having to do with the following:

- Stabilization of in situ materials (i.e. lime stabilization of subgrade, high P.I. materials, etc.)
- Ensure appropriate concrete mix design for construction of siphons on the **Project**
- Verify adequate foundation material at the location of the box placement prior to installation of bedding material

B2Z will assist in the review and processing of any Request for Information (RFI) documents related to Geotechnical and/or Structural issues.

Task 3 – Coordination & Compliance w/ Respect to Specifications Between Field Related Activities & Lab Techs

B2Z will assure that all field test results are within acceptable tolerances of the **Project's** specifications prior to acceptance. The Engineer will also conduct random field and laboratory visits to ensure that all testing procedures are being done in accordance with the governing specifications.

B2Z will work with the **Engineer's** field representative to ensure that all testing is ordered in accordance with 2010 TxDOT's Guide for Testing Frequencies (i.e. appropriate number of tests for the amount of material installed).

Task 4 – Quality Assurance & Quality Control of Lab Testing Procedures, Reports & Frequencies (Field & Laboratory)

B2Z will ensure compliance with the **Engineers** in-house QA/QC manual. The various aspects of QA/QC include, but are not limited to the following:

- Provide frequent verification with the materials (i.e. flex base) that it is originating from an approved stock pile
- Provide visits to concrete/asphalt plants to assure materials that are being used for structural concrete and ACP are what has been submitted with the certification documents
- **B2Z** will provide monthly reports on the QA/QC review of all test reports conducted on the **Project**

Task 5 – Meetings / Coordination / Management Oversight

B2Z will attend and participate in all construction meetings with the **Engineer** on the **Project**. **B2Z** will provide guidance for material related concerns to minimize construction delays and/or issues. **B2Z** will continuously coordinate with the **Engineer** and report any non-compliance issues that may arise during the course of the construction phase of the **Project**.

PROJECT: Mile 2 North
Limits: La Homa (SH 364) to Moorefield Rd
CSJ: 0921-02-323
CLIENT: Hidalgo County

EXHIBIT
WORK SCHE

TASK AND DESCRIPTION	2012	2013	2014									
	JAN-DEC	JUL - DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
PS&E												
By County / L&G												
ROW Acquisition Phase												
By County / L&G												
PS&E, Construction Management & Inspection, CMT												
Submit 60% Set of Plans	July 2012											
TxDOT Review (60% Set of Plans)	Aug. 2012											
Request for approval City's LGPP Process												
L&G QA/QC of 95% Set of Plans		Nov. 2013										
Submit 95% Set of Plans		Nov. 2013										
TxDOT Review (95% Set of Plans)												
Submit Final (100%) PS&E to TxDOT (20 weeks before letting date)												
Receive approval to advertise from TxDOT including pre-bid & DBE Conference												
Advertise (1st) & post in www.civcastusa.com (3 weeks prior to opening bids)												
Advertise (2nd) & post in www.civcastusa.com												
Conduct DBE conference & Pre-Bid Meeting												
Open Bids (Verify apparent low bidder)(7 weeks prior to Letting date)												
Submit Bid Tabs to TxDOT (Request low bidder concurrence)(6 wks prior to letting date)												
Receive concurrence from TxDOT												
Recommend to County, Award to Low Bidder												
Award Contract at County Commissioner's Meeting (Letting Date)												
Preconstruction Meeting												
Compensable/Permitted Utility Adjustments												
Contractor will be informed in writing of utility start date by the County. (June 2015)												
Contractor will be released for the Preparation of ROW (approx. 1 month) (L&G estimates June 2015)												
CONSTRUCTION												

Note: Contract Time will resume after remainder of Utility Delay Period (Combined - Max 120 Days) has been exhausted.

BIT C
CHEDULE

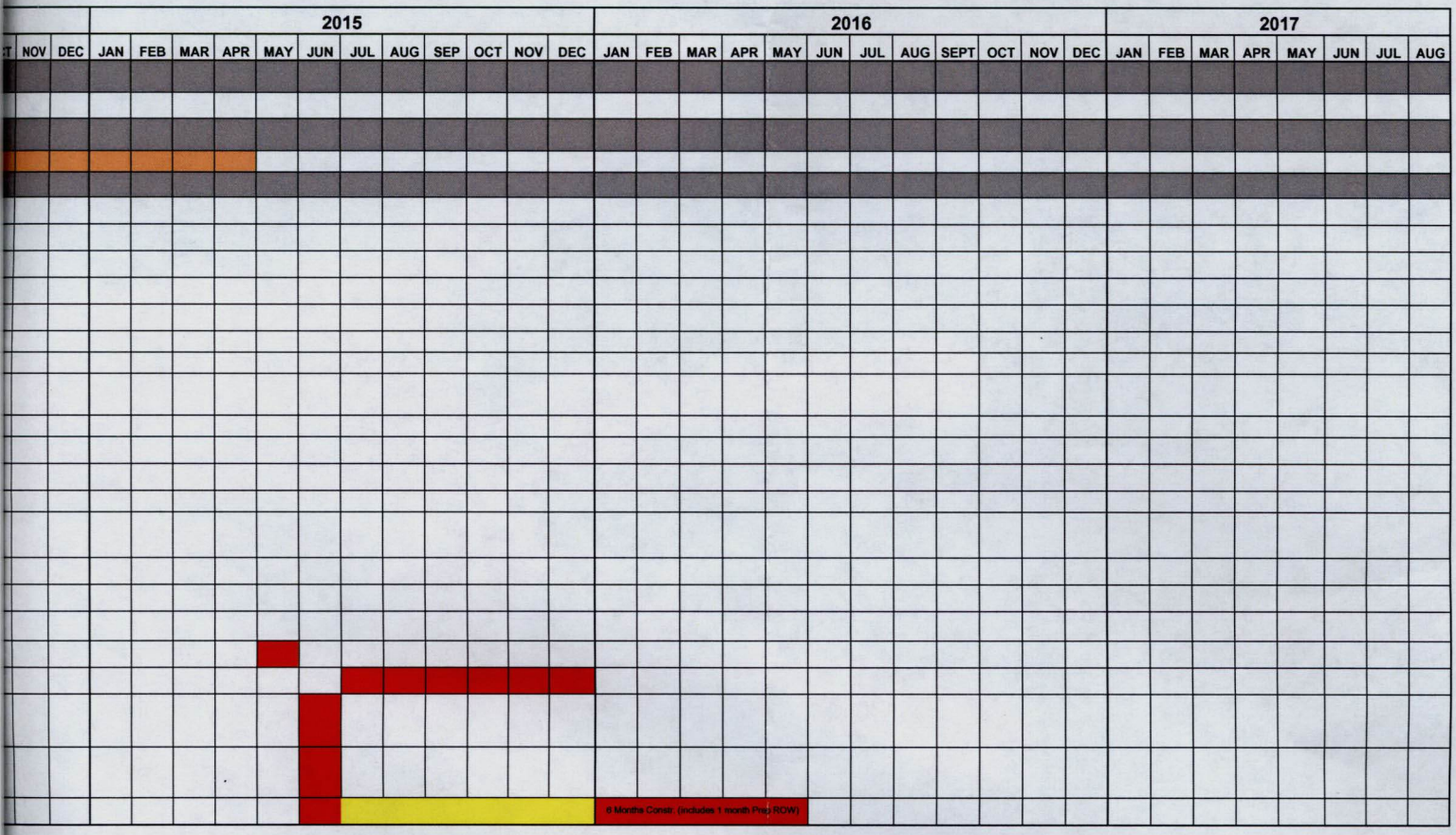


EXHIBIT D-1

ESTIMATED PROJECT FEE SCHEDULE AND MAN-HOUR BREAKDOWN
MILE 2 NORTH ROADWAY RECONSTRUCTION PROJECT

SECTION III (from SH 364 (La Homa) to Moorefield Road) – CSJ: 0921-02-323:

• L&G Construction Management and Inspection Services:	$172,829.62	*(see Page 2 & 3 of 8 for breakdown)*
• Construction Material Testing Services:	$ 39,708.12	*(see Page(s) 4,5,6 & 7 of 8 for breakdown)*
• Sub-consultant Cost (B2Z)	$ 13,835.48	*(see Page 8 of 8 for breakdown)*

SECTION I ---- SUB-TOTAL: $226,373.22

TOTAL OF WORK AUTHORIZATION NO. 1:	**$226,373.22**

EXHIBIT

ESTIMATED PROJECT FEE SCHEDUL
MILE 2 NORTH ROADWAY REC

(CSJ: 0921-02-323): from La Homa

	Senior Project Manager	Engineer (V)	Senior Environmer Scientist
CONTRACT RATE	211.81	180.66	152.63
(CSJ: 0921-02-323):			
CONSTRUCTION MANAGEMENT & INSPECTION SERVICES: (Est. 6 months for utility delay start, 1 month pre-construction, 6 months construction and 1 month for post construction)			
CONSTRUCTION BIDDING:			
1) The ENGINEER will furnish the County the necessary copies of approved plans, specifications, notices to bidders and proposals as prepared under PS&E.			
2) The ENGINEER will assist the County on the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.			
ADMINISTRATION:			
3) Maintain communication and coordinate with Municipality, Design Engineer, Hidalgo County, TxDOT and Construction Constractor(s) on a regular basis.		12	
4) Review, approve or reject project submittals and invoices for processing.			
5) Coordinate with the public and any affected property owners			
6) Provide review, feedback, or guidance on Change Orders as prepared by the contractor.			
7) Accompany Design Engineer, State or Federal representatives and Municipality representatives on visits to the project.		8	
8) Attend and conduct all job related meetings, Construction Status meetings and Final Inspection with the Design Engineer, State or Federal representatives and Municipality representatives. to include final inspection.		24	
9) Calculate and verity the final contract quantities.			
10) Review and submit to the Design Engineer any suggestions or requests made by the contractor to change or modify any requirements of the Plans or Contract Documents.			
11) Prepare a Contractors progress payment estimate on a bi-weekly basis.			
12) Issue a Certificate of Substantial Completion at the appropriate time.		2	
13) Provide certification to the Municipality and TxDOT that this project was constructed as designed, subject to appropriate and necessary revisions during construction, in conformance with all proejct specifications and that all necessary contract provisions were fully complied with.		2	
CONSTRUCTION MANAGEMENT:			
Construction Phase Services:			
1) Attend meetings as necessary, provide written reports (Performed in task Administration #8)			
2) Provide cost control and value management on change orders		2	
3) Assure quality and completeness of the work with continued on-site and office support monitoring and inspections			
4) Maintain job safety measures			
5) Monitor project schedule, provide weekly updates			
Post Construction Phase Services:			
1) Provide all closeout documents			
2) Coordinate final acceptance of projects			

COMPLETED BY COUNTY

BIT D-1

DULE AND MAN-HOUR BREAKDOWN
RECONSTRUCTION PROJECT

ma (SH 364) to Moorefield Road

	MANHOURS											
ior mental atist	Engineer III	Engineering Lab Manager	Engineer Tech	Project Inspector V	Record Keeper	Project Inspector I	CADD Operator / GISAnalyst	Admin / Clerical	Soil & Aggregate Technician	Concrete & Asphalt Technician	TOTAL HOURS	TOTAL LINE ITEM COST
.63	133.94	105.91	93.45	87.22	84.10	68.53	68.53	62.30	52.95	52.95		
	32							8			52	$ 6,952.40
	14										14	$ 1,875.16
	12										12	$ 1,607.28
	4										4	$ 535.76
	12										20	$ 3,052.56
	32							24			80	$ 10,117.12
	8										8	$ 1,071.52
	4										4	$ 535.76
	12										12	$ 1,607.28
											2	$ 361.32
											2	$ 361.32
											0	$ -
											0	$ -
	8										10	$ 1,432.84
	16										16	$ 2,143.04
	8							2			10	$ 1,196.12
	6							10			16	$ 1,426.64
												$ -
	8				8			8			24	$ 2,242.72
	4										4	$ 535.76

CONSTRUCTION INSPECTION:			
1) Maintain a presence on the project during times when contractor activities are underway and be on-site at all times during construction activities of the project requiring certification to be able to certify, on completion of the project, that the project was built as designed. Prepare Daily Reports, including quantities, locations of work, weather conditions, and weekly progress reports. Review and verify traffic control activities to include inspection of barricades and traffic control devices.			
2) Check that the contractor is in compliance with all construction contract requirements. Municipality permits and ordinances; property rights agreements; erosion and sediment control and stormwater management plans state permits, regulations and statutes; and federal regulations and statutes; and exercise the engineer's authority as provided in the contract documents and report immediately any deviations to the City and Construction Manager (CM).			
3) Maintain a photographic record of the progress of construction, annotating such photos to indicate their content and context including date. This photographic record must be available for reference by the Construction Manager, Design Engineer, State or Federal representatives, and Municipality representatives.			
4) Inspect and approve material sources and water, borrow and staging areas.			
5) Receive materials certifications, computations and reference materials submitted by the Contractor. Verify compliance with the Buy America Act. Maintain files on the project site of all items submitted by the contractor and of work done on behalf of the Municipality.			
6) Track utility relocations and plot final facility locations on the final as-built plans (if any).			
7) Erosion control monitoring in accordance with applicable permits.			
8) Develop final as-built plans by marking up a set of contract plans.			
9) Check that completed work complies with the plans and specifications and is true to line and grade.			
10) Organize an inspection of work completed at such time as contractor may claim substantial completion, with a contractor's representative, Design Engineer, State, Federal & Local representatives, and issue a list of items to be corrected or completed.			
SUB-TOTAL	0	50	

				212	266	1210					1688	$ 123,782.54
	16				8						24	$ 2,815.84
			12								12	$ 1,121.40
	2			4	4						10	$ 953.16
					4						4	$ 336.40
			24								24	$ 2,242.80
					8						8	$ 672.80
			24								24	$ 2,242.80
	8										8	$ 1,071.52
	4										4	$ 535.76
	210	0	60	216	298	1210	0	52	0	0	2,096	$ 172,829.62

Construction Management & Inspection Sub-Total:	$	172,829.62
Construction Material Testing (CMT) Sub-Total:	$	39,708.12
B2Z Engineering (See Detailed Proposal) Sub-Total:	$	13,835.48
Grand Total:	**$**	**226,373.22**

Hidalgo County - Mile 2 North Project (From SH 364 (La
Construction Mate

Embankment (Test All Fill Material Incl

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specificat

		TxDOT Test	TxDOT Guide Specs	Additional A
Liquid Limit		Tex-104-E	PI>15 ~ Every 5,000 CY	include
Plasticity Index		Tex-106-E	PI>15 ~ Every 5,000 CY	1 per Cut & 1
Gradation		Tex-110-E	Every 10,000 CY	1 per Cut & 1
Moisture/Density		Tex-114-E	One per Each Material	1 Exist (Ass
In-Place Density		Tex-115-E	Every 5,000 CY or 6,000	At Least
Reports				LL/PI, Gra
Tech Time (Soils)				4 hrs - PI,Gr,
# of Trips (Tech)				4 Trips (5
**Admin/Clerical				

Subgrade (Lime Trea

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridge
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specifica

		TxDOT Test	TxDOT Guide Specs	Additional
Liquid Limit		Tex-104-E		include
Plasticity Index		Tex-106-E	Each 5,000 CY	
Gradation		Tex-110-E	Each 5,000 CY	
Moisture/Density		Tex-114-E	Every 20,000 CY	assum
In-Place Density		Tex-115-E	Every 3,000 CY	Use thru
Reports				LL/PI,
Tech Time (Soils)				4 hrs - PI,Gr,
# of Trips (Tech)				4 Trips (5
**Admin/Clerical				

Flexible Base (Untreated - Stoc

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridge
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specifica

		TxDOT Test	TxDOT Guide Specs	Additional
Liquid Limit		Tex-104-E		include
Plasticity Index		Tex-106-E	Each 5,000 CY	
Gradation		Tex-110-E	Each 5,000 CY	
Moisture/Density		Tex-113-E	Every 20,000 CY	
Wet Ball Mill		Tex-116-E	Every 20,000 CY	
Triaxial		Tex-117-E	Every 20,000 CY	
Reports				LL/PI, MD,
Tech Time (Soils)				4 hrs - LL,PI,
# of Trips (Tech)				1 Trip (5
**Admin/Clerical				

loma Rd.) to Moorefield Rd.) - CSJ: 0921-02-323
als Testing

ding Cut From Job) (ITEM 132)

Misc.) to determine compliance of these materials with project plans and specifications.
ons.

				9362C/939F CY
ssumptions	Unit	Qty.	Contract Rate	Total
with PI	Each		$47.70	$0.00
per Fill (Job)	Each	2	$68.90	$137.80
per Fill (Job)	Each	2	$68.90	$137.80
ime Borrow)	Each	1	$174.90	$174.90
3 on Job	Each	3	$26.50	$79.50
d, MD, FD	Each	7	$20.00	$140.00
ID, 2 hrs - FD	Hour	18	$52.95	$953.10
Miles RT)	Mile	200	$0.55	$110.00
	Hour	3	$62.30	$186.90
			Item Subtotal	$1,920.00

d) (ITEM 260)

Misc.) to determine compliance of these materials with project plans and specifications.
ons.

				7,045 CY
ssumptions	Unit	Qty.	Contract Rate	Total
with PI	Each		$47.70	$0.00
	Each	2	$68.90	$137.80
	Each	2	$68.90	$137.80
1 on Prj	Each	1	$174.90	$174.90
Prj - 1 Lift	Each	3	$26.50	$79.50
ID, FD	Each	8	$20.00	$160.00
ID, 2 hrs - FD	Hour	18	$52.95	$953.10
Miles RT)	Mile	200	$0.55	$110.00
	Hour	3	$62.30	$186.90
			Item Subtotal	$1,940.00

bile Testing) (ITEM 247)

Misc.) to determine compliance of these materials with project plans and specifications.
ons.

				4,742 CY
ssumptions	Unit	Qty.	Contract Rate	Total
with PI	Each		$47.70	$0.00
	Each	1	$68.90	$68.90
	Each	1	$68.90	$68.90
	Each	1	$174.90	$174.90
	Each	1	$165.00	$165.00
	Each	1	$370.00	$370.00
VB, Triaxial	Each	5	$20.00	$100.00
D & WB/Triax.	Hour	12	$52.95	$635.40
Miles RT)	Mile	50	$0.55	$27.50
	Hour	3	$62.30	$186.90
			Item Subtotal	$1,797.50

Flexible Base (Lime Tr

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specificat

		TxDOT Test	TxDOT Guide Specs	Additional
Liquid Limit		Tex-104-E		include
Plasticity Index		Tex-106-E	Each 5,000 CY	
Gradation		Tex-110-E	Each 5,000 CY	
Moisture/Density		Tex-113-E	Every 20,000 CY	Complet
In-Place Density		Tex-115-E	Every 3,000 CY	Inc. to at Le
Reports				MC, LL/P
Tech Time (Soils)				4 hrs - PI,Gr,
# of Trips (Tech)				4 Trips (5
**Admin/Clerical				

Asphalt Concrete Pavement (

- Field compaction testing of asphalt to ensure proper compaction during lay down operations.
- Field sampling and laboratory testing of asphalt materials to determine their material properties and their compliance with

		TxDOT Test	TxDOT Guide Specs	Additional
Coarse Aggr.				Sto
L.A. Abrasion		Tex-410-A	1 Per Project Per Source	if BRSQC meet
Soundness		Tex-411-A	1 Per Project Per Source	if BRSQC meet
Gradation		Tex-200-F	1 Per Project Per Source	
MicroDeval		Tex-461-A	1 Per every 12 Sublots	May be Elimi
Flat & Elongated Particles		Tex-280-F	1 Per Project Per Source	
Coarse Aggr. Angularity		Tex-460-A (Part I)	1 Per Project Per Source	
Del. Matl. and Decant		Tex-217-F	1 Per Project Per Source	
Fine Aggr.				Sto
Bar Linear Shrinkage		Tex-107-E	1 Per Project Per Source	
Organic Impurities		Tex-408-A	1 Per Project Per Source	
Gradation		Tex-200-F	1 Per Project Per Source	
Mineral Filler				Bin
Bar Linear Shrinkage		Tex-107-E	1 Per Project Per Source	Assum
Gradation		Tex-200-F	1 Per Project Per Source	Assum
Combined Aggr.				Stockpile c
Sand Equivalent		Tex-203-F	1 Per Project Per Source	
Complete Mix				Truck
Asphalt Content (%)		Tex-236-F	1 Per Lot Per Design	
Voids in Mineral Aggr. (VMA)		Tex-207-F	1 Per Sublot Per Design	with 227-F
Gradation		Tex-236-F	Min 1 Per 12 Sublots Per	
Boil Test		Tex-530-C	1 Per Project Per Source	Waived b
Indirect Tensile - Dry		Tex-226-F	1 Per Project Per Source	Waived b
Moisture Content		Tex-212-F (Part II)	1 Per Project Per Source	
Lab Molded Density		Tex-207-F	1 Per Sublot Per Design	
Hamburg Wheel Tracker		Tex-242-F	1 Per Project Per Source	Make Contract
Roadway				At
Field Coring			2 Cores Per Sublot Per	For Te
In-Place Air Voids		Tex-207-F	2 Cores Per Sublot Per	
Segregation Profile		Tex-207-F (Part V)	1 Per Project Per Source	Inc. to 1 p
Joint Density		Tex-207-F (Part VII)	1 Per Project Per Source	Inc. to 1 p
Tack Coat Adhesion		Tex-243-F	1 Per Project Per Source	Waived b
Thermal Profile		Tex-244-F	1 Per Project Per Source	Inc. to 1 p
Ride Quality		Tex-1001-S	Engineer may verify	Make Contract
Reports				
Tech Time (Aggr)				16 hours per 1
Tech Time (Asph)				12 hours
# of Trips (Tech)				5 Trips (5
**Admin/Clerical				

ted) (ITEM 247)

Misc.) to determine compliance of these materials with project plans and specifications.
ons.

				4,742 CY
ssumptions	Unit	Qty.	Contract Rate	Total
with PI	Each		$47.70	$0.00
	Each	1	$68.90	$68.90
	Each	1	$68.90	$68.90
Mixture	Each	1	$174.90	$174.90
st 3 on Job	Each	3	$26.50	$79.50
, MD, FD	Each	6	$20.00	$120.00
ID, 2 hrs - FD	Hour	14	$52.95	$741.30
Miles RT)	Mile	200	$0.55	$110.00
	Hour	3	$62.30	$186.90
			Item Subtotal	$1,550.40

m 3268 - HMA-QC/QA)

roject plans and specifications.

				3,228 Tons
ssumptions	Unit	Qty.	Contract Rate	Total
pile				
Project Spec ~	Each	0	$530.00	$0.00
Project Spec ~	Each	0	$530.00	$0.00
	Each	1	$68.90	$68.90
ted based on	Each	0		
	Each	1	$63.60	$63.60
	Each	1	$61.00	$61.00
	Each	1	$42.40	$42.40
pile				
	Each	1	$68.90	$68.90
	Each	1	$35.00	$35.00
	Each	1	$68.90	$68.90
Silo				
No Filler	Each	0	$68.90	$0.00
No Filler	Each	0	$68.90	$0.00
Feeder Belt				
	Each	1	$79.50	$79.50
Sample				
	Each	4	$95.40	$381.60
Rice Gravity	Each	16	$116.60	$1,865.60
	Each	2	$95.40	$190.80
Engineer	Each	0	$84.80	$0.00
Engineer	Each	0	$636.00	$0.00
	Each	1	$15.90	$15.90
	Each	16	$62.00	$992.00
or Perform Test	Each	0	$700.00	$0.00
Site				
-207-F	Each	32	$58.30	$1,865.60
	Each	32	$26.50	$848.00
Lot (3268)	Each	1	$320.00	$320.00
Lot (3268)	Each	1	$320.00	$320.00
Engineer	Each	0	$105.00	$0.00
Lot (3268)	Each	1	$60.00	$60.00
or Perform Test	Each	0		$0.00
	Each	82	$20.00	$1,640.00
days (trips/test -	Each	16	$52.95	$847.20
per 4 days	Hours	48	$52.95	$2,541.60
0 Miles RT)	Mile	250	$0.55	$137.50
	Hours	24	$62.30	$1,495.20
			Item Subtotal	$14,009.20

Hidalgo County - Mile 2 North Project (From SH 364 (La Ho
Construction Materia

Embankment (Test All Fill Material Includ

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/M
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specification

		TxDOT Test	TxDOT Guide Specs	Additional Ass
Liquid Limit		Tex-104-E	PI>15 ~ Every 5,000 CY	included v
Plasticity Index		Tex-106-E	PI>15 ~ Every 5,000 CY	1 per Cut & 1 p
Gradation		Tex-110-E	Every 10,000 CY	1 per Cut & 1 p
Moisture/Density		Tex-114-E	One per Each Material	1 Exist (Assum
In-Place Density		Tex-115-E	Every 5,000 CY or 6,000	At Least 3
Reports				LL/PI, Grad,
Tech Time (Soils)				4 hrs - PI,Gr,MD
# of Trips (Tech)				4 Trips (50 M
**Admin/Clerical				

Subgrade (Lime Treate

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/M
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specificatio

		TxDOT Test	TxDOT Guide Specs	Additional As
Liquid Limit		Tex-104-E		included v
Plasticity Index		Tex-106-E	Each 5,000 CY	
Gradation		Tex-110-E	Each 5,000 CY	
Moisture/Density		Tex-114-E	Every 20,000 CY	assume 1
In-Place Density		Tex-115-E	Every 3,000 CY	Use thru P
Reports				LL/PI, M
Tech Time (Soils)				4 hrs - PI,Gr,M
# of Trips (Tech)				4 Trips (50
**Admin/Clerical				

Flexible Base (Untreated - Stockp

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specificatio

		TxDOT Test	TxDOT Guide Specs	Additional As
Liquid Limit		Tex-104-E		included
Plasticity Index		Tex-106-E	Each 5,000 CY	
Gradation		Tex-110-E	Each 5,000 CY	
Moisture/Density		Tex-113-E	Every 20,000 CY	
Wet Ball Mill		Tex-116-E	Every 20,000 CY	
Triaxial		Tex-117-E	Every 20,000 CY	
Reports				LL/PI, MD, W
Tech Time (Soils)				4 hrs - LL,PI,MD
# of Trips (Tech)				1 Trip (50 M
**Admin/Clerical				

D-1
ND TEST BREAKDOWN

Homa Rd.) to Moorefield Rd.) - CSJ: 0921-02-323
rials Testing

luding Cut From Job) (ITEM 132)

s/Misc.) to determine compliance of these materials with project plans and specifications.
ations.

				9362C/939F CY
Assumptions	Unit	Qty.	Contract Rate	Total
ed with PI	Each		$47.70	$0.00
1 per Fill (Job)	Each	2	$68.90	$137.80
1 per Fill (Job)	Each	2	$68.90	$137.80
sume Borrow)	Each	1	$174.90	$174.90
t 3 on Job	Each	3	$26.50	$79.50
ad, MD, FD	Each	7	$20.00	$140.00
,MD, 2 hrs - FD	Hour	18	$52.95	$953.10
50 Miles RT)	Mile	200	$0.55	$110.00
	Hour	3	$62.30	$186.90
			Item Subtotal	$1,920.00

ted) (ITEM 260)

s/Misc.) to determine compliance of these materials with project plans and specifications.
tions.

				7,045 CY
Assumptions	Unit	Qty.	Contract Rate	Total
ed with PI	Each		$47.70	$0.00
	Each	2	$68.90	$137.80
	Each	2	$68.90	$137.80
e 1 on Prj	Each	1	$174.90	$174.90
Prj - 1 Lift	Each	3	$26.50	$79.50
, MD, FD	Each	8	$20.00	$160.00
,MD, 2 hrs - FD	Hour	18	$52.95	$953.10
50 Miles RT)	Mile	200	$0.55	$110.00
	Hour	3	$62.30	$186.90
			Item Subtotal	$1,940.00

ckpile Testing) (ITEM 247)

es/Misc.) to determine compliance of these materials with project plans and specifications.
ations.

				4,742 CY
Assumptions	Unit	Qty.	Contract Rate	Total
ed with PI	Each		$47.70	$0.00
	Each	1	$68.90	$68.90
	Each	1	$68.90	$68.90
	Each	1	$174.90	$174.90
	Each	1	$165.00	$165.00
	Each	1	$370.00	$370.00
, WB, Triaxial	Each	5	$20.00	$100.00
,MD & WB/Triax.	Hour	12	$52.95	$635.40
50 Miles RT)	Mile	50	$0.55	$27.50
	Hour	3	$62.30	$186.90
			Item Subtotal	$1,797.50

Flexible Base (Lime Treate

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/Mi
- Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specification

		TxDOT Test	TxDOT Guide Specs	Additional Ass
Liquid Limit		Tex-104-E		included w
Plasticity Index		Tex-106-E	Each 5,000 CY	
Gradation		Tex-110-E	Each 5,000 CY	
Moisture/Density		Tex-113-E	Every 20,000 CY	Complete M
In-Place Density		Tex-115-E	Every 3,000 CY	Inc. to at Least
Reports				MC, LL/PI, M
Tech Time (Soils)				4 hrs - PI,Gr,MD,
# of Trips (Tech)				4 Trips (50 M
**Admin/Clerical				

Asphalt Concrete Pavement (Item

- Field compaction testing of asphalt to ensure proper compaction during lay down operations.
- Field sampling and laboratory testing of asphalt materials to determine their material properties and their compliance with proj

		TxDOT Test	TxDOT Guide Specs	Additional Ass
Coarse Aggr.				Stockpi
L.A. Abrasion		Tex-410-A	1 Per Project Per Source	if BRSQC meets P
Soundness		Tex-411-A	1 Per Project Per Source	if BRSQC meets P
Gradation		Tex-200-F	1 Per Project Per Source	
MicroDeval		Tex-461-A	1 Per every 12 Sublots	May be Eliminate
Flat & Elongated Particles		Tex-280-F	1 Per Project Per Source	
Coarse Aggr. Angularity		Tex-460-A (Part I)	1 Per Project Per Source	
Del. Matl. and Decant		Tex-217-F	1 Per Project Per Source	
Fine Aggr.				Stockp
Bar Linear Shrinkage		Tex-107-E	1 Per Project Per Source	
Organic Impurities		Tex-408-A	1 Per Project Per Source	
Gradation		Tex-200-F	1 Per Project Per Source	
Mineral Filler				Bin or
Bar Linear Shrinkage		Tex-107-E	1 Per Project Per Source	Assume N
Gradation		Tex-200-F	1 Per Project Per Source	Assume N
Combined Aggr.				Stockpile or F
Sand Equivalent		Tex-203-F	1 Per Project Per Source	
Complete Mix				Truck Sa
Asphalt Content (%)		Tex-236-F	1 Per Lot Per Design	
Voids in Mineral Aggr. (VMA)		Tex-207-F	1 Per Sublot Per Design	with 227-F Ri
Gradation		Tex-236-F	Min 1 Per 12 Sublots Per	
Boil Test		Tex-530-C	1 Per Project Per Source	Waived by E
Indirect Tensile - Dry		Tex-226-F	1 Per Project Per Source	Waived by E
Moisture Content		Tex-212-F (Part II)	1 Per Project Per Source	
Lab Molded Density		Tex-207-F	1 Per Sublot Per Design	
Hamburg Wheel Tracker		Tex-242-F	1 Per Project Per Source	Make Contractor
Roadway				At Si
Field Coring			2 Cores Per Sublot Per	For Tex-
In-Place Air Voids		Tex-207-F	2 Cores Per Sublot Per	
Segregation Profile		Tex-207-F (Part V)	1 Per Project Per Source	Inc. to 1 per L
Joint Density		Tex-207-F (Part VII)	1 Per Project Per Source	Inc. to 1 per L
Tack Coat Adhesion		Tex-243-F	1 Per Project Per Source	Waived by E
Thermal Profile		Tex-244-F	1 Per Project Per Source	Inc. to 1 per L
Ride Quality		Tex-1001-S	Engineer may verify	Make Contractor
Reports				
Tech Time (Aggr)				16 hours per 1 da
Tech Time (Asph)				12 hours pe
# of Trips (Tech)				5 Trips (50 M
**Admin/Clerical				

reated) (ITEM 247)

es/Misc.) to determine compliance of these materials with project plans and specifications.
cations.

				4,742 CY
l Assumptions	Unit	Qty.	Contract Rate	Total
ded with PI	Each		$47.70	$0.00
	Each	1	$68.90	$68.90
	Each	1	$68.90	$68.90
lete Mixture	Each	1	$174.90	$174.90
Least 3 on Job	Each	3	$26.50	$79.50
L/PI, MD, FD	Each	6	$20.00	$120.00
Gr,MD, 2 hrs - FD	Hour	14	$52.95	$741.30
(50 Miles RT)	Mile	200	$0.55	$110.00
	Hour	3	$62.30	$186.90
			Item Subtotal	$1,550.40

(Item 3268 - HMA-QC/QA)

h project plans and specifications.

				3,228 Tons
l Assumptions	Unit	Qty.	Contract Rate	Total
tockpile				
ets Project Spec ~	Each	0	$530.00	$0.00
ets Project Spec ~	Each	0	$530.00	$0.00
	Each	1	$68.90	$68.90
inated based on	Each	0		
	Each	1	$63.60	$63.60
	Each	1	$61.00	$61.00
	Each	1	$42.40	$42.40
tockpile				
	Each	1	$68.90	$68.90
	Each	1	$35.00	$35.00
	Each	1	$68.90	$68.90
n or Silo				
ne No Filler	Each	0	$68.90	$0.00
ne No Filler	Each	0	$68.90	$0.00
or Feeder Belt				
	Each	1	$79.50	$79.50
k Sample				
	Each	4	$95.40	$381.60
-F Rice Gravity	Each	16	$116.60	$1,865.60
	Each	2	$95.40	$190.80
l by Engineer	Each	0	$84.80	$0.00
l by Engineer	Each	0	$636.00	$0.00
	Each	1	$15.90	$15.90
	Each	16	$62.00	$992.00
actor Perform Test	Each	0	$700.00	$0.00
At Site				
Tex-207-F	Each	32	$58.30	$1,865.60
	Each	32	$26.50	$848.00
per Lot (3268)	Each	1	$320.00	$320.00
per Lot (3268)	Each	1	$320.00	$320.00
l by Engineer	Each	0	$105.00	$0.00
per Lot (3268)	Each	1	$60.00	$60.00
actor Perform Test	Each	0		$0.00
	Each	82	$20.00	$1,640.00
1 days (trips/test -	Each	16	$52.95	$847.20
rs per 4 days	Hours	48	$52.95	$2,541.60
(50 Miles RT)	Mile	250	$0.55	$137.50
	Hours	24	$62.30	$1,495.20
			Item Subtotal	$14,009.20

B2Z ENGINEERING

Exhibit D-1
FEE PROPOSAL

Assistant Project Management Role for Lab Operations

(Construction Material & Geotechnical Engineering Oversight)

			MANHOURS			
Mile 2 North Project (From SH364 (La Homa) to Moorefield Rd.) CSJ: 0921-02-323			Senior Construction Engineer	Engineering Field Tech	Admin/Clerical	Total
	TASK					
	1	Field Visits & Record Audits (Bi-Monthly)	12	20		32
	2	Assist in Construction Related Issues (Geotechnical & Structural)	16			16
	3	Coordination & Compliance w/ Respect to Specifications Between Field Related Activities & Lab Techs	8	30		38
	4	Quality Assurance & Quality Control of Lab Testing Procedures, Reports & Frequencies (Field & Laboratory)	14		8	22
	5	Meetings/Coordination/Management Oversight	12	12		24
						0
		Subtotal	**62**	**62**	**8**	**132**
Labor Hours			**62**	**62**	**8**	**132**
Hourly Base Rates			$ 55.00	$ 24.00	$ 18.00	
Contract Rate FY2015-2017			$ 150.92	$ 65.86	$ 49.39	
Total Labor Costs			**$ 9,357.04**	**$ 4,083.32**	**$ 395.12**	**$ 13,835.48**

B2Z Engineering Total Cost **$ 13,835.48**

AGENDA
CC REGULAR
HIDALGO COUNTY
COMMISSIONERS COURT MEETING
May 5, 2015
9:30 A.M.

NOTICE is hereby given in accordance with Chapter 551, Texas Government Code, that a SPECIAL MEETING of the Commissioners' Court will be held at the Edinburg Council Chambers 415 W. University Drive, Edinburg, Hidalgo County, Texas. Discussion and possible action relating to the following business will be transacted:

1. Roll Call

All members of the Court were counted present for the exception of Commissioner Joseph Palacios.

2. Pledge of Allegiance

Judge Garcia led the Court and Audience in reciting the Pledge of Allegiance.

3. Prayer

Virginia Townsend led the Court and Audience in Prayer.

4. Approval of Consent Agenda

The Court moved to approve the Consent Agenda.

5. Open Forum

Fern McClaugherty expressed her concerns regarding the contract with VIDA, waivers on travel expenses, the rental of vehicles by the County, and lighting and equipment on Constable vehicles.

6. County Judge's Office:

A. AI-49382 Proclamation declaring May 2015 as "Elder Abuse Prevention Month"

On motion by COMMISSIONER PCT. 3, JOE M. FLORES, seconded by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., the Court made a UNANIMOUS vote of approval.

Vote: 4 - 0 - Unanimously

B. AI-49557 Approval of Proclamation declaring May 2015 as Children's Mental Health Awareness Month

B. Acceptance and approval of Work Authorization No. 1 (with an estimated cost of $226,373.22) as submitted by project engineer, L&G Engineering for engineering services for "Engineering Services for Inspection, Material Testing, and construction Management for Mile 2 North Roadway Reconstruction Project (from La Homa to Moorefield Rd)" within Hidalgo County Pct. No. 3.

Commissioner Joe Flores commented that 98.4% of the cost will be reimbursed by TxDOT.

On motion by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., seconded by COMMISSIONER PCT. 3, JOE M. FLORES, the Court made a UNANIMOUS vote of approval.

Vote: 4 - 0 - Unanimously

F. Pct. 4

1. AI-49533 A. Acceptance and approval of Change Order No. 6 for additional 38 days due to adverse weather for Contract No. C-14-067-06-03 with JCon Construction, LLC as reviewed/approved by project architect of record, Mata-Garcia Architects, LLP for: Hidalgo County Precinct No. 4 -"Construction of the Linn-San Manuel Emergency Services Facilities" with authority for County Judge, or Court Member to execute document.

On motion by COMMISSIONER PCT. 3, JOE M. FLORES, seconded by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., the Court made a UNANIMOUS vote of approval.

Vote: 4 - 0 - Unanimously

B. Acceptance and approval of request for payment of invoice 15-4-000012 submitted by L&G Engineering Laboratory for the Linn San Manuel Facility (PO# 713423).

On motion by COMMISSIONER PCT. 1, A.C. CUELLAR, JR., seconded by COMMISSIONER PCT. 3, JOE M. FLORES, the Court made a UNANIMOUS vote of approval.

Vote: 4 - 0 - Unanimously

G. Health & Human Services Dept.

1. AI-49527 Acceptance and approval to award job order contractor, Herrcon LLC (awarded JOC through Buyboard contract #464-14) in the amount of $63,930.27 for the purchase, installation of CCD X-RAY IMAGE Detector to include but not limited to any modifications/appurtenances as may be necessary for a turnkey project. (Project #15-069-OGG)