

HIDALGO COUNTY
Professional Engineering Services
Contract # C-9-177-05-26
Work Authorization Form

WORK AUTHORIZATION NO. 01

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 Engineering Laboratory, LLC, 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 Construction Materials Testing Services for Hidalgo County Pct. 3 – Brushline Rd (7 Mile Line to 8 Mile Line)

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 \$6,696.95. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D"**.

PART 3. PAYMENT

Compensation and payment to the **Engineer** for the services established under this Work Authorization shall be made in accordance with Article/Part/Section 5.1 of the Agreement.

PART 4. FUNDING

This Work Authorization No. 01 shall be funded through funding source:

Account No. 9-1203-431-00-123-005-0-131

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 or (DATE).

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 content and detail of this Work Authorization No. # 01.

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 _____ as indicated below and effective as of _____ day of _____, 2009.

THE ENGINEER:
L&G ENGINEERING LABORATORY, LLC

THE OWNER:
HIDALGO COUNTY

By: Jacinto Garza

By: Juan D. Salinas III, County Judge

ATTEST:

by: Arturo Guajardo Jr., County Clerk

LIST OF ATTACHMENTS

- ATTACHMENT "A" - Services to be Provided by the Owner
- ATTACHMENT "B" - Services to be Provided by the Engineer
- ATTACHMENT "C" - Work Schedule
- ATTACHMENT "D" - Project Cost Proposal

ATTACHMENT "A"
Scope of Services (Owner)

PROJECT: Brushline Rd (7 Mile Line to 8 Mile Line)

Project in Hidalgo County Precinct No. Three (3)

SERVICES TO BE PROVIDED BY OWNER

The County of Hidalgo will provide **L&G Engineering Laboratory, LLC with Construction Documents, Plans and Specifications for the Brushline Rd (7 Mile Line to 8 Mile Line) Project.**

ATTACHMENT "B"
Scope of Services (Engineer)

PROJECT: Brushline Rd (7 Mile Line to 8 Mile Line)

Project in Hidalgo County Precinct No. Three (3)

GENERAL SCOPE OF WORK

The Scope of Work will entail providing The County of Hidalgo with Construction Materials Testing Services.

The Scope of Work is identified as follows:

- **Construction Materials Testing Services**

L&G Engineering Laboratory will furnish all equipment, materials, supplies, and incidentals as needed to perform the services required by this Contract: The work is as follows:

Construction Materials Testing Services

L&G Engineering Laboratory, L.L.C. will provide The County of Hidalgo with Construction Materials Testing Services for the Brushline Rd (7 Mile Line to 8 Mile Line)

Project in Hidalgo County Precinct No. Three (3).

The services to be provided are as follows:

- Sampling and laboratory testing of soils and base materials proposed for use in the construction of Roads and Bridges to determine compliance of these materials with project plans and specifications.
- Field density testing of soils and base materials to ensure proper compaction as required by project plans and specifications.
- Field sampling and testing of fresh concrete, and Laboratory testing of hardened concrete to determine compliance with project plans and specifications.
- Field Compaction testing of Asphalt to ensure proper compaction during lay down operations.
- Field inspection, sampling and laboratory testing of Asphalt materials to determine their materials properties and their compliance with project plans and specifications.

- Any additional laboratory testing as required/requested by **The County of Hidalgo and the project plans and specifications.**
- Provide accurate and timely reports to **The County of Hidalgo** and all/other recipients as designated by the County.

Engineering Services

L&G Engineering Laboratory, L.L.C. will provide an engineer's review of all test results to determine compliance with all project plans and specifications.

Scheduling of Services

L & G Engineering Laboratory is prepared to make a commitment to **The County of Hidalgo's** materials testing needs. L & G Engineering Laboratory makes every effort to respond to its clients as requests are received, and every effort will be made to keep scheduling conflicts to a minimum. As any other firm or business providing a service, L & G Engineering Laboratory prefers to schedule field and laboratory work with as much advance notice as possible. L & G Engineering Laboratory understands; however, that certain situations may occur when the Client may have a need for Materials Testing Services with as little or no advance notice. During these instances, L & G Engineering Laboratory will make every effort to dispatch personnel to the project within one (1) hour of the Client's request for services.

ATTACHMENT "C"
Work Schedule

PROJECT: Brushline Rd (7 Mile Line to 8 Mile Line) Project in Hidalgo County Precinct No. Three (3)

Work Schedule

L&G Engineering Laboratory will provide Hidalgo County Pct. # 3 with Construction Materials Testing Services as outlined in Contract Agreement C-09-177-05-26.

ATTACHMENT "D"
Cost Proposal

PROJECT: Brushline Rd (7 Mile Line to 8 Mile Line)
Project in Hidalgo County Precinct No. Three (3).

(See Attached)

Attachment D
Brushline Road Rd (7 Mile Line to 8 Mile Line)(Approx. 5280 LF)
Prepared For Hidalgo County Pct. No. 3

Roadway Subgrade Materials Testing - Laboratory				
Tech Time	6	Hrs.	\$43.10	\$258.60
Trip Charge	60	Mi.	\$0.47	\$28.20
Attorberg	2	Ea.	\$71.80	\$143.60
Moisture-Density Determ	2	Ea.	\$185.50	\$371.00
Reports	2	Ea.	\$21.25	\$42.50
Eng. Spec.	1	Hrs.	\$107.70	\$107.70
Engineer	1	Hrs.	\$143.70	\$143.70
Sub.				\$1,095.30
Roadway Subgrade Field Density Testing				
Tech Time	12	Hrs.	\$43.10	\$517.20
Trip Charge	120	Mi.	\$0.47	\$56.40
Comp. Test	15	Ea.	\$21.55	\$323.25
Reports	5	Ea.	\$21.25	\$106.25
Eng. Spec.	2	Hrs.	\$107.70	\$215.40
Engineer	2	Hrs.	\$143.70	\$287.40
Sub.				\$1,505.90
Roadway Base Materials Testing - Laboratory				
Tech Time	3	Hrs.	\$43.10	\$129.30
Trip Charge	30	Mi.	\$0.47	\$14.10
Sieve Analysis	1	Ea.	\$53.85	\$53.85
Texas Wet Ball Mill	1	Ea.	\$209.55	\$209.55
Attorberg	1	Ea.	\$71.80	\$71.80
Moisture-Density Determ	1	Ea.	\$185.50	\$185.50
Reports	2	Ea.	\$21.25	\$42.50
Eng. Spec.	1	Hrs.	\$107.70	\$107.70
Engineer	1	Hrs.	\$143.70	\$143.70
Sub.				\$958.00
Base Material Field Density Testing				
Tech Time	12	Hrs.	\$43.10	\$517.20
Trip Charge	120	Mi.	\$0.47	\$56.40
Comp. Test	15	Ea.	\$21.55	\$323.25
Reports	5	Ea.	\$21.25	\$106.25
Eng. Spec.	2	Hrs.	\$107.70	\$215.40
Engineer	2	Hrs.	\$143.70	\$287.40
Sub.				\$1,505.90
Asphalt Testing-Field and Laboratory				
Tech Time	8	Hrs.	\$55.05	\$440.40
Trip Charge	90	Mi.	\$0.47	\$42.30
Rolling Patterns	2	Ea.	\$35.95	\$71.90
Laboratory Molded (ga)	1	Pr.	\$91.90	\$91.90
%AC-Grad	1	Ea.	\$209.50	\$209.50
Rice Gravity (gr)	1	Ea.	\$101.30	\$101.30
Reports	3	Ea.	\$21.25	\$63.75
Asphalt Thickness	6	Ea.	\$59.90	\$359.40
Eng. Spec.	1	Hrs.	\$107.70	\$107.70
Engineer	1	Hrs.	\$143.70	\$143.70
Sub.				\$1,831.85

Total Estimated Material Testing Fees \$6,696.95

HIDALGO COUNTY

Professional Engineering Services

Contract # C-09-177-05-26

Work Authorization Form

WORK AUTHORIZATION NO. 2

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, L&G Engineering Laboratory, LLC, 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 Geotechnical Engineering Services for Hidalgo County Pct. 3 – Mile 2 North Bridge Replacement

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 **\$15,494.60**. This amount is based upon the costs outlined in the **Estimated Cost Proposal** attached hereto as **EXHIBIT "D"**.

PART 3. PAYMENT

Compensation and payment to the **Engineer** for the services established under this Work Authorization shall be made in accordance with Article/Part/Section 5.1 of the Agreement.

PART 4. FUNDING

This Work Authorization No. 2 shall be funded through funding source:

Account No. 9-1203-431-0123-050-731

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 or (DATE).

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 content and detail of this Work Authorization No. # 2.

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 _____ as indicated below and effective as of _____ day of _____, 2009.

THE ENGINEER:
L&G ENGINEERING LABORATORY, LLC

THE OWNER:
HIDALGO COUNTY

By: Jacinto Garza

By: Juan D. Salinas III, County Judge

ATTEST:

by: Arturo Guajardo Jr., County Clerk

LIST OF ATTACHMENTS

ATTACHMENT "A" - Services to be Provided by the Owner
ATTACHMENT "B" - Services to be Provided by the Engineer
ATTACHMENT "C" - Work Schedule
ATTACHMENT "D" - Project Cost Proposal

ATTACHMENT "A"
Scope of Services (Owner)

PROJECT: Mile 2 North Bridge Replacement

Project in Hidalgo County Precinct No. Three (3)

SERVICES TO BE PROVIDED BY OWNER

The County of Hidalgo will provide **L&G Engineering Laboratory, LLC** with **Documents, Plans, and Specifications** for the **Mile 2 North Bridge Replacement Project**.

ATTACHMENT "B"
Scope of Services (Engineer)

PROJECT: Mile 2 Bridge Replacement

Project in Hidalgo County Precinct No. Three (3)

GENERAL SCOPE OF WORK

The Scope of Work will entail providing The County of Hidalgo with Geotechnical Engineering Services.

The Scope of Work is identified as follows:

- **Geotechnical Engineering Services**

L&G Engineering Laboratory will furnish all equipment, materials, supplies, and incidentals as needed to perform the services required by this Contract: The work is as follows:

Geotechnical Engineering Services(Reports)

L&G Engineering Laboratory, L.L.C. will provide drilling services for Hidalgo County Pct. No. 3 Mile 2 North Bridge Replacement Project. Soil samples will be removed from the sample apparatus during drilling operations. One of our geologists or engineering technicians will conduct various field tests on the recovered samples, visually classify the samples, and record the appropriate data on a field boring log. The samples will be appropriately packaged to minimize loss of their natural moisture content and to reduce the possibility of damage during transportation to our soils laboratory for testing. The tests performed on these samples will include Moisture Content, Liquid Limit, Plastic Limit, Plasticity Index and Materials Finer than No. 200. Unconfined compressive strength and Dry Unit Weight tests will be performed as necessary to provide detailed description of undisturbed samples.

Drilling services will also include a 24-hour water level reading at each boring location. Piezometers, when required, be installed to maintain the integrity of the borehole overnight or over a weekend. Following completion of drilling, sampling, and subsurface water monitoring operations, all boreholes will be backfilled with soil cuttings from the completed borings. If enough soil cuttings are unavailable, clean sand will be used to backfill the completed boreholes. If a piezometer is installed, the pipe will be removed following the water level readings and the borehole backfilled as described above.

Once all of the Engineering Properties of the soils have been determined, the final Log of Boring is created using the field and laboratory data. Included in the Log of Boring are THD Penetrometer Blow Counts, actual Moisture Contents, Plasticity Indices, and other laboratory test data obtained during the laboratory testing phase of the project. Proper description and location of strata, ground water elevations and test hole elevations will also be included in the Log of Boring.

Engineering Services

Engineering analysis will be conducted after reviewing the results of both the field and laboratory phases of the study. The findings and conclusions derived from the analyses will be presented in a written engineering report which will be prepared by the engineer. The report will include a boring location plan, boring logs with laboratory classification of recovered soil samples and subsurface water conditions encountered. The report will provide engineering recommendations for:

- Pier capacity curves; and
- Soil parameters that may be used in designing the foundations for the planned structures.

The geotechnical report will provide general comments and applicable recommendations regarding construction methods, sequences, and potential difficulties that may arise during overall construction as it relates to the soil and foundation aspects of this project. This information may serve to guide foundation selection and design and assist in the preparation of specifications for the project.

This contract **does not** include activities and corresponding costs that may be associated with the following:

- Providing an ATV mounted drill rig, dozer or special equipment to clear areas of vegetation and debris or to re-grade the site to gain access to the boring locations;
- Re-grading the site or portions of the site after drilling activities are completed;
- Site safety meetings that may be required; or
- Encountering hazardous or contaminated soils or substances during our field activities.

Hidalgo County Precinct No. 3 will be notified should these services become necessary for the completion of field exploration activities.

This proposal **does** include activities and corresponding costs that may be associated with locating buried utilities or pipelines as follows:

- Providing PVC pipe for water level readings; and
- Clearing the boring locations for underground utilities.

Hidalgo County Precinct No. 3 will be responsible for obtaining any necessary permits or authorization to egress areas where the borings are to be drilled.

ATTACHMENT "C"
Work Schedule

PROJECT: Mile 2 North Bridge Replacement Project in Hidalgo County Precinct No. Three (3)

Work Schedule

L&G Engineering Laboratory will provide Hidalgo County Pct. # 3 with Geotechnical Engineering Services as outlined in Contract Agreement C-09-177-05-26.

ATTACHMENT "D"
Cost Proposal

PROJECT: Mile 2 North Bridge Replacement
Project in Hidalgo County Precinct No. Three (3).

(See Attached)

ATTACHMENT "D"
Cost Proposal-Geotechnical Services-Mile 2 North Bridge Project

	SERVICES	UNITS	UNITS	UNIT COST	TOTAL COST
I.	Project Management / Review				
	A. Senior Project Engineering Specialist	Hours	8	\$ 107.70	\$ 861.60
	B. Typing and Clerical	Hours			
	C. Lodging	Day			
	D. Mileage	Mile			
	E. Air Travel	Trip			
II.	Utility Clear. / Boring Locates				
	A. Technician (Locate Borings)(Util Clr)	Hours	8	\$ 43.10	\$ 344.80
	B. Surveyor / Tie Boring Locations	LS		\$ -	\$ -
	C. Rebar (stakes with impalement covers)	Cost +12.5%			
	D. Vehicle Charge	Mile			
	E. Mileage	Mile	120	\$ 0.470	\$ 56.40
III.	Field Exploration				
A	Mobilization/Demob. Per Day/Per Drill Rig	Day	2	\$ 400.00	\$ 800.00
B	Field Exploration				
	1. ASTM Drilling and SPT or Shelby	Feet			\$ -
	2. TxDOT Drilling	Feet	140	\$ 28.00	\$ 3,920.00
	3. Overburden Drilling	Feet			
	4. Texas Cone Penetration Tests	Each	28	\$ 5.00	\$ 140.00
	5. Field Logger / Engineering Tech	Hour	24	\$ 43.10	\$ 1,034.40
	6. Logger's Assistant (Sample Id)	Hour			\$ -
	7. Piezometers (temporary)	Each			\$ -
	8. Drilling Supplies (IBWC Spec.)	LS			\$ -
	9. Vehicle Charge (Support Veh)	Mile	240	\$ 1.50	\$ 360.00
IV	Engineering Data Analysis / Report				
	1. Staff Engineer (Report)	Hours	16	\$ 143.70	\$ 2,299.20
	2. Engineering Spec. (Soil Classification)	Hours	8	\$ 107.70	\$ 861.60
	3. Engineering Spec. (Boring Logs)	Hours	8	\$ 107.70	\$ 861.60
	4. Moisture Content	Ea.	28	\$ 9.55	\$ 267.40
	5. Atterberg Limits	Ea.	28	\$ 71.80	\$ 2,010.40
	6. -200 Determination	Ea.	28	\$ 59.90	\$ 1,677.20
	7. Consolidation Tests	Ea.		\$ -	\$ -
	8. Unconsolidated, Undrained Triax	Ea.		\$ -	\$ -
	9. Unit Dry Weight/void rat/ UC	Ea.		\$ -	\$ -
	10. Hydrometer Analysis	Ea.		\$ -	\$ -
	10. Hydraulic Conductivity	Ea.		\$ -	\$ -
		Ea.		\$ -	\$ -
Project Total					\$ 15,494.60