

HIDALGO COUNTY
Professional Engineering Services
Contract # C-24-0377-10-29
Work Authorization Form

WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section 4 of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, Terracon Consultants, Inc., professional engineers of Pharr, Texas, 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 the Hidalgo County Precinct No. 2 - Regional Linear Park Parking Lot and Amenities Project.

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 **\$ 23,929.30** . 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** _____ of the Agreement.

PART 4. FUNDING

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

Account No. _____

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 project completion as indicated in the "**Exhibit C-Work Schedule**".

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 #2**, as to content and detail of this **Work Authorization No. 1**.

HIDALGO COUNTY PRECINCT #2

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 _____, 2024.

THE ENGINEER:
Terracon Consultants, Inc.

THE OWNER:
HIDALGO COUNTY

Alfonso Soto

By: Alfonso A. Soto, P.E., BC.GE, F. ASCE

By: Richard Cortez, County Judge

ATTEST:

By: Arturo Guajardo, Jr., County Clerk

LIST OF ATTACHMENTS

- EXHIBIT “A” - Service to be Provided by the Owner
- EXHIBIT “B” - Services to be Provided by the Engineer
- EXHIBIT “C” - Work Schedule
- EXHIBIT “D” - Cost Proposal

EXHIBIT "A"

Scope of Services to be provided by the Owner

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General:

The Owner will provide to the Laboratory the following:

- 1) Provide the authorization to proceed with services through coordination with the project consulting and design Laboratory.
- 2) Payment for work performed by the Laboratory and accepted by the Owner in accordance with Article 3 of this Agreement.
- 3) Assistance to the Laboratory, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Laboratory cannot easily obtain.
- 4) Provide any available relevant data the Owner may have on file concerning the projects.
- 5) Provide timely review and decisions in response to the Laboratory's request for information and/or required submittals and deliverables, in order for the Laboratory to maintain the agreed upon work schedule prepared in accordance with Exhibit "A" attached to this Agreement.
- 6) Attend and participate in progress meetings as required and as coordinated and conducted by Laboratory.
- 7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Laboratory.

EXHIBIT “B”

Scope of Services to be provided by the Engineer

Terracon will perform materials testing in general accordance with the project specifications. The time required for quality control testing during the construction phase on the project is directly related to the contractor’s scheduling and performance. Therefore, our fee for materials testing and observation services will be based upon applicable unit prices and hourly rates. Our anticipated scope of services is as follows:

- Earthwork and Site Preparation Observations and Testing
- Reinforced Concrete Observations and Testing
- Masonry Testing and Inspections
- Asphalt Observations and Testing
- Project Management and Administration

1. Earthwork and Site Preparation Observations and Testing:

- Observe and test structural fill placement and perform field density and moisture content testing during fill placement.
- Testing quantities and frequencies will be in general accordance with the project specifications.
- Perform laboratory testing of proposed fill soils to determine their dry density versus moisture content relationship in general accordance with the Standard Proctor test method

2. Reinforced Concrete Observations and Testing:

- Sample fresh concrete and perform field tests including slump, air content and temperature (ASTM C172, C143, C231, and C1064).
- Observe placement methods and verify mix usage.
- Perform compressive strength tests of concrete test cylinders cast in the field per ASTM C39.
- Observe size, quantity, spacing, splice length, and cover of steel reinforcing.

3. Masonry Testing and Inspections:

- Observe proof rolling of subgrades in the parking and access roads to identify any unstable materials prior to stone base placement.
- Perform field density testing of new pavement stone base and confirm compaction of new asphalt surface and binder materials.
- Inspection and documentation of the reinforcing steel in CMU walls and bond beams.
- Sampling of the fresh mortar during laboratory mixing and casting of mortar cubes or cylinders for compression tests.
- Sampling of the fresh grout during construction and casting of grout prisms for compressive strength tests.
- Sampling and testing of concrete masonry units.

4. Asphalt Observations and Testing:

- Observe proof rolling of subgrades in the parking and access roads to identify any unstable materials prior to stone base placement.
- Perform field density testing of new pavement stone base and confirm compaction of new asphalt surface and binder materials.

5. Project Management and Administration:

- A project manager will be assigned to the project to review the daily activity and assist in scheduling the work. Field and laboratory tests will be reviewed prior to submittal. The project manager will be responsible for monitoring the project budget and will oversee the preparation of the final report.

EXHIBIT "C"

Work Schedule

Terracon's work schedule is directly related to the contractor's scheduling and performance. It is the responsibility of the contractor or your designated representative to notify Terracon, in advance (minimum of 24-hour notice), for testing services required on this project. Our services will be performed on an as requested basis.



**EXHIBIT A
 COST ESTIMATE FOR
 CONSTRUCTION MATERIALS TESTING & SPECIAL INSPECTION SERVICES
 Regional Linear Park Parking Lot and Amenities
 TERRACON PROPOSAL NO. P88241254**

Earthwork Observation and Testing				
Service	Quantity	Unit	Unit Rate	Estimate
Standard Proctor - ASTM D698	4	Each	\$ 230.00	\$ 920.00
Atterberg Limits of Soils - ASTM D4318	4	Each	\$ 130.00	\$ 520.00
Material Finer #200 Sieve-ASTM D1140/ Tex-111E	4	Each	\$ 100.00	\$ 400.00
Sieve Analysis (Dry) (4 Sieves) - ASTM C136/Tex-200-F	1	Each	\$ 115.00	\$ 115.00
Lime Series Testing (pH Relation) - Tex-121-E (Part III)	1	Each	\$ 410.00	\$ 410.00
Field Density Test (Nuclear) - ASTM D6938/Tex-115-E	96	Each	\$ 25.00	\$ 2,400.00
Engineering Technician	84	Hour	\$ 85.00	\$ 7,140.00
Vehicle Trip Charge	330	Mile	\$ 0.93	\$ 306.90
Subtotal, Earthwork Observation and Testing				\$ 12,211.90
Concrete Observation and Testing				
Service	Quantity	Unit	Unit Rate	Estimate
Engineering Technician	18	Hour	\$ 85.00	\$ 1,530.00
Engineering Technician Overtime	6	Each	\$ 127.50	\$ 765.00
Compressive Strength of Cylinder Specimen - ASTM C39/Tex-418-A	20	Each	\$ 18.00	\$ 360.00
Vehicle Trip Charge	80	Mile	\$ 0.93	\$ 74.40
Subtotal, Concrete Observation and Testing				\$ 2,729.40
Reinforcing Steel Placement Observation				
Service	Quantity	Unit	Unit Rate	Estimate
Engineering Technician	3	Hour	\$ 85.00	\$ 255.00
Vehicle Trip Charge	10	Mile	\$ 0.93	\$ 9.30
Subtotal, Reinforcing Steel Observation				\$ 264.30
Masonry Observation and Testing				
Service	Quantity	Unit	Unit Rate	Estimate
Engineering Technician	18	Hour	\$ 85.00	\$ 1,530.00
Grout Prism Prep./Cure/Comp. Strength - ASTM C39	8	Each	\$ 32.00	\$ 256.00
Mortar Cube Prep./Cure/Comp. Strength - ASTM C109	12	Each	\$ 32.00	\$ 384.00
Vehicle Trip Charge	60	Mile	\$ 0.93	\$ 55.80
Subtotal, Masonry Observation and Testing				\$ 2,225.80
Hot Mix Asphalt Testing				
Service	Quantity	Unit	Unit Rate	Estimate
Engineering Technician	12	Each	\$ 85.00	\$ 1,020.00
Engineering Technician Overtime	4	Each	\$ 127.50	\$ 510.00
Maximum Theoretical SPG (Rice Gravity) - Tex-227-F	1	Each	\$ 120.00	\$ 120.00
Extraction/Sieve Analysis/Asphalt Content - Tex-210-F/Tex-200-F	1	Each	\$ 270.00	\$ 270.00
Density of Cores (4 or 6 inch) (Set of 2) - Tex-207-F	5	Each	\$ 85.00	\$ 425.00
Field Coring - ACP Thickness - ASTM D3549	5	Each	\$ 75.00	\$ 375.00
Vehicle Trip Charge	30	Mile	\$ 0.93	\$ 27.90
Subtotal, Hot Mix Asphalt Testing				\$ 2,747.90
Project Management and Administration				
Service	Quantity	Unit	Unit Rate	Estimate
Project Manager	25	Hour	\$ 150.00	\$ 3,750.00
Subtotal, Project Management Administration				\$ 3,750.00
ESTIMATE TOTAL				\$ 23,929.30