

HIDALGO COUNTY
Professional Engineering Services
Contract # C-11-032C-10-11
Work Authorization Form

WORK AUTHORIZATION NO. 1

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 Sheriff's Office Sub-Station Construction Project in Hidalgo County.

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 \$48,239.46. 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.1 shall be funded through funding source:

Account No. 1-1336-423-00-280-036-0-720

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.

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 Sheriff's Office as to content and detail of this Work Authorization No. # 1.

HIDALGO COUNTY
SHERIFF'S OFFICE:

BY: _____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on October 11, 2011 as indicated below and effective as of 11th day of _____, 2011.

THE ENGINEER:
DOS LOGISTICS, INC.

THE OWNER:
HIDALGO COUNTY

Jacinto Garza, P.E.

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: Hidalgo County Sheriff's Office Substation Construction Project in Hidalgo County

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 Hidalgo County Sheriff's Office Substation Construction Project.

ATTACHMENT "B"
Scope of Services (Engineer)

PROJECT: Hidalgo County Sheriff's Office Substation Construction Projects in Hidalgo County.

GENERAL SCOPE OF WORK

The Scope of Work will entail providing **The County of Hidalgo Sheriff's Office** 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 **Construction Materials Testing Services** for the **Hidalgo County Sheriff's Office Substation Construction Project** in Hidalgo County.

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 Sheriff's Office** and the project plans and specifications.

- Provide accurate and timely reports to **The County of Hidalgo Sheriff's Office** 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 Sheriff's Office** 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: Hidalgo County Sheriff's Office Substation Construction Project in Hidalgo County.

Work Schedule

L&G Engineering Laboratory will provide Hidalgo County Sheriff's Office with Construction Materials Testing Services as outlined in Contract Agreement C-XX-XXX-XX-XX.

ATTACHMENT "D"
Cost Proposal

PROJECT: Hidalgo County Sheriff's Office Substation Construction Project in Hidalgo County.

See Attached

Attachment I
L&G Engineering Laboratory, LLC
Hidalgo Sherriff's Substation
Prepared for Hidalgo County

Proof Rolling -Building Subgrade					
Report	2	Ea.	\$22.56	\$45.12	
Eng. Tech. (Soils)	5	Hr.	\$45.75	\$228.75	Proof Roll Observation
Trip Charge (Miles)	24	Mi.	\$0.50	\$12.00	as per General Notes on plans
					Sheet S1.2
				\$285.87	Based on 2 Site Visits
In-Situ Soils Testing-Laboratory-Building Subgrade					
Proctor	1	Ea.	\$196.83	\$196.83	Building Footprint 15,840 Sq. Ft.
Atterberg Limits	1	Ea.	\$76.18	\$76.18	
% Pass 200	1	Ea.	\$63.57	\$63.57	
Report	1	Ea.	\$22.56	\$22.56	
Eng. Tech. (Soils)	2.5	Hr.	\$45.75	\$114.38	
Trip Charge (Miles)	12	Mi.	\$0.50	\$6.00	
				\$479.52	
In-Situ Soils Testing-Field -Building Subgrade					
Compact. Test	6	Ea.	\$22.87	\$137.22	Based on 1 Lift
Report	2	Ea.	\$22.56	\$45.12	A Minimum of 3 Compaction
Eng. Tech. (Soils)	5	Hr.	\$45.75	\$228.75	Test Per Lift or every
Trip Charge (Miles)	24	Mi.	\$0.50	\$12.00	3000 Square Feet
				\$423.09	
Select Fill Soils Testing / Slab - Laboratory					
Proctor	2	Ea.	\$196.83	\$393.66	Based on 2 Select Fill
Atterberg Limits	4	Ea.	\$76.18	\$304.72	Samples
% Pass 200	4	Ea.	\$63.57	\$254.28	2 Additional Atterberg Limits &
Eng. Tech. (Soils)	7	Hr.	\$45.75	\$320.25	Minus 200 for Field Verification
Trip Charge (Miles)	24	Mi.	\$0.50	\$12.00	of Select Fill Materials
Report	4	Ea.	\$22.56	\$90.24	
				\$1,375.15	
Select Fill Soils Testing-Field Testing and Monitoring					
Compact. Test	40	Ea.	\$22.87	\$914.80	Based on 8 - 6" Lifts
Report	8	Ea.	\$22.56	\$180.48	A Minimum of 3 Compaction
Eng. Tech. (Soils)	16	Hr.	\$45.75	\$732.00	Test Per Lift or every
Trip Charge (Miles)	96	Mi.	\$0.50	\$48.00	3000 Square Feet
				\$1,875.28	As per General Notes (S1.2)
Trench Backfill Soils Testing-Laboratory					
Proctor	2	Ea.	\$196.83	\$393.66	Based on 2 Trench Backfill
Atterberg Limits	2	Ea.	\$76.18	\$152.36	Samples
% Pass 200	2	Ea.	\$63.57	\$127.14	
Report	2	Ea.	\$22.56	\$45.12	
Eng. Tech. (Soils)	5	Hr.	\$45.75	\$228.75	
Trip Charge (Miles)	24	Mi.	\$0.50	\$12.00	
Report	2	Ea.	\$22.56	\$45.12	
				\$1,004.15	
Trench Backfill Soils Testing-Field Testing and Monitoring					
Compact. Test	24	Ea.	\$22.87	\$548.88	Based on 1 Test for every 6" Lift
Report	12	Ea.	\$22.56	\$270.72	at a frequency of 1 Test Every 100
Eng. Tech. (Soils)	24	Hr.	\$45.75	\$1,098.00	Linear Feet within the Building
Trip Charge (Miles)	144	Mi.	\$0.50	\$72.00	Pad Footprint
				\$1,989.60	
Concrete Reinforcement Steel Inspection (Slab)					
Report	2	Ea.	\$22.56	\$45.12	Based on 2
Eng. Tech. (Concrete)	6	Hr.	\$58.41	\$350.46	trips to perform
Trip Charge (Miles)	24	Mi.	\$0.50	\$12.00	steel inspection
				\$407.58	

Lime Stabilized In-Situ Soils Testing-Field -Pavement Subgrade					
Compact. Test	16	Ea.	\$22.87	\$365.92	Based on one Density test every 325 S.Y. as per General Notes 5,283 Total S.Y.
Report	3	Ea.	\$22.56	\$67.68	
Eng. Tech. (Soils)	6	Hr.	\$45.75	\$274.50	
Trip Charge (Miles)	36	Mi.	\$0.50	\$18.00	
				<u>\$726.10</u>	
Site Select Fill Soils Testing-Laboratory					
Proctor	1	Ea.	\$196.83	\$196.83	Based on Select Fill Samples 2 Additional Atterberg Limits & Minus 200 for Field Verification of Select Fill Materials
Atterberg Limits	2	Ea.	\$76.18	\$152.36	
% Pass 200	2	Ea.	\$63.57	\$127.14	
Eng. Tech. (Soils)	7	Hr.	\$45.75	\$320.25	
Report	4	Ea.	\$22.56	\$90.24	
Trip Charge (Miles)	12	Mi.	\$0.50	\$6.00	
				<u>\$892.82</u>	
Site Select Fill Soils -Field Testing and Monitoring					
Compact. Test	16	Ea.	\$22.87	\$365.92	Based on one Density test every 325 S.Y. as per General Notes 5,283 Total S.Y.
Report	3	Ea.	\$22.56	\$67.68	
Eng. Tech. (Soils)	6	Hr.	\$45.75	\$274.50	
Trip Charge (Miles)	30	Mi.	\$0.50	\$15.00	
				<u>\$723.10</u>	
Cement Stabilized Sand Testing-Laboratory					
Proctor	1	Ea.	\$196.83	\$196.83	Based on a raw sample of Sand and a sample of cement to be used as stabilization
Atterberg Limits	1	Ea.	\$76.18	\$76.18	
% Pass 200	1	Ea.	\$63.57	\$63.57	
Eng. Tech. (Soils)	2.5	Hr.	\$45.75	\$114.38	
Report	1	Ea.	\$22.56	\$22.56	
Trip Charge (Miles)	12	Mi.	\$0.50	\$6.00	
				<u>\$479.52</u>	
Hold, Cure	4	Ea.	\$11.49	\$45.96	Based on field sampling of Cement Stab. Sand for compression testing
Compression Test	4	Ea.	\$15.22	\$60.88	
Eng. Tech. (Soils)	4	Hr.	\$45.75	\$183.00	
Test Reports (7 and 28 day)	2	Ea.	\$22.56	\$45.12	
Trip Charge (Miles)	12	Mi.	\$0.50	\$6.00	
				<u>\$1,293.99</u>	
Cement Stabilized Sand-Field Testing and Monitoring					
Compact. Test	3	Ea.	\$22.87	\$68.61	Based on one Density test every 325 S.Y. as per General Notes 49 Total S.Y.
Report	1	Ea.	\$22.56	\$22.56	
Eng. Tech. (Soils)	2	Hr.	\$45.75	\$91.50	
Trip Charge (Miles)	12	Mi.	\$0.50	\$6.00	
				<u>\$188.67</u>	
Trench Backfill Soils Testing-Laboratory					
Proctor	2	Ea.	\$196.83	\$393.66	Based on 1 to 2 materials if encountered.
Atterberg Limits	2	Ea.	\$76.18	\$152.36	
% Pass 200	2	Ea.	\$63.57	\$127.14	
Eng. Tech. (Soils)	5	Hr.	\$45.75	\$228.75	
Report	2	Ea.	\$22.56	\$45.12	
Trip Charge (Miles)	12	Mi.	\$0.50	\$6.00	
				<u>\$953.03</u>	
Trench Backfill Soils Testing-Field Testing and Monitoring					
Compact. Test	27	Ea.	\$22.87	\$617.49	Based on one Density test every 200 Linear Feet. Or at every trench that crosses a pavement structure.
Report	3	Ea.	\$22.56	\$67.68	
Eng. Tech. (Soils)	6	Hr.	\$45.75	\$274.50	
Trip Charge (Miles)	36	Mi.	\$0.50	\$18.00	
				<u>\$977.67</u>	
Lime Stabilized Flex Base (Caliche) Testing-Laboratory					
Proctor	1	Ea.	\$196.83	\$196.83	Testing Based on General Notes Sheet C1.0, Testing Schedule
Atterberg Limit	1	Ea.	\$76.18	\$76.18	
Sieve Analysis	1	Ea.	\$57.12	\$57.12	
Texas Wet ball Mill	1	Ea.	\$222.38	\$222.38	
Eng. Tech. (Soils)	3.5	Hr.	\$45.75	\$160.13	
Report	2	Ea.	\$22.56	\$45.12	
Trip Charge (Miles)	12	Mi.	\$0.50	\$6.00	
				<u>\$763.76</u>	

Lime Stabilized Flex Base (Callche)-Field Testing and Monitoring					
Compact. Test	16	Ea.	\$22.87	\$365.92	Based on one Density test every 325 S.Y. as per General Notes 5,283 Total S.Y.
Report	3	Ea.	\$22.56	\$67.68	
Eng. Tech. (Soils)	6	Hr.	\$45.75	\$274.50	
Trip Charge (Miles)	36	Mi.	\$0.50	\$18.00	
				<u>\$726.10</u>	
Concrete Reinforcement Steel Inspection					
Inspection	6	Hr.	\$58.41	\$350.46	
Eng. Tech. (Concrete)	6	Hr.	\$58.41	\$350.46	
Report	3	Ea.	\$22.56	\$67.68	
Trip Charge (Miles)	36	Mi.	\$0.50	\$18.00	
				<u>\$786.60</u>	
Concrete Pavement - Curb & Gutter					
Air Content	5	Ea.	\$22.82	\$114.10	
Report	5	Ea.	\$22.56	\$112.80	
Eng. Tech. (Concrete)	15	Hr.	\$45.75	\$686.25	
Trip Charge (Miles)	60	Mi.	\$0.50	\$30.00	
				<u>\$943.15</u>	
Hold, Cure	20	Ea.	\$11.49	\$229.80	
Compression Test	20	Ea.	\$15.22	\$304.40	
Test Reports (7 and 28 day)	15	Ea.	\$22.56	\$338.40	
Eng. Tech. (Concrete)	15	Hr.	\$45.75	\$686.25	
Trip Charge (Miles)	60	Mi.	\$0.50	\$30.00	
				<u>\$1,588.85</u>	
Concrete Placement - Rip Rap - Detention Pond					
Air Content	3	Ea.	\$22.82	\$68.46	Assuming 3 Placements
Report	3	Ea.	\$22.56	\$67.68	
Eng. Tech. (Concrete)	8	Hr.	\$45.75	\$366.00	
Trip Charge (Miles)	36	Mi.	\$0.50	\$18.00	
				<u>\$520.14</u>	
Hold, Cure	12	Ea.	\$11.49	\$137.88	
Compression Test	12	Ea.	\$15.22	\$182.64	
Test Reports (7 and 28 day)	9	Ea.	\$22.56	\$203.04	
Eng. Tech. (Concrete)	8	Hr.	\$45.75	\$366.00	
Trip Charge (Miles)	36	Mi.	\$0.50	\$18.00	
				<u>\$907.56</u>	

Field and Laboratory Test Fees				\$35,434.50	
Engineering Specialist (Rpt. Review)(Hr.)	48		\$114.30	\$5,486.40	
Engineer (Report Review)(Hr.)	48		\$152.47	\$7,318.56	
Estimated Materials Testing Total				<u>\$48,239.46</u>	