

EXHIBIT "F"
Supplemental Agreement Form

THE STATE OF TEXAS §
 §
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO. 1
TO WORK AUTHORIZATION NO. 2
TO AGREEMENT FOR PROFESSIONAL SERVICES
C-18-228-10-09

THIS **SUPPLEMENTAL AGREEMENT** is made pursuant to the terms and conditions of Article 6 of the Agreement made by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and L&G ENGINEERING, Professional Engineers of Mercedes, Texas, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the 9th day of October, 2018 concerning Geotechnical and Construction Material Testing Engineering Services for the Justice Center Project located in Hidalgo County Precinct No. 4 hereinafter referred to as the ("**Project**") and,

WHEREAS, Article 6 of the **Agreement**, Supplemental Agreements, establishes; and,

WHEREAS, it has become necessary to amend the contract to amend Exhibit B-Services to be provide by Engineer of Work Authorization No. 2 to remove the scope of services of the County Services Facility for the proposed design modification to the Project; and

WHEREAS, it has become necessary to amend the contract to amend Exhibit D-Cost Proposal to be provided by Engineer of Work Authorization No. 2 to remove the cost of the County Services Facility for the proposed design modification to the Project; and

WHEREAS, the Estimated Cost will decrease from the Work Authorization No. 2 amount of 24,033.71 to \$17,336.35; therefore, the decrease amount of Supplemental No. 1 is \$6,697.36.

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said **Agreement** is amended as follows:

- I. Sections of the Work Authorization, Exhibit B-Scope of Services to be provided by the Engineer and Exhibit-D-Cost Proposal, are revised to reflect the above listed modifications of this Supplemental.

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the 23rd day of June, 2020.

**THE ENGINEER:
L&G ENGINEERING**

BY: _____
Jacinto Garza, P.E., President

**THE OWNER:
HIDALGO COUNTY**

BY: _____
Richard F. Cortez, County Judge

LIST OF ATTACHMENTS:

REVISED EXHIBIT B-Scope of Services to be provided by the Engineer
REVISED EXHIBIT D- Cost Proposal

EXHIBIT B

Scope of Services to be provided by the Engineer

GENERAL SCOPE OF WORK

The work to be performed by the **Engineer** under this Work Authorization shall consist of; Geotechnical Drilling and Miscellaneous Field Services, Geotechnical Laboratory Testing Services and Geotechnical Engineering Services for the County Services Facility and Justice Center project hereinafter denoted as the **Project**.

The **Engineer** shall provide all services required (as noted under this Work Authorization) for usage by the **Owner** in the preparation of plans, specification and estimate, and related documents for the **Project**. The **Engineer** shall maintain a direct line of communication and coordinate with the **Owner** throughout the project.

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

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

I. Geotechnical Drilling Services and Miscellaneous Field Services

The **Engineer** will coordinate with the **Owner** for verification of project vicinity map indicating general boring site locations.

The **Engineer** will provide drilling/excavation and sampling of subsurface materials as follows in accordance with this Work Authorization and in conformance with ASTM guidelines:

- Structural Boring – Two (2) Borings will be drilled at approximate locations of the building structure on the project (Borings will be advanced to a depth of approximately 20 feet below the existing top of natural ground) (Boring Designation B-01 through B-04)
- Pavement Boring – Seven (7) Borings will be drilled at approximate locations of the parking lot on the project (Borings will be advanced to a depth of approximately 8 feet below the existing top of natural ground) (Boring Designation B-PV-01 through B-PV-07)

The **Engineer** will stake the boring locations and provide utility clearances prior to performing the field exploration portion of the project. The **Owner** will be responsible to provide any necessary permits or authorization to access areas (right of entry) where borings are to be drilled. All borings will be located in the field by a representative of the **Engineer**. All boring locations will be documented with GPS coordinates. Field survey and tie-down locations of all borings will be the responsibility of the **Owner**.

The borings will be advanced to the specified depth(s) and in-situ soil testing will be performed in general accordance with ASTM and/or TxDOT Standard Test Procedures and Geotechnical Manual (ASTM D1586 – Standard Penetration Testing (SPT) and/or Tex-132-E – Texas Cone Penetration (TCP)). In addition, where applicable, thin-walled Shelby tube samples may be collected (ASTM D1587 – Thin Walled Tube Sampling). The soils will be sampled as needed to

Engineer: L&G Consulting Engineers, Inc. (Lab Division)

Owner: Hidalgo County Pct. 4

verify subsurface materials and strata changes. Final drilling depths and elevations will be based on topographic conditions at the time of drilling operations.

All samples will be removed from the sample apparatus during drilling operations. The **Engineer** 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 natural moisture content and to reduce the possibility of damage during transportation to the soil testing laboratory facility.

Drilling services will include an initial water strike depth and a 24-hour water level reading at each boring location. Following completion of drilling and sampling, all boreholes will be backfilled with soil cuttings from the completed borings. If there is insufficient soil cuttings available, alternate fill will be used to backfill the completed boreholes.

This proposal 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 re-grading 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;
- Encountering hazardous or contaminated soils or substances during our field activities.

The **Engineer** will notify the **Owner** should these services become necessary to complete field exploration activities, and if approved by the **Owner**, additional negotiated fee and scope will be incorporated through Supplemental Work Authorization.

II. Geotechnical Laboratory Testing Services

Geotechnical Laboratory Testing will be performed by the **Engineer** on the samples recovered during the field study to evaluate their physical and engineering properties. Laboratory testing will be performed in general accordance with ASTM and/or TxDOT Standard Test Procedures. Testing shall include the following test procedures:

- (1) Atterberg Limits (ASTM D4318 or Tex-104-E, 105-E, 106-E)
- (2) Gradation (-200) (ASTM D1140 or Tex-111-E)
- (3) Lab. Determination of Moisture in Soils (ASTM D2216 or Tex-103-E)
- (4) Sulfate Content of Soil (ASTM C1580 or Tex-145-E)
- (5) Lime Series Testing – pH Relation (Tex-121-E, Part III)

III. Geotechnical Engineering Services

The **Engineer** will utilize information gathered from the field and laboratory testing to provide the **Owner** with Geotechnical Engineering results and analyses for the **Project**. The findings and conclusions derived from the results and analyses will be presented in an engineering report and provided to the **Owner** (electronic .pdf medium only). The report will include a boring location plan, boring logs with laboratory classification of recovered soil samples at the boring locations

Engineer: L&G Consulting Engineers, Inc. (Lab Division)
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and subsurface water conditions encountered. The report will provide analyses and/or engineering recommendations as follows:

Structures (1 Bldg)	
1	Structural Evaluation of Borings / Calc. Shear Strength Models / Soil Profiles
2	Shallow Foundation Analysis & Recs (All BC, PVR, WRI, PTI, Modulus)
3	Construction Recommendations based on Geotechnical Investigation/Analyses
Parking Lots (Pavement Recs)	
1	Structural Evaluation of Borings / Soil Profiles
2	Pavement Eng Analysis & Recommendations (Parking Lot & Drives)

The 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 aspects of this project. This information may serve to guide both geometric modeling and foundation selection and design as well as provide assistance in the preparation of specifications for the project.

EXHIBIT "D"
Cost Proposal



Geotechnical Engineering, Report & Summary

L&G Consulting Engineers, Inc. (Division: L&G ENGINEERING LAB)

SUPP #1 to WA #2 - Justice Center Geo SUMMARY Client: Hidalgo County Pct. 4			MANHOURS					
			Senior Project Manager	Senior Engineer (Geotechnical)	Project Engineer	Engineering Tech / GIS	Admin/Clerical	Total
TASK								
		Structures (1 Bldg)						
1		Structural Evaluation of Borings / Calc. Shear Strength Models / Soil Profiles			2			2
2		Shallow Foundation Analysis & Recs (All BC, PVR, WRI, PTI, Modulus)			2			2
3		Construction Recommendations based on Geotechnical Investigation/Analyses		2	2			4
4		Geotechnical Report (Including Soil Survey/Geog./All Analyses)		2	4	2	2	10
5		Meetings/Coordination	2					2
		Parking Lots (Pavement Recs)						
1		Structural Evaluation of Borings / Soil Profiles			2			2
2		Pavement Eng Analysis & Recommendations (Parking Lot & Drives)			2			2
3		Geotechnical Report (Including Soil Survey/Geog./All Analyses)	2	2	4	2	2	12
		Subtotal	4	6	18	4	4	36
Labor Hours			4	6	18	4	4	36
Contract Rate (Contract Rates)			\$ 215.34	\$ 180.42	\$ 139.68	\$ 78.57	\$ 58.20	
Total Labor Costs			\$ 861.36	\$ 1,082.52	\$ 2,514.24	\$ 314.28	\$ 232.80	\$ 5,005.20

LINE ITEM EXPENSES

Printing Reproduction (None - Electronic Copies Only)

\$ -

*L&G Consulting Engineers, Inc. (Sub-Total for Geo. Field & Lab Services)

\$ 12,331.15

* - (Please see page 2, for detailed estimates of testing)

Total Expenses

\$ 12,331.15

L&G Total Cost

\$ 17,336.35

EXHIBIT "D"
Geotechnical Field and Laboratory Services
Supp #1 to WA #2 - Justice Center Geo - SUMMARY
Prepared for Hidalgo County Pct. 4

	SERVICES	UNITS	UNITS	UNIT COST	TOTAL COST
I.	Project Management / Review				
	A. Principal / Project Manager / Review	Hours			
	B. Senior Project Engineer (Staff)	Hours			\$ -
	C. Typing and Clerical (Report)	Hours			
	D. Lodging	Day			
	E. Mileage	Mile			
	F. Air Travel	Trip			
II.	Utility Clearances / Boring Locates				
	A. Technician (Locate Borings)(Util Clr)	Hours	4	\$ 58.20	\$ 232.80
	B. Staff Engineer/Geologist/Scientist	Hours			
	C. Rebar (stakes with impalement covers)	Cost +12.5%			
	D. Vehicle Charge	Mile			
	E. Mileage	Mile	90	\$ 0.54	\$ 48.60
	F. Survey Locate Borings (X,Y,Z)	LS			\$ -
	G. Clear Site for Access (Dozer)	LS			\$ -
III.	Field Exploration				
A	Mobilization/Demobilization	Day	1.5	\$ 468.56	\$ 702.84
B	Field Exploration				
	1. ASTM Drill & SPT/Tube Sampling (SS)	Feet	96	\$ 32.97	\$ 3,165.12
	2. TxDOT TCP Field Test (BL/ft)	Ea.			\$ -
	3. Field Logger/Eng Tech (Soil & Agg Tech)	Hour	12	\$ 58.20	\$ 698.40
	4. 24 Hr. Water Level Observations	Hour	3	\$ 58.20	\$ 174.60
	5. Piezometers	Each			\$ -
	6. Supp. Vehicle-Trailer, Tools H2O Supply	Mile	90	\$ 1.75	\$ 157.50
	7. Vehicle Charge	Mile	180	\$ 0.54	\$ 97.20
C	Miscellaneous Field Services				
IV.	Engineering Data Analysis / Report				
	1. Staff Engineer	Hours			
	2. Sr. Eng Tech / Geo Eng (Soil Classification)	Hours	3	\$ 116.40	\$ 349.20
	3. Sr. Eng Tech / Geo Eng (Logs & Summ.)	Hours	3	\$ 116.40	\$ 349.20
	4. Moisture Content	Ea.	42	\$ 11.20	\$ 470.40
	5. Atterberg Limits	Ea.	22	\$ 84.51	\$ 1,859.22
	6. -200 Determination	Ea.	22	\$ 70.51	\$ 1,551.22
	7. Sieve Analysis (w/ Hydrometers)	Ea.			\$ -
	8. UC Testing (w/ Unit Weight)	Ea.			\$ -
	9. Consolidation Testing	Ea.			\$ -
	10. Dry Unit Weight	Ea.			\$ -
	11. Soils Sulfate Content	Ea.	9	\$ 91.66	\$ 824.94
	12. Determination of Soil pH	Ea.			\$ -
	13. Lime Series Testing (5 Pt.)	Ea.	3	\$ 549.97	\$ 1,649.91
Project Sub-Total (Geo Field and Lab)					\$ 12,331.15