



# L&G Engineering Laboratory

Construction Material Testing  
Geotechnical Engineering

September 6, 2012

Commissioner Joel Quintanilla  
Attn: Mr. Celestino Avila Jr.  
County of Hidalgo, Precinct No. 1  
1902 Joe Stevens Drive  
Weslaco, Texas 78596



**RE: Work Authorization No. 3 – Constable's Office in Hidalgo County Pct. 1**

Dear Mr. Avila:

**L&G Engineering Laboratory, L.L.C. (L&G)**, is providing you two (2) signed original Work Authorization forms for Construction Materials Testing Services for the referenced project as per your request. We are attaching the following in duplicate:

- Work Authorization No. 3
- The Scope of Services (Owner) (Attachment A)
- The Scope of Services (Engineer) (Attachment B).
- Work Schedule (Attachment C)
- Project Cost Proposal (Attachment D)

**L & G Engineering Laboratory, LLC.** appreciates the opportunity to submit Work Authorization No.3 and look forward to working with **Hidalgo County Pct. 1**. If I may be of any assistance or any additional information is required, please feel free to contact me at 956-565-0760 or 956-463-2008.

Sincerely,

L&G ENGINEERING LABORATORY, L.L.C.

  
Ricardo A. Gil  
General Manager

Attachments

**HIDALGO COUNTY**  
**Professional Engineering Services**  
**Contract # C-11-289-11-15**  
**Work Authorization Form**

**WORK AUTHORIZATION NO. 3**

**THIS WORK AUTHORIZATION** is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, **L&G ENGINEERING LABORATORY, LLC** professional engineers of 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 Constable's Office Building located in Hidalgo County Precinct No. One (1)**

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 **\$30,406.47**. 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. 3 shall be funded through funding source:

Account No. 2-1336-421-00-220-042-0-720

Requisition Number 223483 (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. 1 Commissioner Joel Quintanilla as to content and detail of this Work Authorization No. # 3.

HIDALGO COUNTY  
COMMISSIONER PRECINCT NO. 1:

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 \_\_\_\_\_, 2012.

THE ENGINEER:  
L&G ENGINEERING LABORATORY, LLC

THE OWNER:  
HIDALGO COUNTY

  
\_\_\_\_\_  
By: Jacinto Garza, P.E.

\_\_\_\_\_  
Hon. Ramon Garcia, County Judge

ATTEST:

\_\_\_\_\_  
Arturo Guajardo Jr., County Clerk

**LIST OF ATTACHMENTS**

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

**ATTACHMENT “A”  
Scope of Services (Owner)**

***PROJECT:*** Constable’s Office Building located in Hidalgo County Precinct No. One (1)

***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 **Constable’s Office Building located in Precinct No. One (1)**.

**ATTACHMENT “B”**  
**Scope of Services (Engineer)**

***PROJECT:*** Constable’s Office Building located in Hidalgo County Precinct No. One (1)

***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 **Constable’s Office Building located in Precinct No. One (1)**.

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:*** Constable's Office Building located in Hidalgo County Precinct No. One (1)

***Work Schedule***

**L&G Engineering Laboratory will provide Hidalgo County Pct. # 1 with Construction Materials Testing Services as outlined in Contract Agreement C-11-289-11-15.**

**ATTACHMENT "D"**  
**Cost Proposal**

***PROJECT:* Constable's Office Building located in Hidalgo County Precinct No. One (1).**

**See Attached**

**Attachment "D"**  
**L&G Engineering Laboratory, LLC**  
**Constables Office Building**  
**Prepared for Hidalgo County Precinct No. 1**

<i>In-Situ Soils Testing-Laboratory-Building Subgrade / Parking Area</i>					
Standard Proctor	2	Ea.	\$196.83	\$393.66	<i>Building Footprint Approx. 6,000 SF</i>
Atterberg Limits of Soils	2	Ea.	\$76.18	\$152.36	
Material Finer #200	2	Ea.	\$63.57	\$127.14	<i>New Parking Area Approx. 18,000 SF</i>
Test Report	2	Ea.	\$22.56	\$45.12	
Technician (Soils)	5	Hr.	\$45.75	\$228.75	
Mileage (Trip Charge)	12	Mi.	\$0.50	\$6.00	
				<b>Subtotal:</b>	<b>\$953.03</b>
<i>In-Situ Soils Testing-Field -Building Subgrade / Parking Area</i>					
Field Density Test	12	Ea.	\$22.87	\$274.44	<i>Quantities Based on 4 Visits to Project To perform testing</i>
Test Report	4	Ea.	\$22.56	\$90.24	
Technician (Soils)	8	Hr.	\$45.75	\$366.00	
Mileage (Trip Charge)	24	Mi.	\$0.50	\$12.00	
				<b>Subtotal:</b>	<b>\$742.68</b>
<i>Select Fill Soils Testing / Slab - Laboratory</i>					
Standard Proctor	2	Ea.	\$196.83	\$393.66	<i>Based on 2 Select Fill Samples 4 Additional Atterberg Limits &amp; Minus 200 for Field Verification of Select Fill Materials</i>
Atterberg Limits of Soils	6	Ea.	\$76.18	\$457.08	
Material Finer #200	6	Ea.	\$63.57	\$381.42	
Technician (Soils)	8	Hr.	\$45.75	\$366.00	
Mileage (Trip Charge)	12	Mi.	\$0.50	\$6.00	
Test Report	6	Ea.	\$22.56	\$135.36	
				<b>Subtotal:</b>	<b>\$1,739.52</b>
<i>Select Fill Soils Testing-Field Testing and Monitoring</i>					
Field Density Test	60	Ea.	\$22.87	\$1,372.20	<i>Based on 10 - 6" Lifts A Minimum of 3 Compaction Test Per Lift or every 3000 Square Feet 6 tests per lift</i>
Test Report	20	Ea.	\$22.56	\$451.20	
Technician (Soils)	40	Hr.	\$45.75	\$1,830.00	
Mileage (Trip Charge)	120	Mi.	\$0.50	\$60.00	
				<b>Subtotal:</b>	<b>\$3,713.40</b>
<i>Concrete Reinforcement Steel Placement Verification (Concrete Masonry Units)</i>					
Test Report	6	Ea.	\$22.56	\$135.36	<i>Approx. 5000 square feet Verification Inspection assuming 6 grout placements</i>
Technician (Concrete)	12	Hr.	\$58.41	\$700.92	
Mileage (Trip Charge)	36	Mi.	\$0.50	\$18.00	
				<b>Subtotal:</b>	<b>\$854.28</b>
<i>Concrete Placement - Floor Slabs-Main Building-Sally Port</i>					
Air Content(Pressure Method)	3	Ea.	\$22.82	\$68.46	<i>Assuming 2 Placements for a total of 150 cy 1 set Every 50 as per General Notes 4 Cylinders to be Tested for Compression</i>
Test Report	3	Ea.	\$22.56	\$67.68	
Technician (Concrete)	6	Hr.	\$58.41	\$350.46	
Mileage (Trip Charge)	12	Mi.	\$0.50	\$6.00	
				<b>Subtotal:</b>	<b>\$492.60</b>
Cyl. Spec. Prep, Hold, Cure	12	Ea.	\$11.49	\$137.88	<i>at a Frequency of Two 7 Day and Two 28 Day</i>
Comp. Str. Of Cyl. Specimen	6	Ea.	\$15.22	\$91.32	
Test Reports (7 and 28 day)	6	Ea.	\$22.56	\$135.36	
Technician (Concrete)	3	Hr.	\$58.41	\$175.23	
Mileage (Trip Charge)	24	Mi.	\$0.50	\$12.00	
				<b>Subtotal:</b>	<b>\$551.79</b>

**Concrete Placement - Misc. Concrete -Sidewalks**

Air Content(Pressure Method)	4	Ea.	\$22.82	\$91.28	<i>Assuming 4 Placements</i>
Test Report	4	Ea.	\$22.56	\$90.24	
Technician (Concrete)	8	Hr.	\$58.41	\$467.28	
Mileage (Trip Charge)	24	Mi.	\$0.50	\$12.00	
			Subtotal:	\$660.80	
Cyl. Spec. Prep, Hold, Cure	16	Ea.	\$11.49	\$183.84	<i>Quantities based on sample pickup an deliver to laboratory for Compression Testing</i>
Comp. Str. Of Cyl. Specimen	16	Ea.	\$15.22	\$243.52	
Test Reports (7 and 28 day)	8	Ea.	\$22.56	\$180.48	
Technician (Concrete)	4	Hr.	\$58.41	\$233.64	
Mileage (Trip Charge)	24	Mi.	\$0.50	\$12.00	
			Subtotal:	\$853.48	

**Concrete Masonry Unit - Grout Testing**

Air Content(Pressure Method)	6	Ea.	\$22.82	\$136.92	<i>Approx. 5000 square feet 1 test per 2500 square feet</i>
Test Report	6	Ea.	\$22.56	\$135.36	
Technician (Concrete)	12	Hr.	\$58.41	\$700.92	
Mileage (Trip Charge)	36	Mi.	\$0.50	\$18.00	
			Subtotal:	\$991.20	<i>2 tests minimum</i>
Grout Prism Prep, Hold, Cure, Comp Str.	18	Ea.	\$31.78	\$572.04	<i>Assuming 6 placements</i>
Test Reports (7 and 28 day)	12	Ea.	\$22.56	\$270.72	
Technician (Concrete)	5	Hr.	\$58.41	\$292.05	
Mileage (Trip Charge)	36	Mi.	\$0.50	\$18.00	
			Subtotal:	\$1,152.81	

**Concrete Masonry Unit - Mortar Testing**

Test Report	6	Ea.	\$22.56	\$135.36	<i>Approx. 5000 square feet 1 test per 1500 square feet</i>
Technician (Concrete)	12	Hr.	\$58.41	\$700.92	
Mileage (Trip Charge)	36	Mi.	\$0.50	\$18.00	
			Subtotal:	\$854.28	
Mortar Cube, Prep, Cure, Comp Str.	18	Ea.	\$31.06	\$559.08	<i>Assuming 6 placements</i>
Test Reports (7 and 28 day)	12	Ea.	\$22.56	\$270.72	
Technician (Concrete)	5	Hr.	\$58.41	\$292.05	
Mileage (Trip Charge)	36	Mi.	\$0.50	\$18.00	
			Subtotal:	\$1,139.85	

**Welding and Bolt Torque Inspection**

Engineering Specialist	18	Ea.	\$114.30	\$2,057.40	<i>Assuming 6 Visits to perform Welding and Bolt Torque Inspection</i>
Mileage (Trip Charge)	36	Mi.	\$0.50	\$18.00	
Test Report	10	Ea.	\$22.56	\$225.60	
			Subtotal:	\$2,301.00	

**Lime Stabilized In-Situ Soils Testing-Laboratory-Pavement Subgrade**

Standard Proctor	1	Ea.	\$196.83	\$196.83	<i>Quantity Based On 1 visit to obtain sample for laboratory testing</i>
Atterberg Limits of Soils	1	Ea.	\$76.18	\$76.18	
Test Report	1	Ea.	\$22.56	\$22.56	
Technician (Soils)	2.5	Hr.	\$45.75	\$114.38	
Mileage (Trip Charge)	6	Mi.	\$0.50	\$3.00	
			Subtotal:	\$412.95	

**Lime Stabilized In-Situ Soils Testing-Field -Pavement Subgrade**

Field Density Test	16	Ea.	\$22.87	\$365.92	<i>Quantity Based On 4 site visits to perform compaction testing</i>
Test Report	4	Ea.	\$22.56	\$90.24	
Technician (Soils)	8	Hr.	\$45.75	\$366.00	
Mileage (Trip Charge)	24	Mi.	\$0.50	\$12.00	
			Subtotal:	\$834.16	

<b>Site Select Fill Soils Testing-Laboratory</b>					
Standard Proctor	1	Ea.	\$196.83	\$196.83	<i>Quantity Based in 1 site visit to obtain sample</i>
Atterberg Limits of Soils	1	Ea.	\$76.18	\$76.18	
Material Finer #200	1	Ea.	\$63.57	\$63.57	
Technician (Soils)	2.5	Hr.	\$45.75	\$114.38	
Test Report	1	Ea.	\$22.56	\$22.56	
Mileage (Trip Charge)	6	Mi.	\$0.50	\$3.00	
				Subtotal:	\$476.52
<b>Site Select Fill Soils -Field Testing and Monitoring</b>					
Field Density Test	8	Ea.	\$22.87	\$182.96	<i>Quantities based on 2 visits to perform testing</i>
Test Report	2	Ea.	\$22.56	\$45.12	
Technician (Soils)	4	Hr.	\$45.75	\$183.00	
Mileage (Trip Charge)	12	Mi.	\$0.50	\$6.00	
				Subtotal:	
<b>Lime Stabilized Flex Base (Caliche) Testing-Laboratory</b>					
Standard Proctor	1	Ea.	\$196.83	\$196.83	<i>Quantity based on 1 site visit to obtain sample</i>
Atterberg Limits of Soils	1	Ea.	\$76.18	\$76.18	
Sieve Analysis (Dry)(4 Sieve)	1	Ea.	\$57.12	\$57.12	
Texas Wet Ball Mill	1	Ea.	\$222.38	\$222.38	
Technician (Soils)	3.5	Hr.	\$45.75	\$160.13	
Test Report	2	Ea.	\$22.56	\$45.12	
Mileage (Trip Charge)	6	Mi.	\$0.50	\$3.00	
				Subtotal:	\$760.76
<b>Lime Stabilized Flex Base (Caliche)-Field Testing and Monitoring</b>					
Field Density Test	8	Ea.	\$22.87	\$182.96	<i>Quantities based on two visits to perform in-place testing</i>
Test Report	2	Ea.	\$22.56	\$45.12	
Technician (Soils)	4	Hr.	\$45.75	\$183.00	
Mileage (Trip Charge)	12	Mi.	\$0.50	\$6.00	
				Subtotal:	
<b>Concrete Pavement - Curb &amp; Gutter</b>					
Air Content(Pressure Method)	2	Ea.	\$22.82	\$45.64	<i>Quantities based on two visits to perform testing</i>
Test Report	2	Ea.	\$22.56	\$45.12	
Technician (Concrete)	4	Hr.	\$58.41	\$233.64	
Mileage (Trip Charge)	12	Mi.	\$0.50	\$6.00	
				Subtotal:	
Cyl. Spec. Prep, Hold, Cure	8	Ea.	\$11.49	\$91.92	<i>at a Frequency of Two 7 Day and Two 28 Day</i>
Comp. Str. Of Cyl. Specimen	8	Ea.	\$15.22	\$121.76	
Test Reports (7 and 28 day)	4	Ea.	\$22.56	\$90.24	
Technician (Concrete)	3	Hr.	\$58.41	\$175.23	
Mileage (Trip Charge)	12	Mi.	\$0.50	\$6.00	
				Subtotal:	\$485.15
<b>Hot Mix Asphalt Paving-Parking Area</b>					
Ext. Sieve Analysis/Asph Content	1	Ea.	\$222.33	\$222.33	<i>Quantities based on two site visits to perform testing</i>
Density of Asphaltic Cores	3	Ea.	\$69.85	\$209.55	
Asphalt Rolling Patterns	2	Ea.	\$38.12	\$76.24	
Coring/ACP Thickness	6	Ea.	\$63.57	\$381.42	
Technician (Asphalt)	6	Hr.	\$58.41	\$350.46	
Mileage (Trip Charge)	12	Mi.	\$0.50	\$6.00	
Test Report	1	Ea.	\$22.56	\$22.56	
				Subtotal:	\$1,268.56

Estimated Field and Laboratory Test Fees			\$22,403.37
Engineering Specialist (Report Review)(Hr.)	30	\$114.30	\$3,429.00
Engineer-Principal (Report Review)(Hr.)	30	\$152.47	\$4,574.10
Estimated Materials Testing Total			\$30,406.47

# Requisition

**Req # 00223483**

PO #

Date: 09/21/12

**Bill To:** x  
x

**Vendor :** 312797  
L & G ENGINEERING LABORATORY, LLC  
2100 W. EXPRESSWAY 83  
MERCEDES TX 78570

**Ship To:** FACILITIES MANAGEMENT DEPARTMENT  
3100 S. BUSINESS HWY 281  
EDINBURG TX 78539

**Contact:** NORMA KALIFA  
956-289-7850

**Contract No:** C-11-289-11-15

**Special Instructions:**  
REQ# 857

QUANTITY	UOM	DESCRIPTION	UNIT PRICE	AMOUNT
1.00	EACH	C-11-289-11-15 DO NOT DUPLICATE ORDER WORK AUTHORIZATION NO.3 <u>Account No</u> 2-1336-421-00-220-042-0-720  REPORT ROAD HAZARDS 1-866-HCR-SAFE OR 1-866-427-7233	30,406.47  <u>Encumbrance</u> 30,406.47  Freight .00  Total 30,406.47	30,406.47          30,406.47

**Authorized By:** \_\_\_\_\_