

HIDALGO COUNTY
Professional Engineering Services
Contract # C-21-0944-02-08
Work Authorization Form

WORK AUTHORIZATION NO. 9

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of **Article 7** of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner’s Court**, hereinafter called the “**Owner**,” and, **B2Z Engineering, LLC**, professional engineers of Mission, Texas, hereinafter called “**Engineer**”.

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide Construction Management Services and Construction Material Testing (CMT) Services for the construction of the Recreational Trails Connectivity Project – McAllen Segment 3 .

The Engineer is to provide the Services as required by the Agreement with Owner. This includes but is not limited to the services identified in **EXHIBIT “A” – Scope of Services to be provided by the Engineer** which is attached hereto and incorporated by reference.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **\$194,979.26**. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT “B”**.

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the On-Call Services Agreement between Owner and Engineer.

PART 4. FUNDING

This Work Authorization No. 9 shall be funded through the 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 scope of work provided in this 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 Precinct 2**, Commissioner Eduardo Cantu, as to the content and detail of this **Work Authorization No. 9**

**HIDALGO COUNTY
COMMISSIONER PRECINCT NO. 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 _____, 2026.

**THE ENGINEER:
B2Z Engineering, LLC**



By: Aisha Gonzalez, President

**THE OWNER:
HIDALGO COUNTY**

By: Richard F. Cortez, County Judge

ATTEST:

By: Arturo Guajardo, Jr., County Clerk

LIST OF ATTACHMENTS

Exhibit A – Services to be Provided by the Engineer

Exhibit B – Cost Proposal

EXHIBIT “A”
Services to be provided by the Engineer

PROJECT INFO:

- **Project Name:** Construction Management & Construction Material Testing (CMT) for Recreational Trails Connectivity Project – McAllen Segment 3
- **Project Limits:** From North Dicker Tunnel to 2nd Street Loop

GENERAL SCOPE OF WORK:

The work to be performed by the **Engineer** under this work authorization shall consist of providing Construction Management Services and Construction Material Testing (CMT) Services during the construction of the Recreational Trails Connectivity Project – McAllen Segment 3 hereinafter denoted as the **Project**.

The **Engineer** will furnish all equipment, materials, supplies, and incidentals as needed to perform the services required by this Work Authorization, except as otherwise specified in Exhibit A, “Services to be provided by the **Owner**.”

Specific activities to be performed by the **Engineer**, as generally outlined in the Contract, including the following:

SECTION 2 – WORK PERFORMED

Services
Provided By:
ENGINEER COUNTY

YES NO **CONSTRUCTION MANAGEMENT SERVICES:**

The ENGINEER will provide engineering, geotechnical testing and support services for and during the construction of the Project or portions of the Project approved by the COUNTY. Specific (basic and special) services for CONSTRUCTION MANAGEMENT AND SUPPORT by the ENGINEER will include the following:

Construction Contract Administration and Inspection:

- 1) In general, the ENGINEER will provide the management and engineering support/data required for consultation and advisement to the COUNTY and act as the COUNTY’s representative as provided in the General Condition of the Construction Contract.
- 2) The ENGINEER will coordinate and conduct a pre-construction conference (if required).
- 3) Defects and Deficiencies. The ENGINEER will use his best efforts to protect the COUNTY against defects and deficiencies in the work of the Contractor. The ENGINEER will promptly notify the COUNTY of any such defect or deficiency, and take all steps possible to require the Contractor to correct the defect or deficiency.

- 4) Contractor Payment. The ENGINEER will review quantities as submitted by the Contractor and will coordinate with the COUNTY for the preparation of the monthly and final estimates for payment to the Contractor.
- 5) The ENGINEER will provide Project site inspection of the authorized construction contract as follows:
 - a) Project Engineer. The ENGINEER will provide visits by the Project Engineer or a competent representative of the ENGINEER to the site of construction for the purpose of monitoring the Contractor's progress and conformance to the construction contract plans and specifications.
 - b) Resident Engineer and/or Construction Inspector(s). The ENGINEER will furnish the services of a Resident Engineer and/or Construction Inspector(s) for on the site inspection construction to monitor/inspect the Contractor's daily progress and conformance to TxDOT's PS&E specifications.

Services
Provided By:
ENGINEER COUNTY
YES NO

Miscellaneous Technical Activities:

- 6) Shop Drawings. The ENGINEER will review and check all shop or working drawings furnished by the Contractor.
- 7) Control of Materials & Equipment. The ENGINEER will provide inspection of all materials and equipment furnished/used by the Contractor as follows:
 - a) Review and record all laboratory, shop and mill tests of materials and equipment for compliance with the construction contract specifications.
 - b) Observe and/or perform Project record testing and/or independent assurance testing as outlined in the construction contract specifications.
- 8) Change Orders. When applicable the ENGINEER will prepare the engineering data, including plan sheet drawings, specifications, and estimates, for the preparation of construction contract change orders, which may be required due to actual field conditions encountered or new requirements directed by the COUNTY.
- 9) As Built Drawings. The ENGINEER will develop as built drawings to depict the work as actually constructed. The COUNTY will be furnished five (5) set of prints.

YES

NO

CONSTRUCTION MATERIAL TESTING:

The ENGINEER will provide the COUNTY with construction material testing services for the Project. The services to be provided include sampling and testing of all construction materials as required by the project plans and specifications. All sampling frequencies and test procedures will be performed in general accordance with the Texas Department of Transportation TEX methods (or ASTM methods as required) as outlined in the Guide Schedule for Sampling and Testing (11/07). The construction material testing includes, but is not limited to the following:

- (a) Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/Misc.) to determine compliance of these materials with project plans and specifications.
- (b) Field density testing of soils and base materials to ensure proper compaction as required by project plans and specifications.
- (c) Field sampling and testing of fresh concrete, and laboratory testing of hardened concrete to determine compliance with project plans and specifications.
- (d) Field compaction testing of asphalt to ensure proper compaction during lay down operations.
- (e) Field inspection, sampling and laboratory testing of asphalt materials to determine their material properties and their compliance with project plans and specifications.
- (f) The ENGINEER will be responsible for concrete batching as well as the asphalt testing at the plants to insure delivery of acceptable material to the job site.
- (g) Any additional laboratory testing as required/requested by the COUNTY and the project plans and specifications.
- (h) Providing accurate and timely reports to the COUNTY and all/other recipients as designated by the COUNTY.
- (i) The ENGINEER will verify the concrete and asphalt designs to assure it is in accordance with TxDOT specifications to be developed by the contractor.



Exhibit "B"

**Recreational Trails Connectivity Project - McAllen Segment 3
Construction Phase Services**

<i>Hidalgo County Precinct No. 2 Construction Management Services</i>			PROJECT MANAGER	CONSTRUCTION INSPECTOR	ADMIN / CLERICAL	TOTAL HOURS	TOTAL LINE ITEM COST
TASKS							
Construction Contract Administration							
1	Review project plans, general notes, general conditions, bid & contract documents, and any other pertinent project documents.	20	12	16	48	\$7,506.56	
2	Conduct the Pre-Construction Meeting with HC P2, Design Engineer and the Construction Contractor	10	10	6	26	\$4,028.60	
3	Coordination with Design Engineer of Record, HC P2 Staff, and Construction Contractor(s) throughout the duration of the project	12	10		22	\$4,043.12	
4	Issue a Certificate of Substantial Completion that Certifies to HC P2 the Project was Constructed as Designed and Complies.	10		16	26	\$3,738.80	
5	Prepare Monthly Invoicing to HC P2 (13 Pay Applications)	13		8	21	\$3,840.28	
Subtotal Labor Hours		65	32	46	143	\$23,157.36	
Construction Management & Inspection							
Construction Management (During Construction)							
1	Meetings, and Coordination with HC P2 Staff, Design Engineer and Contractor throughout construction duration to ensure project progression (Field Visits, Status Meetings, Issue Resolution, & Final Inspection)	40	20	15	75	\$13,223.50	
2	Review & Processing of Contractor's Application for Payment (Approval/Modification/Rejection)	12	12	60	84	\$9,042.48	
3	Obtain Design Engineer's Concurrence with any Suggestions or Request for Information (RFI's) and/or Submittals made by the Contractor	20	10	8	38	\$6,651.60	
4	Coordinate with the Design Engineer and HC P2 on any required Change Orders	8		8	16	\$2,608.48	
Subtotal Labor Hours		80	42	91	213	\$31,526.06	
Construction Inspection							
1	On-Site Inspection During Construction Activities & Documentation in Project Diary. To include: SW3P requirements, maintaining job safety measures and implement OSHA requirements, inspection of TCP and Barricades, and coordination of CMT.	50	650		700	\$82,960.00	
2	Develop and Oversee Completion of a "Project Punch List" with the HC P2, Inspector/PM & Contractor's Representative	8	16	8	32	\$4,347.36	
Subtotal Labor Hours		58	666	8	732	\$87,307.36	
Construction Management (Post Construction)							
1	Coordinate all Project Close-Out Documents for delivery to HC P2, Review Contractor's Final Application for Payment & Release of Retainage	8		16	24	\$3,246.08	
Subtotal Labor Hours		8	0	16	24	\$3,246.08	
Total Labor Hours		211	740	161	1112	1112	
Hourly Base Rates		\$ 68.00	\$ 30.00	\$ 22.00			
Contract Rate FY2026		\$ 246.36	\$ 108.68	\$ 79.70			
Total Costs		\$ 51,981.96	\$ 80,423.20	\$ 12,831.70		\$145,236.86	

Direct Expenses	Construction Materials Testing (See Pages 2 of 2)	\$	43,628.65
	Mileage: \$0.67/mile 25mi round trip	\$	6,113.75
Total Direct Expenses		\$	49,742.40

B2Z Engineering Total Cost

\$194,979.26

Exhibit "B"
ESTIMATED MAN-HOURS AND TEST BREAKDOWN

Recreational Trails Connectivity Project - McAllen Segment 3 Construction Materials Testing							
Embankment (Test All Fill Material Including Cut From Job) (ITEM 132)							
<ul style="list-style-type: none"> • Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/Misc.) to determine compliance of these materials with project plans and specifications. • Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specifications. 							
	TxDOT Test	TxDOT Guide Specs	Additional Assumptions	Unit	Qty.	Contract Rate	Total
Atterberg Limits of Soils	Tex-106-E	PI>15 - Every 5,000 CY		Each	3	\$135.00	\$405.00
Gradation	Tex-110-E	Every 10,000 CY		Each	2	\$90.00	\$180.00
Moisture/Density	Tex-114-E	One per Each Material		Each	1	\$225.00	\$225.00
In-Place Density	Tex-115-E	Every 5,000 CY or 6,000 Linear Feet (Min. 1 per Lift)		Each	6	\$28.00	\$168.00
Reports			PI,Gr,MD & FD	Each	8	\$25.00	\$200.00
Tech Time (Soils)			PI,Gr,MD & FD	Hour	20	\$94.19	\$1,883.80
# of Trips (Tech)			8 Trips (20 Miles RT)	Mile	160	\$0.725	\$116.00
**Admin/Clerical				Hour	8	\$79.70	\$637.60
Item Subtotal							\$3,815.40
Existing Material (Lime Treated) (ITEM 260)							
<ul style="list-style-type: none"> • Sampling and laboratory testing of soils and base materials proposed for use in the construction of Project (Roads/Bridges/Misc.) to determine compliance of these materials with project plans and specifications. • Field density testing of soils and base materials to ensure proposer compaction as required by project plans and specifications. 							
	TxDOT Test	TxDOT Guide Specs	Additional Assumptions	Unit	Qty.	Contract Rate	Total
Pulverization Gradation	Tex-101-E (Part III)	Each 4,500 CY	Inc. to 5 - 1 per Leg (Job)	Each	3	\$100.00	\$300.00
Atterberg Limits of Soils	Tex-106-E	PI>15 - Every 5,000 CY		Each	6	\$135.00	\$810.00
Gradation	Tex-110-E	Each 5,000 CY	Inc. to 5 - 1 per Leg (Job)	Each	6	\$90.00	\$540.00
Moisture/Density	Tex-114-E	One per Each Material		Each	3	\$225.00	\$675.00
In-Place Density	Tex-115-E	Every 3,000 CY		Each	6	\$28.00	\$168.00
Reports			PI,Gr,MD & FD	Each	20	\$25.00	\$500.00
Tech Time (Soils)			PI,Gr,MD & FD	Hour	37	\$94.19	\$3,485.03
# of Trips (Tech)			17 Trips (20 Miles RT)	Mile	340	\$0.725	\$246.50
Admin/Clerical				Hour	20	\$79.70	\$1,594.00
Item Subtotal							\$8,318.53
Hydraulic Cement Concrete Rail, Sidewalk and Riprap (Class C)							
<ul style="list-style-type: none"> • Field sampling and testing of fresh concrete and laboratory testing of hardened concrete to determine compliance with project plans and specifications. • Concrete batching as well as the asphalt testing at the plants to insure delivery of acceptable material to the job site (as required). 							
	TxDOT Test	TxDOT Guide Specs	Additional Assumptions	Unit	Qty.	Contract Rate	Total
Coarse Aggr.			QA Test. (QC by Source)				
Decantation	Tex-406-A	Each 20,000 CY (or source)		Each	1	\$50.00	\$50.00
Sieve Analysis	Tex-401-A	Each 1,000 CY (ea source)	5 Sieve	Each	1	\$90.00	\$90.00
Deleterious Matl.	Tex-413-A	Each 20,000 CY (or source)		Each	1	\$50.00	\$50.00
Fine Aggr.			QA Test. (QC by Source)				
Sand Equivalent	Tex-203-F	Each 1,000 CY (ea source)		Each	1	\$80.00	\$80.00
Organic Imp.	Tex-408-A	One Per Project Per Source		Each	1	\$50.00	\$50.00
Sieve Analysis	Tex-401-A	Each 1,000 CY (ea source)		Each	1	\$90.00	\$90.00
Fineness Mod.	Tex-402-A	Each 1,000 CY (ea source)		Each	1	\$15.00	\$15.00
Deleterious Matl.	Tex-413-A	Each 20,000 CY (or source)		Each	1	\$50.00	\$50.00
Concrete							
*Strength	Tex-447-A & Tex-418-A	Each 120 CY(1 Set = 4 Cyl)		Each	92	\$30.00	\$2,760.00
Slump	Tex-415-A	One per Set		Each	23	\$20.00	\$460.00
Entrained Air	Tex-416-A	One per Set		Each	23	\$25.00	\$575.00
Temperature	Tex-422-A	One per Set		Each	23	\$5.00	\$115.00
Reports				Each	50	\$25.00	\$1,250.00
Tech Time (Aggr)				Hour	8	\$94.19	\$753.52
Tech Time (Cone)				Hour	92	\$94.19	\$8,665.48
# of Trips (Tech)			50 Trips (20 Miles RT)	Mile	1000	\$0.725	\$725.00
Admin/Clerical				Hour	50	\$79.70	\$3,985.00
Item Subtotal							\$19,764.00

Summary

Sub-Total (CMT Items) =	\$31,897.93
Engineering Lab Manager (46 hrs x 155.78 Hr.)	\$7,165.88
Project Engineer (QA/QC of CMT) (28 hrs x 163.03 Hr.)	\$4,564.84
Constuction Materials Testing Total	\$43,628.65