

HIDALGO COUNTY
Professional Engineering Services
Agreement #C-16-326-08-23

WORK AUTHORIZATION NO. 3

FILED	
AT <u>2:30</u>	O'CLOCK <u>P</u> M
MAR 20 2017	
ARTURO GUAJARDO, JR. COUNTY CLERK HIDALGO COUNTY, TEXAS	
BY <u>[Signature]</u>	DEPUTY

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. 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 needed "GIS Mapping services" that encompass the limits of 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 **\$149,351.07**. 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 Articles 5 and 6 of the Agreement.

PART 4. FUNDING

This Work Authorization No. 3 shall be funded through funding source:

Account No. 1-1200-431-00-122-0060-334

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.**

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 No.2, Commissioner, Eduardo Cantu, as to content and detail of this **Work Authorization No. 3**.

HIDALGO COUNTY

COMMISSIONER PRECINCT No. 2:

BY: Eduardo Cantu

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on 3/7/17 as indicated below and effective as of _____ day of _____, 201____.

**THE ENGINEER:
B2Z ENGINEERING**

Reza Badiozamani
By: Reza Badiozamani, P.E.

**THE OWNER:
HIDALGO COUNTY**

Ramon Garcia
By: Ramon Garcia, County Judge

ATTEST:

Arturo Guajardo Jr.
By: Arturo Guajardo Jr., County Clerk

APPROVED BY
COMMISSIONERS' COURT
ON: 3/7/17 mb



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 3 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 Services for “Road and Bridge, C.I.P. and Other Projects in General”
Work Authorization No. 3 ~ GIS Mapping

ENGINEER shall mean B2Z Engineering.

COUNTY shall mean Hidalgo County.

EXHIBIT B

Scope of Services to be provided by the Engineer

SECTION 2 – FEASIBILITY STUDIES

(Function Code 102)

Uncontrolled Mapping (w/Contours & GIS Info)

The ENGINEER will coordinate with the COUNTY for the below referenced needed mapping efforts;

1. *Map Booklet of Drainage Area Patterns for Pct. #2 (55 maps ~ 24x36):*
 - a. *Map booklet will identify drainage area and patterns within Pct. #2*
 - b. *Maps shall include all GIS Hydrologic Data (1 FT Contours, Ponding Low Areas, Watersheds, Water Flow Arrows, Drainage Network, Irrigation Network, and Drain Ditch Elevations.*
 - c. *Maps shall include inset images of all drainage/irrigation structures (imagery provided by Pct#2 drone.)*
 - d. *Maps will include all data for drainage and irrigation structures (ex: who manages structure, name of structure)*
 - e. *Maps shall include Registered Colonias & Colonia street names.*
 - f. *Maps shall include existing gas lines available through Texas Railroad Commission.*
 - g. *Maps shall include all basemap data (ex: State Roads, Main Roads, Jurisdiction, etc.)*
2. *Overall Asset Identification Pct. #2 Exhibit*
 - a. *Exhibit shall highlight all of Pct. #2 Assets (ex: Parks, CRCs, Pools, Administration Bld, etc.)*
 - b. *Exhibit shall include inset photos of Asset and Facilities (imagery provided by Pct#2 drone.)*
 - c. *Exhibit shall include all basemap data (ex: State Roads, Main Roads, Jurisdiction, etc.)*
3. *Overall Brush Route Zone Exhibit*
 - a. *Exhibit shall identify the updated brush zones within Pct. 2. (Exist. Zones are outdated. Research and field verification is needed.)*
 - b. *Exhibit shall identify most efficient route for driver to utilize.*
 - c. *Exhibit shall include all basemap data (ex: State Roads, Main Roads, Jurisdiction, etc.)*
4. *Overall Shredder Zone Exhibit*
 - a. *Exhibit shall identify the updated Shredder Routes within Pct. 2. (Exist. Zones are outdated. Research and field verification is needed.)*
 - b. *Exhibit shall quantify area of zones.*
 - c. *Exhibit shall include all basemap data (ex: (ex: State Roads, Main Roads, Jurisdiction, Colonia Labels, etc.)*
5. *Overall Patch Route Exhibit*
 - a. *Exhibit shall identify the updated Patch Route within Pct. 2 (ex: State Roads, Main Roads, Jurisdiction, etc.)*
6. *Overall Exhibit highlighting the location of sanitation permit holders.*
 - a. *Exhibit shall identify all sanitation permit holders that use the disposal facilities in Hidalgo County Pct. #2. Jurisdiction (Pct. #2 will provide database of permit holders).*
 - b. *Exhibit shall identify disposal facility location.*
 - c. *Create data for map: Geocode address list provided by Pct. #2*
 - d. *Create data for map: Create geodatabase and shapefile associated with permit holder data.*
 - e. *Exhibit shall include all basemap data (ex: State Roads, Main Roads, Jurisdiction, etc.)*
7. *Overall Census and Demographic Exhibit*
 - a. *Identify population clusters in Pct. #2 Jurisdiction*
 - b. *Coordinate with Pct. #2 Administration on other Socio-Economic Data of Importance.*
 - c. *Exhibit shall include all basemap data (ex: State Roads, Main Roads, Jurisdiction, etc.)*

EXHIBIT B

Scope of Services to be provided by the Engineer

8. *Overall Road Inventory Exhibit*
 - a. *Exhibit shall identify mileage roads in county limits within Pct. #2 County Jurisdiction and mileage.*
 - b. *Exhibit shall identify at responsibility of roads at county and city lines.*
 - c. *Exhibit shall identify road types (concrete, asphalt, caliche, dirt etc.).*
 - d. *Exhibit shall provide road data (road widths, lane widths, shoulders, drainage type, etc.).*
 - e. *Exhibit shall identify road conditions and will show inset of major deficiencies.*
 - f. *Exhibit shall include all basemap data (ex: State Roads, Main Roads, Jurisdiction, etc.)*
9. *Wi-Fi Colonia Zone Map*
 - a. *Exhibit shall identify proposed Wi-Fi hotspots within Colonias in Pct. 2.*
 - b. *Exhibit will identify all utility poles within Colonias and what company is responsible for them.*
 - c. *Exhibit will show Wi-Fi footprint and reach relative to homes within Colonia.*
10. *Meetings and Coordination with County.*

The ENGINEER shall coordinate with the COUNTY's staff on all Project related items for the duration of the project.

EXHIBIT "C"
PROJECT SCHEDULE
On-Call Services for "Road and Bridge, C.I.P. and Other Projects in General"

WA #3 - GIS Mapping Services

TASK AND DESCRIPTION	2017											
	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC		
GIS Mapping Services												
Drainage Area Patterns Map Booklet 55 (24x36)-Maps												
Assets Identification Exhibit-Produce Overall Exhibit highlighting all Pct. #2 Assets and Facilities												
Brush Route Zone Exhibit-Produce Overall Exhibit identifying brush zones and best brush zone route for driver to utilize.												
Shredder Zone Exhibit-Produce Overall Exhibit identifying the Shredder Zones.												
Patch Route Exhibit-Produce Overall Exhibit Identifying the Patch Route.												
Overall Exhibit highlighting Sanitation Permit Holders and Disposal Facility location of Pct. #2.												
Census and Demographics Exhibit-Produce Overall Exhibit identifying population clusters in Pct. #2.												
Road Inventory Exhibit-Produce Overall Exhibit identifying mileage of state and main roads within Pct. #2 Jurisdiction. The Exhibit will also assess the condition and responsibility of the roads intersecting at county and city lines												
Wifi Colonia Zone Map - Produce Overall Exhibit identifying utility poles (including service provider) within each colonia in Pct 2 and map out potential wifi footprint.												
Meetings & Coordination with Hidalgo County Pct. #2												

 B2Z Engineering



EXHIBIT D FEE PROPOSAL

GIS Mapping Services

Precinct #2

		TASKS	MANHOURS				Total
			Senior Project Manager	Design Engineer	GIS Technician		
1		Drainage Area Patterns Map Booklet 55 (24x36)-Maps	40	60	200		300
2		Assets Identification Exhibit-Produce Overall Exhibit highlighting all Pet. #2 Assets and Facilities.	10	15	30		55
3		Brush Route Zone Exhibit-Produce Overall Exhibit identifying brush zones and best brush zone route for driver to utilize.	8	10	90		108
4		Shredder Zone Exhibit-Produce Overall Exhibit identifying the Shredder Zones.	12	15	120		147
5		Patch Route Exhibit-Produce Overall Exhibit Identifying the Patch Route.	12	15	120		147
6		Overall Exhibit highlighting Sanitation Permit Holders and Disposal Facility location of Pet. #2.	2	4	40		46
7		Census and Demographics Exhibit-Produce Overall Exhibit identifying population clusters in Pet. #2.	6	10	60		76
8		Road Inventory Exhibit-Produce Overall Exhibit identifying mileage of state and main roads within Pet. #2 Jurisdiction. The Exhibit will also assess the condition and responsibility of the roads intersecting at county and city lines.	20	40	140		200
9		Wifi Colonia Zone Map - Produce Overall Exhibit identifying utility poles (including service provider) within each colonia in Pet 2 and map out potential wifi footprint.	4	8	60		72
10		Meetings & Coordination with Hidalgo County Pet. #2	20	40	40		100
			134	217	900		1251
Labor Hours			134	217	900		1251
Hourly Base Rates			\$ 80.00	\$ 38.00	\$ 32.00		
Contract Rate FY2017			\$ 244.73	\$ 116.25	\$ 97.89		
Total Labor Costs			\$ 32,793.82	\$ 25,226.25	\$ 88,101.00	\$	146,121.07

Direct Expenses

Mileage (\$0.56/mile)
8 1/2" X 11" Copies (\$1.00/sheet)
11" X 17" Copies (\$1.50/sheet)

\$ 2,240.00
\$ 315.00
\$ 675.00

Total Direct Expenses \$ 3,230.00

B2Z Engineering Total Cost

\$ 149,351.07