

November 24, 2015

Commissioner Eduardo "Eddie" Cantu
Attn: Erika Zamora
Hidalgo County, Pct. #2
300 W. Hall Acres, Ste. G
Pharr, TX 78577

RE: Owassa Rd. Imprvts. (Raul Longoria Rd. to Alamo Rd.)

Dear Ms. Zamora:

Included for your use with this letter are test reports **R001 & R002** for **Construction Material Testing** performed on the above referenced project.

L&G Engineering appreciates the opportunity to serve your material testing needs on this project and we look forward to working with you in the future.

If you have any questions, feel free to contact me at 956-565-0760.

Sincerely,

Ricardo A. Gil
General Manager

Attachments

CC: Project File

2100 W. Expressway 83
 Mercedes, TX 78570
 Office (956) 565-0760 Fax (956) 565-6746

===== Invoice Detail by Report =====

Report No.	Sampled	Qty	Billing Code	Unit Type	Unit Rate	Extension
R001	10/27/2015	1.00	950:95061 - Test Report	Each	\$23.59	\$23.59
Report Number R001 for a Subtotal of:						\$561.31
R002	10/27/2015	1.00	930:93039 - Extraction, Grad., Asph. Content	Each	✓ \$232.48	\$232.48
R002	10/27/2015	1.00	930:93042 - Asphalt Maximum Theoretical S.P.G.	Each	✓ \$90.00	\$90.00
R002	10/27/2015	1.00	930:93043 - Lab Molded Density	Each	✓ \$80.00	\$80.00
R002	10/27/2015	2.00	940:94045 - Eng. Tech. (Asphalt / Lab)	Each	✓ \$52.95	\$105.90
R002	10/27/2015	0.50	940:94054 - Lab Manager	Hour	✓ \$105.91	\$52.96
R002	10/27/2015	0.50	940:94055 - Engineer / P.E.	Hour	✓ \$133.94	\$66.97
R002	10/27/2015	0.50	950:95060 - Administrative / Clerical	Hour	✓ \$62.30	\$31.15
R002	10/27/2015	1.00	950:95061 - Test Report	Each	✓ \$23.59	\$23.59
Report Number R002 for a Subtotal of:						\$683.05

Total for this Invoice: \$1,244.36

PO # 733831
5-1200-431-00-122-163-0-721
 Req # 286823

#460.41

PO # 733831
5-1200-431-00-122-163-0-841
 Req # 286823

#1,244.36

HIDALGO COUNTY
 PRECINCT NO. 2

2015 NOV 30 PM 1 21

INVOICE RECEIVED BY: Ma ON 11/30/15

GOODS/SERVICES RECEIVED BY: Edwards (ant) ON 10/27/15

REMIT TO: 2100 W. Expressway 83
 Mercedes, TX 78570
 Office (956) 565-0760 Fax (956) 565-6746

Net 30 Days

2100 W. Expressway 83
Mercedes, TX 78570
Office (956) 565-0760 Fax (956) 565-6746

Client Address: Hidalgo County Pct. #2

300 W. Hall Acres
 Ste. G
 Pharr, TX. 78577

Account No.: E451

Project No: E4511503

Project Desc.: Owassa Rd. Imprvts. (Raul Longoria to Alamo Rd.)

Due Date: UPON RECEIPT

Budget/Remaining: \$6,912.09 / \$5,667.73

PO: 733831

===== Invoice Summary by Billing Code =====

	<u>Unit Rate</u>	<u>Qty</u>	<u>Extension</u>
930:93039 - Extraction, Grad., Asph. Content	✓ \$232.48	1.00	\$232.48
930:93042 - Asphalt Maximum Theoretical S.P.G.	✓ \$90.00	1.00	\$90.00
930:93043 - Lab Molded Density	✓ \$80.00	1.00	\$80.00
930:93047 - Asphalt Rolling Patterns	✓ \$39.86	4.00	\$159.44
940:94045 - Eng. Tech. (Asphalt / Lab)	✓ \$52.95	2.00	\$105.90
940:94052 - Eng. Tech. (Asphalt)	✓ \$52.95	4.00	\$211.80
940:94054 - Engineering Specialist	✓ \$105.91	0.50	\$52.96
940:94054 - Lab Manager	✓ \$105.91	0.50	\$52.96
940:94055 - Engineer / P.E.	✓ \$133.94	1.00	\$133.94
950:95058 - Vehicle Trip Charge	✓ \$0.55	28.00	\$15.40
950:95060 - Administrative / Clerical	✓ \$62.30	1.00	\$62.30
950:95061 - Test Report	✓ \$23.59	2.00	\$47.18
Total for this Invoice:			\$1,244.36

===== Invoice Detail by Report =====

<u>Report No.</u>	<u>Sampled</u>	<u>Qty</u>	<u>Billing Code</u>	<u>Unit Type</u>	<u>Unit Rate</u>	<u>Extension</u>
R001	10/27/2015	4.00	930:93047 - Asphalt Rolling Patterns	Each	✓ \$39.86	\$159.44
R001	10/27/2015	4.00	940:94052 - Eng. Tech. (Asphalt)	Hour	✓ \$52.95	\$211.80
R001	10/27/2015	0.50	940:94054 - Engineering Specialist	Hour	✓ \$105.91	\$52.96
R001	10/27/2015	0.50	940:94055 - Engineer / P.E.	Hour	✓ \$133.94	\$66.97
R001	10/27/2015	28.00	950:95058 - Vehicle Trip Charge	Mile	✓ \$0.55	\$15.40
R001	10/27/2015	0.50	950:95060 - Administrative / Clerical	Hour	✓ \$62.30	\$31.15

REMIT TO: 2100 W. Expressway 83
Mercedes, TX 78570
Office (956) 565-0760 Fax (956) 565-6746

Net 30 Days

SUMMARY OF ASPHALT ROLLING PATTERN TEST REPORT

Project Description: Owassa Rd. Imprvts. (Raul Longoria to Alamo Rd.)
Client: Hidalgo County Pct. #2

L&G Project Number: E4511503
L&G Report Number: R001
Sample Date: 10/27/2015
Date Reported: 10/27/2015

Client PO: 733831

Page 1 of 1

Material Description: Hot Mix Asphalt Paving
Material Source: Frontera Progresso
Specification: TxDOT Item 340

Rolling Pattern Location	Density (%)	Air Voids (%)
55ft W of Cesar Chavez Rd. on Owassa Rd. & 5ft S. of Center	92.3	7.7
100ft W of Cesar Chavez Rd. on Owassa Rd. & 5ft N. of Center	91.7	8.3
60ft s of Owassa Rd. on Cesar Chavez Rd. & 5ft E. of Center	92.9	7.1
100ft E of Cesar Chavez Rd. on Owassa Rd. & 5ft S. of Center	92.0	8.0

Procedure: A Rolling Pattern was established using an Instron Model Number 3500 Nuclear Density Gauge. Further compaction of the asphalt surface was achieved by the use of a Pneumatic roller after the initial rolling operation. Target Maximum Density used was 156.1 Lbs/Cf. TxDot Item 340 specifies a target in place density of 91 to 95 percent.

Remarks: Tex Method 207F Part III, Tex Method 222F
Test Method (As Applicable):

Orig: Hidalgo County Pct. #2 (On-Call) (Hidalgo County Pct. #2)
(Pharr, TX) (1-cc copy)
1-cc Laboratory

Respectfully Submitted,
L&G Engineering



Ricardo A. Gil, Lab Manager

BITUMINOUS MIXTURE PROPERTIES TEST REPORT

Project Description: Owassa Rd. Imprvts. (Raul Longoria to Alamo Rd.)
 Client: Hidalgo County Pct. #2

L&G Project Number: E4511503
 L&G Report Number: R002
 Sample Date: 10/27/2015
 Date Reported: 10/27/2015

Client PO: 733831

Page 1 of 1

Material Description: Hot Mix Asphalt Paving
Material Source:
Specification: TxDOT Item 340 (Ty D)

Sieve Size	Result (% Passing)	Ty D Fine Surface Requirement
1/2"	99.0	100.0
3/8"	93.0	85-100
No. 4	66.0	50-70
No. 10	30.0	32-42
No. 40	18.0	11-26
No. 80	13.0	4-14
No. 200	5.0	1-6

Tex-236-F Asphalt Content (Ignition Method)

Asphalt Content = 4.69% (design value)
 Tex-227-F Theoretical Maximum Specific Gravity of Bituminous Mixtures

(Rice Gravity) Gr = 2.502 (design value)
 Tex-207-F Density of Compacted Bituminous Mixtures

(Bulk Specific Gravity) Ga = 2.424 (design value)
 Density (%) = 96.9% (design value)

Orig: Hidalgo County Pct. #2 (On-Call) (Hidalgo County Pct. #2)
 (Pharr, TX) (1-cc copy)
 1-cc Laboratory

Respectfully Submitted,
 L&G Engineering



 Ricardo A. Gil, Lab Manager

Zimbra**erika.zamora@co.hidalgo.tx.us**

Fwd: Owassa Rd Project Request

From : Armando Pompa
<armando.pompa@co.hidalgo.tx.us>

Wed, Dec 16, 2015 05:40 PM

 1 attachment

Subject : Fwd: Owassa Rd Project Request

To : Erika Zamora <erika.zamora@co.hidalgo.tx.us>

Erika,

Below is the request I sent to L&G Lab for the testing needed on Owassa Rd on the 27th of October.

Thanks.

Regards,

Armando Pompa

Director of Field Operations
Hidalgo County Pct 2
4011 S. Veterans Blvd.
San Juan, TX 78

From: "Armando Pompa" <armando.pompa@co.hidalgo.tx.us>

To: "Ricardo Gallaga" <ricardo@lgengineers.com>

Sent: Monday, October 26, 2015 3:05:13 PM

Subject: Owassa Road Project Request

Good Afternoon Ricardo,

Please see below for testing request,

Date of Service Requested: 10/27/2015 (Tuesday)

Project Name/Location: Owassa Rd Project (From Cesar Chavez to Alamo Rd.)

Time of Needed Services: 06:00 AM

Type of Service Requested: Road Way Section : Check densities and set rolling patterns on paved sections.

Thanks,

Armando Pompa

Director of Field Operations
Hidalgo County Pct 2
4011 S. Veterans Blvd.
San Juan, TX 78589



Pct 2 Logo Design small-02.jpg
165 KB



Purchase Order COUNTY OF HIDALGO

PO# 733831

DATE: 10/28/15

PAGE NO: 1 Of 1

PO TYPE:

VENDOR: 280046

REQ: 00286823

PHONE: (956) 565-9813

Fax: (956) 565-6746

EMAIL:

SHIP TO: HIDALGO CO. PCT 2

300 WEST HALL ACRES, SUITE G
PHARR TX 78577

E & G CONSULTING ENGINEERS, INC.
2100 W. EXPRESSWAY 83
MERCEDDES TX 78570

CONTACT:

SITE: COMMISSIONER, PRECINCT 2

CONTRACT NO: C-15-125-04-14

SPECIAL INSTRUCTIONS:

VENDOR NOTES

1. Do not add to, or alter this Purchase Order. This Order is not renewable.
2. TAX EXEMPTION: This Purchase Order may be accepted in lieu of Exemption Certificate.
3. This Order is also placed F.O.B. Destination. Vendor must repay all shipping costs.
4. Invoice each Purchase Order singly. Original invoices are required; customer copy may be accepted. Out number must appear on all invoices, bills of lading, and packages.
5. Payment will be made only for bona fide and full completed orders, unless otherwise attached.

QTY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
		DO NOT DUPLICATE ORDER		
		C-15-125-04-14 EXPIRES 4/13/2016- PCT 2 ICA W/ SAN JUAN AND PCT 4 FOR OWASSA RD (RAUL LONGORIA-ALAMO) PROJECT - CONSTRUCTION MATERIAL TESTING SERVICES		
		ICA W/ SAN JUAN AND PCT 4 APPROVED BY CC 8/18/15 AI#50924 63% CITY LIMITS 37% COUNTY LIMITS		
1.00	LOT	CC WORK AUTHORIZATION NO 5 TO PROVIDE CONSTRUCTION MATERIAL TESTING SERVICES FOR THE OWASSA ROAD PROJECT (RAUL LONGORIA TO ALAMO RD)	6,912.09	6,912.09
		TOTAL:		6,912.09
		REPORT ROAD HAZARDS 1-866-HCR-SAFE OR 1-866-427-7233		
		***** For Hidalgo County use only		
		5-1200-431-00-122-163-0-721	2,557.47	
		5-1200-431-00-122-163-0-841	4,354.62	

HIDALGO COUNTY
PRECINCT NO. 2

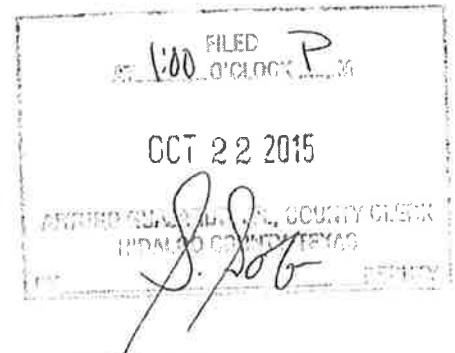
2015 OCT 30 AM 9 01

SCANNED
10/30/15

Authorized by: *Martha P. Salazar*

**HIDALGO COUNTY
Professional Engineering Services
Agreement #C-15-125-04-14**

WORK AUTHORIZATION NO. 5



THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, 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 "engineering services" to provide Construction Materials Testing services for the Owassa Road Overlay Project from Raul Longoria Road to Alamo 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 \$6,912.09. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D"**.

PART 3. PAYMENT

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

PART 4. FUNDING

This Work Authorization No. 5 shall be funded through funding source:

Account No. 5-1200-431-00-122-1430-721/841

Requisition Number 286023

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

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

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and Confirmation by Hidalgo County Precinct No.2, Commissioner, Eduardo Cantu, as to content and detail of this **Work Authorization No. 5**.


**HIDALGO COUNTY
COMMISSIONER PRECINCT No. 2:**

BY: 

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on 10/21/2015 as indicated below and effective as of 21st day of October, 2015.


**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

APPROVED BY
COMMISSIONERS' COURT
ON: 10/21/15

LIST OF ATTACHMENTS

- Exhibit A – Services to be Provided by the Owner
- Exhibit B – Services to be Provided by the Engineer
- Exhibit C – Work Schedule
- Exhibit D – Fee Schedule

EXHIBIT A

-Scope of Services to be provided by the County

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General:

The Owner will provide to the Engineer the following:

- 1) Provide the authorization to proceed with services through coordination with the project consulting and design Engineer.
- 2) Payment for work performed by the Engineer and accepted by the Owner in accordance with Article 3 of this Agreement.
- 3) Assistance to the Engineer, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Engineer cannot easily obtain.
- 4) Provide any available relevant data the Owner may have on file concerning the projects.
- 5) Provide timely review and decisions in response to the Engineer's request for information and/or required submittals and deliverables, in order for the Engineer to maintain the agreed upon work schedule prepared in accordance with Exhibit "A" attached to this Agreement.
- 6) Attend and participate in progress meetings as required and as coordinated and conducted by Engineer.
- 7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Engineer.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 1 - 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

PROJECT/DESCRIPTION: On-Call Geotechnical & Construction Materials Testing Services for
"Road and Bridge, C.I.P. and Other Projects in General"

CMT for Owassa Road Overlay Project (from Raul Longoria Rd to Alamo Rd)

ENGINEER shall mean L&G Engineering.

STATE shall mean Texas Department of Transportation.

COUNTY shall mean Hidalgo County.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 2 ROUTE AND DESIGN STUDIES – N/A

(Function Code 110)

Services
Provided By:
ENGINEER COUNTY

- 4. ~~Soil Core Hole Drilling~~
- ~~_____ a. Pavement (See Section 3, page 3-1 for requirements)~~
- ~~_____ b. Retaining Walls (See Section 4, page 4-1 for requirements)~~
- ~~_____ c. Miscellaneous Structures (See Section 4, page 4-1 for requirements)~~
- ~~_____ d. Bridges (See Section 5, page 5-1 for requirements)~~

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 3 - ROADWAY DESIGN CONTROLS - N/A
(Function Code 160)

Services
Provided By:
ENGINEER COUNTY

- ~~_____~~ 1. ~~Pavement Design Embankment and Subgrade Analysis~~
- ~~_____~~ ~~a. Embankment and Subgrade~~
- ~~_____~~ ~~(1) Soil Core Holes (Show cost estimate with Function Code 110)~~
- ~~_____~~ ~~(a) Along center line~~
- ~~_____~~ ~~(b) Along center line of each roadway~~
- ~~_____~~ ~~The location and minimum number of soil core holes required for this project are as follows: (To be determined by Engineer during Preliminary Engineering)~~
- ~~_____~~ ~~(2) Identify, interpret and summarize geologic features that affect engineering design (PI, Sulfate content, % of lime)~~
- ~~_____~~ ~~d. Traffic Data for Pavement Design (To be provided by others)~~
- ~~_____~~ ~~e. Basic Design Criteria~~
- ~~_____~~ ~~f. Life Cycle Cost Analysis(es)~~
- ~~_____~~ ~~g. Cost Data~~
- ~~_____~~ ~~h. Pavement Material Properties~~
- ~~_____~~ ~~i. Rehabilitation Investigations~~
- ~~_____~~ ~~(1) Core Hole Survey (Show cost estimate with Function Code 110)~~
- ~~_____~~ ~~(a) Determine type and depth of existing material, pavement, etc. The Engineer will determine whether to salvage ACP and FLEXBASE as well as their properties and provide this information to Client.~~

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 4 - MISCELLANEOUS (ROADWAY) - N/A (Function Code 163)

Services
Provided By:
ENGINEER COUNTY

- ~~1. Retaining Walls and Embankments~~
 - ~~a. Foundation Studies (Show cost estimate with Function Code 110)~~
 - ~~(1) The soil core holes shall be obtained at approximately 200-foot intervals along retaining wall alignments. The core holes shall extend 25 feet or more below the footing elevation.~~
 - ~~(2) The soil core holes shall be obtained at locations provided by the Engineer along the embankment locations.~~
 - ~~b. Stability Analysis~~
 - ~~c. Estimate~~
 - ~~d. Summary of Quantities~~
 - ~~e. Typical X-section.~~
 - ~~f. General Guidelines for Retaining Walls~~
 - ~~(1) The ground water level should be observed at the water strike.~~
 - ~~(2) Soil core hole data shall be shown on boring logs & layouts as illustrated in the TxDOT Geotechnical Manual (2012).~~
 - ~~(3) Foundation exploration shall conform to the requirements set forth in Administrative Circular No. 25-84, Administrative Circular 33-87 and Administrative Circular No. 25-92.~~

- ~~2. Miscellaneous Structures~~
 - ~~a. Foundation Studies (Show cost estimate with Function Code 110)~~

~~The soils exploration requirements for miscellaneous structures on this project are as follows: (To be provided by the Engineer on an as-needed basis)~~
 - ~~b. Foundation Analysis~~

~~To be determined based on miscellaneous structure type and requirements.~~

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 6 - CONSTRUCTION PHASE SERVICES (Function Code 320)

Services
Provided By:
ENGINEER COUNTY

No No CONSTRUCTION INSPECTION SERVICES:

~~The ENGINEER will provide engineering and support services (Inspection & Observation) during the construction of the Project or portions of the Project approved by the COUNTY.~~

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 (08/10). 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 inspection, sampling and laboratory testing of asphalt materials to determine their material properties and their compliance with project plans and specifications.
- (f) The ENGINEER will be responsible for concrete batching as well as the asphalt testing at the plants to insure delivery of acceptable material to the job site.
- (g) Any additional laboratory testing as required/requested by the COUNTY and the project plans and specifications.
- (h) Providing accurate and timely reports to the COUNTY and all/other recipients as designated by the COUNTY.
- (i) The ENGINEER will verify the concrete and asphalt designs to assure it is in accordance with TxDOT specifications to be developed by the contractor.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 7 - ADDITIONAL RESONSIBILITIES

Document and Information Exchange

Geotechnical Reports, Data, Plan Sheets, General Notes and/or Specifications provided to the COUNTY shall be furnished on 8GB USB flash drives or CD/DVD medium. Each flash drive or CD/DVD shall have a file titled Table of Contents (as applicable). The Table of Contents shall indicate the locations of files within the directory structure of the documentation (as applicable).

General Notes and specifications shall be provided in MS Office 2007 format. Plan sheets shall be provided in Microstation DGN or GEOPAK GPK format. PDF copies of plan sheets shall also be provided.

CMT Reports and Inspection documentation shall be provided in PDF format.

Two copies of the documentation shall be provided to the COUNTY.

If required, the ENGINEER shall provide to the COUNTY, a CD that contains all the plan sheets for the project. The graphics tape shall be compatible with the COUNTY's computer system.

CD Tape Required (YES or NO): YES

Proposal Time

The time indicated in the proposal and the contract shall include time necessary for reviews, approval, etc.

Office Location

The ENGINEER will perform the services to be provided under this agreement out of their office or offices listed below:

<u>Service</u>	<u>Office Location</u>
Geotechnical	Mercedes Office
CMT	Mercedes Office
Inspection	Mission Office

The work effort will be managed out of the Mercedes
(City)

office located at 2100 West Expressway 83
(Address)

Mercedes, Texas
(City) (State)

EXHIBIT B

Scope of Services to be provided by the Engineer

APPENDIX A – GENERAL SERVICES OUTLINE

The following is a general outline of the services to be provided by the ENGINEER in providing Geotechnical Laboratory services, Construction Materials Testing Services, and Construction Inspection Services:

A. Preliminary Phase: N/A

- ~~1) Attend preliminary conferences with the COUNTY and, if requested, with the funding agency and other government agencies or interested parties regarding the Project.~~
- ~~2) Provide for the necessary geotechnical investigation and testing necessary to develop design.~~
- ~~3) Provide assistance to the COUNTY in providing material requirements and specifications for design, construction and maintenance projects.~~
- ~~4) Provide assistance to the COUNTY in providing pavement design and/or rehabilitation recommendations for the design, construction and maintenance projects.~~

B. Design Phase: N/A

- ~~1) Attend the COUNTY'S and respective Party's meeting as requested for the purpose of explaining geotechnical investigation report recommendations and preliminary testing results and their impact to proposed design activities.~~
- ~~2) Perform any additional geotechnical investigations, testing and environmental studies necessary to collect information required in the design of the Project.~~
- ~~3) Provide assistance to the COUNTY in providing material requirements and specifications for design, construction and maintenance projects.~~
- ~~4) Provide assistance to the COUNTY in providing pavement design and/or rehabilitation recommendations for the design, construction and maintenance projects.~~
- ~~5) Furnish the COUNTY all necessary reports for preliminary design, design, and construction and maintenance projects.~~

C. Construction/Maintenance Phase:

- 1) Attend the COUNTY'S and respective Party's pre-construction and construction meetings as requested for the purpose of explaining geotechnical investigation report recommendation and preliminary testing results and their impact to proposed construction activities and establish coordination and lines of communication for proposed construction materials testing during construction activities.
- 2) Consult and advise with the COUNTY during construction.
- 3) Provide construction materials testing for construction and maintenance project as required by the project plans and specifications and/or specified by the project design Laboratory.
- 4) Review all material designs as requested by the COUNTY and/or project design Laboratory.
- 5) Furnish the COUNTY all necessary reports for construction and maintenance projects.
- 6) Provide construction inspection and observation services as requested by the COUNTY on construction and maintenance projects.

D. Miscellaneous/Other:

- 1) Promptly submit formal construction materials testing reports for all tests, observations and services performed indicating where applicable, compliance with COUNTY specifications or other documents. Such reports shall be completed and factual, citing the tests performed, methods employed, values obtained, parts of the structure and location at which tests were made.
- 2) The plans, specifications, and Geotechnical/CMT reports prepared under this Agreement shall become the property of the COUNTY upon completion of the work and payment in full of all monies due to the ENGINEER.
- 3) Retain all pertinent records relating to the services performed for a period of five (5) years following submission of all reports, during which period the records will be made available to the COUNTY within a reasonable time.

EXHIBIT D

Owassa Road Overlay Project (Raul Longoria to Alamo Rd) (2 miles x 20' width) Prepared For Hidalgo County Pct. No. 2

<i>Asphalt Testing-Field and Laboratory</i>				
Technican Time (Asphalt)	48	Hours	\$52.95	\$2,541.60
Mileage	240	Miles	\$0.55	\$132.00
Asphalt Rolling Pattern	12	Each	\$39.86	\$478.32
Ext-Sieve Analysis AC Content	4	Each	\$232.48	\$929.92
Maximum Theoretical SPG	4	Each	\$90.00	\$360.00
Lab Molded Density	4	Each	\$80.00	\$320.00
Field Coring - ACP Thickness	10	Each	\$66.47	\$664.70
Lab Density of Asphaltic Cores	10	Each	\$73.04	\$730.40
Engineer Lab Manager	5	Hours	\$105.91	\$529.55
Project Engineer	5	Hours	\$133.94	\$669.70
Admin/Clerical	3	Hours	\$62.30	\$186.90
Reports	10	Each	\$23.59	\$235.90
			Sub.	<u>\$6,912.09</u>

Total Estimated Material Testing Fees \$6,912.09