

**EXHIBIT “F”**  
**HIDALGO COUNTY**  
**Professional Engineering Services for Construction Material Testing Agreement**  
**C-23-0286-08-08**  
**(ARPA-22-124-049)**

**WORK AUTHORIZATION NO. 1**

**THIS WORK AUTHORIZATION** is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. C-23-0286-08-08, incorporated herein by reference, for the **“Construction Material Testing - Hidalgo County Precinct 4 Mile 17 Rd Stormwater Project”** made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the **“Owner,”** and Millennium Engineers Group, Inc., hereinafter called **“Engineer”**.

**PART 1. SCOPE OF WORK**

The purpose of this Work Authorization is for the **Engineer** to provide Construction Material Testing services for and during the construction of the Project, or portions of the Project, as approved by the COUNTY.

The **Engineer** is to provide the scope of Services as required by the Agreement with Owner.

The scope of services to be provided by the **Engineer** is identified in **Attachment “A” – “Scope of Services to be provided by Engineer”** attached hereto and incorporated by reference.

**PART 2. ESTIMATED COST**

The estimated cost for services under this Work Authorization is **\$51,694.00**. This amount is based upon the costs outlined in the **Attachment “B” – “Fee Proposal”** attached hereto and incorporated by reference.

**PART 3. PAYMENT**

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the **Professional Engineering Services Agreement No. C-23-0286-08-08** between the **Owner** and the **Engineer**.

**PART 4. FUNDING**

This Work Authorization No.1 shall be funded through funding source:

Account No. 3-1290-431-50-115-242-4-723

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 the scopes of the Work Authorization, within the limits of Agreement No. C-23-0286-08-08, provided in this Work Authorization; or on ( \_\_\_\_\_ ) DATE**. *If applicable:* Engineer shall conform to the

approved "Work/Project Schedule", attached hereto and incorporated by reference herein as **Attachment "C"**.

**PART 6. RESPONSIBILITIES AND OBLIGATIONS**

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement No. C-23-0286-08-08**

**PART 7. ACKNOWLEDGEMENT AND CONFIRMATION**

Acknowledgement and confirmation by **Hidalgo County Precinct 4, Commissioner Ellie Torres**, as to content and detail of this **Work Authorization No. 1**.

**HIDALGO COUNTY PRECINCT No. 4**

By: \_\_\_\_\_  
Ellie Torres, Commissioner

**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted and approved by the Hidalgo County Commissioners Court and hereby executed and effective as of the date indicated below.

**APPROVED BY COMMISSIONERS' COURT ON AUGUST 8, 2023.**

**Agenda Item No. 91852**

**Executive Office:** \_\_\_\_\_

**ENGINEER:**  
Millennium Engineers Group, Inc.

**COUNTY:**  
COUNTY OF HIDALGO

\_\_\_\_\_  
Raul Palma P.E, CEO

\_\_\_\_\_  
Hon. Richard F. Cortez, County Judge

**ATTEST:**

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

**LIST OF ATTACHMENTS:**

**Attachment "A"** – *Scope of Services to be provided by Engineer*

**Attachment "B"** – *Fee Proposal*

**Attachment "C"** – *Approved Work/Project Schedule (If applicable)*



# **ATTACHMENT A**

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## **PROJECT SPECIFIC SCOPE OF SERVICES TO BE PROVIDED BY ENGINEER**

## Attachment "A"

### Services to be Provided by Laboratory

The services to be provided by the LABORATORY in providing Geotechnical Services for Hidalgo County Precinct No.4 Project, "**Mile 17 Road Drainage Improvements**" and the services are as follows:

#### **A. Preliminary Phase:**

- (1) Attend preliminary conferences with the OWNER 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 the design.
- (3) Provide environmental studies as may be necessary to complete a project.
- (4) Provide assistance to the OWNER in providing material requirements and specifications for design, construction and maintenance projects.
- (5) Provide assistance to the OWNER in providing pavement design recommendations for the design, construction and maintenance projects.
- (6) Provide assistance to the OWNER in providing pavement rehabilitation recommendations for the design, and maintenance projects.
- (7) Provide assistance to the OWNER in providing pavement condition studies.

#### **B. Design Phase:**

- (1) Attend the OWNER'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 OWNER in providing material requirements and specification for design, construction and maintenance projects.
- (4) Provide assistance to the OWNER in providing pavement design recommendations for the design, construction and maintenance projects.
- (5) Provide assistance to the OWNER in providing pavement rehabilitation recommendations for the design, construction and maintenance projects.
- (6) Provide assistance to the OWNER in providing pavement condition studies.
- (7) Furnish the OWNER all necessary reports for preliminary design, design, construction and maintenance projects.

#### **C. Construction/Maintenance Phase:**

- (1) Attend the OWNER'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 OWNER during construction.

- (3) Provide construction materials testing for construction and maintenance projects as required by the project plans and specifications and/or specified by the project design engineer.
- (4) Review all material designs as requested by the OWNER and/or project design engineer.
- (5) Furnish the OWNER all necessary reports for construction and maintenance projects.
- (6) Provide construction inspection services as requested by the OWNER on construction and maintenance projects.

**D. Miscellaneous/Other:**

- (1) Act for OWNER in professional manner, using that degree of care and skill ordinarily exercised by and consistent with the standards of the profession.
- (2) Perform all technical services under the general direction of a Licensed Professional Laboratory in the State of Texas and in substantial accordance with the basic requirements of the appropriate Standards of the American Society of Testing and Materials, where applicable, or other standards designated by County.
- (3) Employ testing machines which have been calibrated within a period not exceeding twelve (12) months from the time of use by devised of accuracy traceable to the National Institute of Standards and Technology (NIST) of the United States Department of Commerce, and, upon request, submit to the OWNER or its authorized representative documentation of such calibration.
- (4) Promptly submit formal construction materials testing reports for all tests, observations, and services performed indicating where applicable, compliance with OWNER 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 the tests were made.
- (5) The plans and specifications prepared under this Agreement shall become the property of the OWNER upon completion of the work and payment in full of all monies due to the Laboratory.
- (6) 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 Owner within a reasonable time.

**NOTE:** Change in and/or additional services to Scope will require prior approval from OWNER prior to undertaking.



# **ATTACHMENT B**

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## **FEE PROPOSAL**

**Work Schedule  
Proposed Construction Materials Testing Services for  
Mile 17 Road Drainage Improvements**

**SOILS SECTION**

**Task: Backfill Sample (Per Sample, 12 samples estimated)**

Line Item	Qty.	Unit Rate	Estimated Cost
Soil Engineering Technician (Per Hour) (Min. 3 Hrs.)	16	90.00	\$1,440.00
Standard Proctor (each test)	12	220.00	\$2,640.00
Atterberg Limits (each test)	12	80.00	\$960.00
Percent Passing No. 200 Sieve (each test)	12	58.00	\$696.00
Vehicle trip charge (per trip) (within 25 miles of office)	12	55.00	\$660.00
Test Reports (each report)	12	40.00	\$480.00
Project Engineer (per hour)	3	180.00	\$540.00
Project Management (per hour)	3	105.00	\$315.00
Clerical / Administrative (per hour)	3	78.00	\$234.00
Sub-Total (per sample)	1	-	\$795.30
Sub-Total (per task)	1	<b>876.03</b>	<b>\$8,760.30</b>

**Task: Backfill density testing – Assumed testing every 300' of Backfill (Per Trip, 22 trips estimated)**

Line Item	Qty.	Unit Rate	Estimated Cost
Soil Engineering Technician (Per Hour) (Min. 3 Hrs.)	66	90.00	\$5,940.00
Nuclear density test (min. 3, each test)	64	28.00	\$1,792.00
Vehicle trip charge (per trip) (within 25 miles of office)	22	55.00	\$1,210.00
Test Reports (each report)	22	40.00	\$880.00
Project Engineer (per hour)	5.5	180.00	\$990.00
Project Management (per hour)	5.5	105.00	\$577.50
Clerical / Administrative (per hour)	5.5	78.00	\$429.00
Sub-Total (per trip)	1	-	\$539.75
Sub-Total (per task)	1	<b>12,358.25</b>	<b>\$12,358.25</b>

**Task: Subgrade Sample (Per Sample, 6 samples estimated)**

Line Item	Qty.	Unit Rate	Estimated Cost
Soil Engineering Technician (Per Hour) (Min. 3 Hrs)	18	90.00	\$1,620.00
Standard Proctor (each test)	6	220.00	\$1,320.00
Atterberg Limits (each test)	6	80.00	\$480.00
Percent Passing No. 200 Sieve (each test)	6	58.00	\$348.00
Vehicle trip charge (per trip) (within 25 miles of office)	6	55.00	\$330.00
Test Reports (each report)	6	40.00	\$240.00
Project Engineer (per hour)	1.5	180.00	\$270.00
Project Management (per hour)	1.5	105.00	\$157.50
Clerical / Administrative (per hour)	1.5	78.00	\$117.00
Sub-Total (per sample)	1	-	\$813.75
Sub-Total (per task)	1	<b>5,696.25</b>	<b>\$5,696.25</b>

**Task: Subgrade density testing (Per Trip, 4 trips estimated)**

Line Item	Qty.	Unit Rate	Estimated Cost
Soil Engineering Technician (Per Hour) (Min. 3 Hrs)	30	90.00	\$2,700.00
Nuclear density test (min. 3, each test)	30	28.00	\$840.00
Vehicle trip charge (per trip) (within 25 miles of office)	10	55.00	\$550.00
Test Reports (each report)	10	40.00	\$400.00
Project Engineer (per hour)	2.5	180.00	\$450.00
Project Management (per hour)	2.5	105.00	\$262.50
Clerical / Administrative (per hour)	2.5	78.00	\$195.00
Sub-Total (per trip)	1	-	\$521.20
Sub-Total (per task)	1	5,918.70	\$5,918.70

**Task: Flexible Base Sample (Per Sample, 1 sample estimated)**

Line Item	Qty.	Unit Rate	Estimated Cost
Soil Engineering Technician (Per Hour) (Min. 3 Hrs)	3	90.00	\$270.00
Standard Proctor (each test)	1	220.00	\$220.00
Atterberg Limits (each test)	1	80.00	\$80.00
Sieve Analysis (each test)	1	85.00	\$85.00
Wet Ball Mill (each test)	1	240.00	\$240.00
Vehicle trip charge (per trip) (within 25 miles of office)	1	55.00	\$55.00
Test Reports (each report)	1	40.00	\$40.00
Project Engineer (per hour)	0.25	180.00	\$45.00
Project Management (per hour)	0.25	105.00	\$26.25
Clerical / Administrative (per hour)	0.25	78.00	\$19.50
Sub-Total (per sample)	1	-	\$1,080.75
Sub-Total (per task)	1	1,080.75	\$1,080.75

**Task: Flexible Base density testing (Per Trip, 4 trips estimated)**

Line Item	Qty.	Unit Rate	Estimated Cost
Soil Engineering Technician (Per Hour) (Min. 3 Hrs)	12	90.00	\$1,080.00
Nuclear density test (min. 3, each test)	16	28.00	\$448.00
Vehicle trip charge (per trip) (within 25 miles of office)	4	55.00	\$220.00
Test Reports (each report)	4	40.00	\$160.00
Project Engineer (per hour)	1	180.00	\$180.00
Project Management (per hour)	1	105.00	\$105.00
Clerical / Administrative (per hour)	1	78.00	\$78.00
Sub-Total (per trip)	1	-	\$539.75
Sub-Total (per task)	1	2,810.75	\$2,810.75

**SOILS Section Total****\$36,625.00**

**CONCRETE SECTION**

**Task: Concrete testing at Paving Area (Per Pour, 10 concrete pour estimated)**

<b>Line Item</b>	<b>Qty.</b>	<b>Unit Rate</b>	<b>Estimated Cost</b>
Concrete Engineering Technician (Per Hour) (Min. 3 Hrs)	60	90.00	\$5,400.00
Slump Test (each test)	10	20.00	\$200.00
Air Content, Pressure (each test)	10	25.00	\$250.00
Concrete Cylinder Compressive Strength Test (each cylinder)	40	16.00	\$640.00
Vehicle trip charge (per trip) (within 25 miles of office)	20	55.00	\$1,100.00
Test Reports (each report)	20	40.00	\$800.00
Project Engineer (per hour)	5	180.00	\$900.00
Project Management (per hour)	5	105.00	\$525.00
Clerical / Administrative (per hour)	5	78.00	\$390.00
Sub-Total (per pour)	1	-	\$564.75
Sub-Total (per task)	1	<b>10,769.75</b>	<b>\$10,769.75</b>

**CONCRETE Section Total**

**\$10,769.75**

**HMAC PAVEMENT SECTION**

**Task: HMAC pavement rolling pattern (per trip, 4 trips estimated)**

<b>Line Item</b>	<b>Qty.</b>	<b>Unit Rate</b>	<b>Estimated Cost</b>
Asphalt Engineering Technician (Per Hour) (Min. 3 Hrs.)	24	90.00	\$2,160.00
Nuclear density test (Min. 3, each test)	12	28.00	\$336.00
Vehicle trip charge (per trip) (within 25 miles of office)	4	55.00	\$220.00
Test Reports (each report)	4	40.00	\$160.00
Project Engineer (per hour)	2	175.00	\$350.00
Project Management (per hour)	2	180.00	\$360.00
Clerical / Administrative (per hour)	2	78.00	\$156.00
Sub-Total (per trip)	1	-	\$557.25
Sub-Total (per task)	1	<b>4,299.25</b>	<b>\$4,299.25</b>

**HMAC Pavement Section Total**

**\$4,299.25**

**Total Estimated Cost**

**\$51,694.00**



# ATTACHMENT C

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## APPROVED WORK/PROJECT SCHEDULE

ATTACHMENT "C"

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**TENTATIVE SCHEDULE - Depends on Contractor/County Inspector scheduling**