



**HIDALGO COUNTY
Professional Engineering Services
Agreement #C-18-306-02-12**

WORK AUTHORIZATION NO. 2

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, **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 Design, Construction Management and Inspection of Closed-Circuit Television Cameras and Call-Stations for the Regional Linear Park Phase II project located in Hidalgo County Precinct 2.

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 **\$39,955.14**. 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 Section 4 of the Agreement.

PART 4. FUNDING

This Work Authorization No. 2 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 scopes of the work authorization**.

EXHIBIT A

Scope of Services to be provided by the County

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 Engineer the following:

- 1) Provide the authorization to proceed with services through coordination with the project consulting and design Engineer.
- 2) Payment for work performed by the Engineer and accepted by the Owner in accordance with Article 4 of this Agreement.
- 3) Assistance to the Engineer, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Engineer 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 Engineer's request for information and/or required submittals and deliverables, in order for the Engineer 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 Engineer.
- 7) Provide the authorization to proceed with services on project by project basis through consulting design and construction Engineer.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION I - PROJECT DESCRIPTION

The services designated herein as “Services provided by the ENGINEER” shall include the performance of all engineering services for the following described facility:

COUNTY/CITY: HIDALGO COUNTY

PROJECT/DESCRIPTION: On-Call Engineering for “Road and Bridge, C.I.P. and Other Projects in General”
(C-18-306-02-12) ~ WA#2 – RLPP Camera Design

ENGINEER shall mean B2Z Engineering.

STATE shall mean Texas Department of Transportation.

COUNTY shall mean Hidalgo County.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 2 – PRELIMINARY DESIGN VALUES

(Function Code 102)

Preliminary Design Values

The ENGINEER will work with the Owner to establish basic design concepts, project controls and general scope of Projects.

1. *The ENGINEER will review any existing documentation (sketches, drawings, etc.) with and provided by the Owner to establish the general scope of the project.*
2. *The ENGINEER will identify and develop the low-voltage systems and equipment requirements for the project.*
3. *The ENGINEER will develop a low-voltage system design with primary components consisting of, but not limited to:*
 - a. *IP-based video cameras*
 - b. *Call stations*
 - c. *Digital video recording devices*
 - d. *Associated Hardware*
 - e. *Fiber-optic cabling*
 - f. *PVC Conduit*

Meetings, Coordination & Support for Project Development

The ENGINEER shall provide coordination services and shall assist in meetings and workshops with TxDOT, Hidalgo County, Hidalgo County Drainage District No. 1 and Hidalgo County Irrigation Districts, and all other affected parties. The ENGINEER shall serve as representative for the Owner in coordination items. The ENGINEER shall coordinate with the Owner's staff on all Project related items.

1. *The ENGINEER will coordinate with other project consultants assigned to the project.*
2. *The ENGINEER will attend project and coordination meetings as needed to assist the Owner with project development.*

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 12 - CONSTRUCTION PHASE SERVICES

(Function Code 320)

CONSTRUCTION MANAGEMENT SERVICES:

The ENGINEER will provide engineering 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 Bidding:

- 1) The ENGINEER will furnish the COUNTY the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.
- 2) The ENGINEER will assist the COUNTY on the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.

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) 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.
- 4) The ENGINEER will provide Project site inspection of the authorized construction contract as follows:
 - a) Construction Inspector(s). The ENGINEER will furnish the services of a Construction Inspector(s) for on the site inspection construction to monitor/inspect the Contractor's daily progress and conformance to PS&E specifications.

Miscellaneous Technical Activities:

- 1) Shop Drawings. The ENGINEER will review and check all shop or working drawings furnished by the Contractor.
- 2) 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.
- 3) As Built Drawings. The ENGINEER will develop as built drawings to depict the work as actually constructed. The COUNTY will be furnished five (2) set of prints.

EXHIBIT "C"
SCHEDULE
 Project: 2020-01-WA#2_RIP
 On-Call Contract (C-18-306)0212
 Work Authorization #2

ID	Task Node	Task Name	Duration	Start	Finish	Jan 5 '20	Jan 12 '20	Jan 19 '20	Jan 26 '20	Feb 2 '20	Feb 9 '20	Feb 16 '20	Feb 23 '20	Mar 1 '20	Mar 8 '20	Mar 15 '20	Mar 22 '20	Mar 29 '20	Apr 5 '20	Apr 12 '20	Apr 19 '20	Apr 26 '20	May 3 '20	May 10 '20	May 17 '20
1	★	Preliminary Design Values - Design of Low Voltage System	20 days	Mon 1/6/20	Fri 1/31/20																				
2	★	Construction Bidding Assistance	20 days	Mon 2/3/20	Fri 2/28/20																				
3	★	Construction Contract Administration and Inspection	60 days	Mon 3/2/20	Fri 5/22/20																				
4	★	Meetings Coordination & Support for Project Development	41 days	Mon 1/6/20	Mon 3/2/20																				

Task: Project: 2020-01-WA#2_RIP
 Split: Date: Fri 1/3/20
 Milestone: January 2020

Summary: [Bar chart showing task progress]
 Project Summary: [Bar chart showing project progress]
 Inactive Task: [Bar chart showing inactive task progress]

Inactive Milestone: [Bar chart showing inactive milestone progress]
 Inactive Summary: [Bar chart showing inactive summary progress]
 Manual Task: [Bar chart showing manual task progress]

Duration-only: [Bar chart showing duration-only progress]
 Manual Summary Rollup: [Bar chart showing manual summary rollup progress]
 Manual Summary: [Bar chart showing manual summary progress]

Start-only: [Bar chart showing start-only progress]
 Finish-only: [Bar chart showing finish-only progress]
 External Tasks: [Bar chart showing external tasks progress]

External Milestone: [Bar chart showing external milestone progress]
 Deadline: [Bar chart showing deadline progress]
 Progress: [Bar chart showing progress]

Manual Progress: [Bar chart showing manual progress]





EXHIBIT "D"
FEE PROPOSAL
 Hidalgo County Pet No. 2
 On-Call Contract C-18-306-02-12
 Work Authorization #2

TASKS	MANHOURS							Total Line Item Cost
	Project Management Professional	Senior Construction Inspector	Design Engineer	CADD Operator	Admn/ Clerical	Total Hours		
1.0 Preliminary Design Values - Design of Low-Voltage System (Cameras and Call-Stations)								
1.1 Review of preliminary plans. Review of camera locations and call stations provided by the County.			4			4	\$556.68	
1.2 Identify systems and equipment required by the County's low voltage systems standards.			2			2	\$278.34	
1.3 Design of new IP based network video surveillance system by a Registered Communications Distribution Designer (RCDD). Primary components will include IP-based video cameras, call-stations, and video recorders.			8	40		48	\$4,035.76	
2.0 Construction Bidding Assistance								
2.1 Respond to questions and issues as necessary during the proposal phase			4		2	6	\$695.84	
2.2 Evaluate proposals and vendor qualifications and make recommendation to the County			6		2	8	\$974.18	
3.0 Construction Contract Administration and Inspection								
3.1 Documentation Review (shop drawings, submittals, equipment list)	12					12	\$2,296.32	
3.2 On-Site Inspection During Construction Activities & Documentation in Project Diary		174				174	\$21,793.50	
3.3 Participate in final system testing, punchlist and acceptance of the project.	8					8	\$1,530.88	
4.0 Meetings, Coordination & Support for Project Development								
4.1 Coordinate with other professionals assigned to the project.	6		4			10	\$1,704.84	
4.2 Attend coordination meetings.	14		16		8	38	\$5,462.40	
Labor Hours	40	174	44	40	12	310		
Hourly Base Rates	\$ 58.00	\$ 38.00	\$ 40.00	\$ 21.00	\$ 20			
Contract Rate FY2020	\$ 191.36	\$ 125.25	\$ 139.17	\$ 73.06	\$ 69.58			
Total Labor Costs	\$ 7,654.40	\$ 21,793.50	\$ 6,123.48	\$ 2,922.40	\$ 834.96		\$39,328.74	
Direct Expenses	Mileage: (\$0.58/mile x 18 miles roundtrip x 60 trips)						\$ 626.40	
							Total Direct Expenses \$ 626.40	

\$39,955.14

B2Z Engineering Total Cost

