

**EXHIBIT “E”**  
**HIDALGO COUNTY**  
**Professional Engineering Services**  
**Agreement # C-21-0519-12-28**

**WORK AUTHORIZATION NO. 3**

**THIS WORK AUTHORIZATION** is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. C-21-0519-12-28, incorporated herein by reference, for the “ On-Call Professional Engineering Services for Geotechnical and Construction Material Testing Services” made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the “**Owner,**” and Terracon Consultants, Inc., 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 the Precinct 4 Waste Collection Station project located in Edinburg, Texas.

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 **\$14,985.50**. 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-21-0519-12-28** between the **Owner** and the **Engineer**.

**PART 4. FUNDING**

This Work Authorization No. 3 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 completion of the scopes of the Work Authorization, within the limits of Agreement No. C-21-0519-12-28, 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-21-0519-12-28**

**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. 3**.

**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 09, 2022.**

**Agenda Item No. 86908**

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

**ENGINEER:**

TERRACON CONSULTANTS, INC

**COUNTY:**

COUNTY OF HIDALGO

\_\_\_\_\_  
Alfonso A. Soto, P.E.

\_\_\_\_\_  
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)***



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# **Attachment “A” –** *Scope of Services to be provided by Engineer*



July 18, 2022

Hidalgo County Drainage District No.1  
Precinct 4 Waste Collection Station  
902 N. Doolittle Rd  
Edinburg, Tx 78542

Attn : Mr. Nick Perez  
P: [6] 383-3112  
E: [nick.perez@co.hidalgo.tx.us](mailto:nick.perez@co.hidalgo.tx.us)

Proposal for Materials Testing Services  
Hidalgo County Drainage District No.1  
Precinct 4 Waste Collection Station  
Terry Street and Davis Road (NWQ)  
Edinburg, Texas  
Terracon Proposal No. P88221131

Dear Mr. Perez:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to provide construction materials testing services for the Precinct 4 Waste Collection Station project located in Edinburg, Texas. **We understand that we have been chosen to provide these services for this publicly funded project. Therefore, by providing cost information we are not in violation of the Texas Professional Services Procurement Act.** Our proposal includes an outline of the project information, our proposed scope of services, estimated quantities, unit rates, and a total estimated fee for our services.

## 1.0 CAPABILITIES AND EXPERIENCE

### Construction Materials Testing & Special Inspection Services

Our team of inspectors and technicians are experienced with providing materials testing, special inspections and/or observations of concrete, soils, aggregate, asphaltic concrete, and structural steel in the local area and are familiar with the recognized building jurisdiction requirements.

Terracon Consultants, Inc. 1506 Mid Cities Drive Pharr, Texas 78577  
P [956] 283-8254 F [956] 283-8279 [www.terracon.com](http://www.terracon.com)

Environmental



Facilities



Geotechnical



Materials

## Laboratory Capabilities

Our laboratory is accredited by AASHTO Re:source which is recognized by ASTM E329 Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection. The scope of accreditation includes the field of Soils, Aggregates, Portland Cement Concrete, and HMAC. As a requirement of accreditation, we regularly participate in the Proficiency Sample Programs of both AASHTO Re:source and the Concrete and Cement Reference Laboratory (CCRL). Our office includes a fully equipped laboratory and employs engineering technicians and special inspectors certified by the American Concrete Institute (ACI), National Institute for Certification in Engineering Technologies (NICET), American Welding Society (AWS), and the International Code Council (ICC). We provide a rigorous internal training program where our staff are evaluated in specific field and laboratory test procedures by internal Terracon auditors and external agencies.

- Accredited by AASHTO Materials Reference Laboratory (AMRL)
- Inspected by Concrete and Cement Reference Laboratory (CCRL)
- Validated by United States Army Corps of Engineers (USACE)

## 2.0 PROJECT INFORMATION

Our understanding of the required construction materials testing and special inspection services for this project is based upon the following information:

- Structural Drawings and Specifications for Precinct 4 Waste Collection Station prepared by H. R. Project No. E-21-036, dated June 8, 2022.

Pertinent project information is summarized below:

Item	Description
Location	The project site is located at the northwest quadrant (NWQ) of Davis Road and Terry Street in Edinburg, Texas. Latitude/Longitude 26.350432°, -98.0933087°
Project Description	The project will include the construction of a Waste Collection Station with a footprint of approximately 120,000 square feet (sf). Development will also include the construction of a flexible and/or rigid pavement for the main access lanes.
Existing Improvements	Undeveloped land.

### 3.0 SCOPE OF SERVICES

Terracon proposes to provide materials testing and special inspection services as summarized below:

Item	Description
<b>Over-Excavation &amp; Backfill</b>	We will observe moisture conditioning and backfill operations and perform moisture/density tests on the backfill materials.
<b>Earthwork</b>	Terracon will obtain samples for laboratory tests and perform in-place field density testing.
<b>Concrete Framework and Reinforcing Steel</b>	Prior to concrete placement, formwork and reinforcing steel for concrete slabs, CMU walls and concrete pavement will be observed by Terracon. Our observations will include the following: <ul style="list-style-type: none"> <li>■ Formwork dimensions.</li> <li>■ Reinforcing steel size, grade, spacing, cover, position, splices, condition, and supports.</li> </ul>
<b>Concrete</b>	During concrete placements, observation, sampling and testing will be performed by Terracon for the concrete. The concrete will be sampled and tested for slump, and temperature at the time of placement. Testing will be performed in general accordance with project plans and specifications. <ul style="list-style-type: none"> <li>■ Verification of approved design mix;</li> <li>■ Provide observations of placement procedures, consolidation, and curing and protection; and</li> </ul> Cast 1 set of 5 (4-inch by 8-inch) cylinders for each 50 cubic yards or fraction thereof.
<b>Hot-Mix Asphalt Concrete</b>	Observations/testing will be performed by, or under the direction of a TxDOT Level 1A and 1B Certified Technician on as requested basis during placement of asphalt at the project. The asphalt will be sampled and submitted to our laboratory for Mix Properties, asphalt content and aggregate grain size distribution to verify compliance with project specifications. Asphalt cores will confirm thickness and density.
<b>Project Management</b>	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 final submittal. The project manager will be responsible for the project budget, communicating with the contractor regarding schedule, deviations, and documenting the resolution of outstanding deviations.  To help create a good working relationship with the contractor and for the contractor to better understand our scope of work for the project, we request that Terracon be invited to preconstruction meetings prior to each phase of construction.

**Commitment to Timely Report Turnaround:**

We understand the importance of report turnaround to our clients and we are committed to delivering test results on a timely basis as well as the following reporting standards:

- Failing tests or non-conformance items will be communicated to the designated parties prior to leaving the site and handwritten draft reports are available at the end of each day.
- Final reports with non-conformances (Deviation Reports) will be provided within 24 hours of testing.
- Final reports without non-conformances will be provided within five business days.
- Final laboratory test reports will be provided within two days of test completion.

**Terracon Field Representative:** In addition to the above services, our field personnel will provide the following services during their visit:

- Check in with the project general superintendent upon arrival on-site.
- Confirm that current approved construction documents are available during our visit.
- Notify the general contractor of our field observations and test results prior to leaving the site.
- Submit a written draft report to the Terracon project manager for review.
- Our field personnel have the right to decline work if they believe the conditions are not safe.

**Scheduling of Services:** We understand that the client may not be involved with scheduling our services; this is typically the responsibility of the general contractor. We request that the following information be passed on to whom will be responsible for scheduling our services.

- Scheduling testing services must be requested no later than 3:00 pm on the business day preceding the work.
- For structural steel testing and observations, we request 72 hours' notice.
- Scheduling is performed through our dispatcher by calling (956) 283-8254; or emailing [freddy.hernandez@terracon.com](mailto:freddy.hernandez@terracon.com)
- Cancellation of services should be done prior to a Terracon representative mobilizing to the project. Failure to do so will result in a cancellation fee.
- Terracon will not be responsible for tests that are not performed due to a failure to schedule our services on the project.
- Testing and observations will only determine compliance with project specifications at the test locations, at the time our services are performed.

## **4.0 COMPENSATION**

A breakdown of the fee of **\$14,985.50** is outlined in the attached Tables 1. **Please recognize that this is an estimate.** Fees for services provided will be based on the unit rates shown in that exhibit. Please note that this is only a budget estimate. Any additional out of scope items will be performed within accordance with our current fee schedule.

## Proposal for Materials Testing & Special Inspection Services

Precinct 4 Waste Collection Station ■ Edinburg Texas

July 18, 2022 ■ Terracon Proposal No. P88221131



Many factors, including those out of our control, such as weather and the contractor's schedule including overtime and weekend work, and the need for re-testing will dictate the final fee for our services. We will not exceed our budget without first notifying you and providing a summary of work performed to date and remaining work. We will track the costs of re-testing, stand-by time, and cancellations separately.

For purposes of our proposal, overtime is defined as all hours worked above 8 hours per day, Saturday, Sunday and Terracon recognized holidays. Overtime rates will be 1.5 times the hourly rate quoted. All charges are portal to portal from our local office. A minimum of 3 hours will be charged for each site visit with the exception of sample pick-ups.

### 5.0 ASSUMPTIONS

- We have assumed that contractors on the site will work a single shift, typical schedule of 5 days per week;
- An out of scope charge at the applicable unit rate will be applied for all stand-by time and/or time spent on activities which are not cancelled with prior notice;
- Staff time, laboratory testing and extra trips required for re-testing and re-inspections will be denoted on the monthly invoices and be considered out-of-scope items are not included in the above estimated budget.

### 6.0 AUTHORIZATION

We appreciate the opportunity to provide this proposal and look forward to working with you. Please be aware that we will be unable to distribute field and laboratory reports until a Agreement for Services is received Please give us a call if you have any questions or comments regarding this proposal.

Sincerely,

**TERRACON CONSULTANTS, INC.**

(Firm Registration: TX F3272)

George Flores Jr  
Project Manager

Alfonso A. Soto, P.E., D.GE, F. ASCE  
Senior Principal

Enclosures: Table 1 Estimated Fee Summary  
Agreement for Services  
Distribution Sheet



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# Attachment “B” – *Fee Proposal*

TABLE 1				
ESTIMATED FEE SUMMARY				
Our fee estimate is in accordance with the time and tests performed as shown below:				
<b>Earthwork Observation/Testing</b>				
Service	Quantity	Unit	Unit Rate	Estimate
Moisture/Density Curve (ASTM D-698)	2	Each	\$ 225.00	\$ 450.00
Moisture/Density Curve (ASTM D-1557)	1	Each	\$ 275.00	\$ 275.00
Atterberg Limits (ASTM D4318)	2	Each	\$ 75.00	\$ 150.00
-200 Sieve (ASTM C1140)	3	Each	\$ 55.00	\$ 165.00
Sieve Analysis	1	Each	\$ 85.00	\$ 85.00
Lime Determination Series	1	Each	\$ 300.00	\$ 300.00
Nuclear Density Test	55	Each	\$ 11.50	\$ 632.50
Soil Technician	50	Hour	\$ 50.00	\$ 2,500.00
Vehicle Trip Charge	15	Per Trip	\$ 40.00	\$ 600.00
<b>Subtotal, Earthwork</b>				<b>\$ 5,157.50</b>
<b>Reinforcing Steel</b>				
Service	Quantity	Unit	Unit Rate	Estimate
Engineering Technician	12	Hour	\$ 50.00	\$ 600.00
Vehicle Trip Charge	3	Per Trip	\$ 40.00	\$ 120.00
<b>Subtotal, Reinforcing Steel</b>				<b>\$ 720.00</b>
<b>Concrete Observation and Testing</b>				
Service	Quantity	Unit	Unit Rate	Estimate
Engineering Technician	30	Hour	\$ 50.00	\$ 1,500.00
Engineering Technician (Overtime)	10	Hour	\$ 75.00	\$ 750.00
Concrete Cylinders, (ASTM C31 & C39)	30	Each	\$ 15.00	\$ 450.00
Vehicle Trip Charge	10	Per Trip	\$ 40.00	\$ 400.00
<b>Subtotal, Concrete Observation and Testing</b>				<b>\$ 3,100.00</b>
<b>Asphalt Observation and Testing</b>				
Service	Quantity	Unit	Unit Rate	Estimate
Senior Engineering Technican	40	Hour	\$ 60.00	\$ 2,400.00
Extraction/Gradation	2	Each	\$ 175.00	\$ 350.00
Theoretical Maximum Density	2	Each	\$110.00	\$220.00
Molding specimens (set of 3)	2	Each	\$175.00	\$350.00
Specific Gravity (set of 3)	2	Each	\$110.00	\$220.00
Asphalt Coring Equipment	1	Day	\$ 150.00	\$ 150.00
Generator	1	Day	\$ 150.00	\$ 150.00
Asphalt Cores	12	Each	\$ 44.00	\$ 528.00
Vehicle Trip Charge	5	Per Trip	\$ 40.00	\$ 200.00
<b>Subtotal, Asphalt Observation and Testing</b>				<b>\$ 4,568.00</b>
Administrative Secretary	8	Hour	\$ 45.00	\$ 360.00
Project Manager	12	Hour	\$ 90.00	\$ 1,080.00
<b>Subtotal, Project Manager</b>				<b>\$ 1,440.00</b>
<b>ESTIMATE TOTAL</b>				<b>\$ 14,985.50</b>