

**EXHIBIT “F”**  
**HIDALGO COUNTY**  
**Professional Engineering Services**  
**Agreement # C-23-0111-05-16/ ARPA- 23-123-328**

**WORK AUTHORIZATION NO. 1**

**THIS WORK AUTHORIZATION** is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. C-23-0111-05-16, incorporated herein by reference, for the “**5K Mansion Linear Park Trail**” made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the “**Owner,**” and B2Z ENGINEERING, LLC, hereinafter called “**Engineer**”.

**PART 1. SCOPE OF WORK**

The purpose of this Work Authorization is for the **Engineer** to provide Engineering Services required for Geotechnical Engineering, Survey, & Plans & Specifications, and Estimate (PS&E).

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 **\$230,020.06**. 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-23-0111-05-16** between the **Owner** and the **Engineer**.

**PART 4. FUNDING**

This Work Authorization No.1 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-23-0111-05-16 , 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-23-0111-05-16.

**PART 7. ACKNOWLEDGEMENT AND CONFIRMATION**

Acknowledgement and confirmation by **Hidalgo County Precinct 3, Commissioner Everardo "Ever" Villarreal**, as to content and detail of this **Work Authorization No. 1**.

**HIDALGO COUNTY PRECINCT No. 3**

By: \_\_\_\_\_  
Everardo "Ever" Villarreal, Commissioner

**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on May 16th, 2023 as indicated below and effective as of 16th day of MAY 16TH, 2023.

**EXECUTED** as of the day and year first written above.

**APPROVED BY COMMISSIONERS' COURT ON MAY 16TH, 2023**.

**Agenda Item No. 90229**

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

**ENGINEER:**  
B2Z ENGINEERING, LLC.

**COUNTY:**  
COUNTY OF HIDALGO

\_\_\_\_\_  
Aisha Gonzalez, President

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



# **ATTACHMENT A**

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## **PROJECT SPECIFIC SCOPE OF SERVICES TO BE PROVIDED BY ENGINEER**

**ATTACHMENT “A”**  
**Services to be provided by the Engineer**

**PROJECT INFO:**

- **Project Name:** 5K Mansion Linear Park Trail Project

**GENERAL SCOPE OF WORK:**

The work to be performed by the **Engineer** under this work authorization shall consist of providing Engineering Services required for Geotechnical Engineering, Survey, & Plans & Specification, and Estimate (PS&E) of the proposed 5K Mansion Linear Park Trail Project located within Hidalgo County Precinct 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 Attachment 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 6 – FIELD SURVEYING AND PHOTOGRAMMETRY**

Services

Provided By:

SURVEYOR COUNTY

- |            |           |                 |   |
|------------|-----------|-----------------|---|
|            | 1.        | Field Surveying |   |
| <u>YES</u> | <u>NO</u> | a.              | Primary Project Control - 3 to 5 miles spacing<br>Precision shall be 1 part in 20,000 or better unless otherwise directed by the district engineer.<br>(1) Establish horizontal control points<br>(2) Establish vertical control points |

NOTE: ALL BEARING AND DISTANCE SHALL BE BASED ON THE STATE PLANE COORDINATE SYSTEM NAD 1983, SOUTH ZONE.

ALL DISTANCES AND COORDINATES SHALL BE SURFACE AND MAY BE CONVERTED TO GRID BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999960

- |            |           |    |   |
|------------|-----------|----|---|
| <u>YES</u> | <u>NO</u> | b. | Secondary Project Control (Surveyor shall recover and/or reset H&V Control Points as provided by the Engineer and create Survey Data Sheets for inclusion in the Project Plans. <ul style="list-style-type: none"><li>• No traverse should exceed 25 angle points. Planimetrics shall be Lt &amp; Rt from the proposed R.O.W. as per the schematic provided by the Engineer.</li><li>• The unadjusted angular error should not exceed 2 seconds per angle, plus 14 seconds.</li></ul> |
|------------|-----------|----|---|

Services

Provided By:

SURVEYOR COUNTY

**Hidalgo County Pct. 3 – WA#1  
5K Mansion Linear Park Trail Project – PS&E**

- The unadjusted ratio of precision should be one part in 10,000 or better. (The ratio of precision is the total length of the traverse divided by the total error.)
- The unadjusted vertical error should not exceed 0.03 foot per mile of traverse.

NO      NO  
NO      NO  
NO      NO  
NO      NO

- (1) Project control base lines
- (2) Photogrammetric ground control
  - (a) Establish horizontal control
  - (b) Establish vertical control points
  - (c) Place and maintain control point targets

YES      NO

- c. Other Field Surveying
  - (1) The limit of the Design surveys shall be 700-ft before and after the limits of the project as identified by the Project Engineer on the schematic. Establish horizontal and vertical control. Set benchmarks at 1000-ft intervals along the project proposed right-of-way. Provide x,y,z for each Benchmark. The B.M.'s shall be #5 I.R. 2-ft in depth set in concrete. The surveyor shall provide a H&V Book (a Sample shall be provided by the Engineer to the Surveyor). The Surveyor will provide a 3-pt reference sketch with ties to the B.M.s for inclusion the the existing H&V Control Book. Establish benchmark circuit throughout the project with a tolerance of 0.03'/ft per mile error vertically.
  - (2) Complete topographic and cross section survey, data processing, and CADD mapping (2D & 3D) for the limits of the project.
  - (3) Locate all visible utilities, data processing and CADD mapping (2D & 3D) including irrigation lines. Follow sample provided by the Engineer.
  - (4) Field locate cross culverts, driveway culverts, inverts, irrigation lines, within the project limits, data processing and CADD mapping (2D & 3D).
  - (5) Right of Entry, Right of Way Research, and Appraisal District Records is the responsibility of the Surveyor.
  - (6) The Surveyor shall also paint/mark the proposed centerline as approved by Engineer. (500-ft stations and a tick mark at 100-ft. stations –12 inches long) before construction for the purpose of utility adjustments and project location.
  - (7) Profile and cross section intersecting streets for ties into project (500-ft. beyond the proposed R.O.W. per schematic and 20-ft wider than the existing R.O.W. of intersecting street).
  - (8) Cross section irrigation crossings for a distance of 20-ft beyond the proposed R.O.W. at 100-ft intervals in a D.T.M. file. Provide a complete description of irrigation appurtances as identified by the engineer sample layout.
  - (9) Tie Horizontally and Vertically the existing storm drain system that lies within the existing proposed R.O.W. including the elevation of the outfall of said recovered existing storm drain systems.

YES      NO

- (10) Tie to existing underground and overhead utilities (location, elevation and direction)
 

Horizontally – the surveyor shall call the 1-800 number for the utilities to be marked on the ground as well as any city water and sewer lines. He shall tie all visible utility crossings with name, address and Phone #'s of utility companies. The Engineer will coordinate with the utility companies and jointly the Surveyor and the Engineer will identify which utilities were missed and need to be tied down.

Vertically – The Engineer shall identify all utilities that are potential conflicts and that need to be tied vertically. The Engineer will advise the surveyor in writing of the needed vertical ties and the surveyor will tie the lines vertically once the surveyor has coordinated the exposure and provide the information to the Engineer.

Services  
 Provided By:  
SURVEYOR COUNTY

- |            |            |   |
|------------|------------|---|
| <u>YES</u> | <u>NO</u>  | (11) Additional Field Surveying as shown below:<br>(A) <u>IRRIGATION LINES</u> – The surveyor will meet with the Engineer before he ties down any irrigation lines. The Engineer will provide him the existing Irrigation District Maps and the A&M Data of existing irrigation lines that are identified of record. He will follow the sample given to him by the Engineer and tie the structures horizontally and vertically and provide Field Books to the Engineer. |
|            |            | <b><u>Driveways and Turnouts</u></b>  |
|            |            | (a) Inventory commercial entrances, public roads and side streets separately.   |
|            |            | (b) Obtain centerline station. (Width at R.O.W., PAV'T and existing radius.   |
|            |            | (c) Inventory by type (dirt, caliche, gravel or paved). If paved, indicate condition in terms of no patches, has patches or has potholes. Obtain width at R.O.W. line.  |
|            |            | (e) Obtain elevations at both edges of the driveway or turnout in line with the side drain.   |
| <u>YES</u> | <u>NO</u>  | (12) R.O.W. staking (Existing and Proposed @ 1,000 ft. stations P.C.'s P.T.'s and Angle points as per R.O.W. Map) (#5 I.R. 2-ft.)   |
| <u>YES</u> | <u>NO</u>  | (13) Soil core hole staking   |
| <u>YES</u> | <u>NO</u>  | (14) Determine changes in topography from voids and outdated maps due to development, erosion, etc.   |
| <u>YES</u> | <u>NO</u>  | (15) Profiles of existing drainage facilities   |
| <u>YES</u> | <u>NO</u>  | (16) Measurement of hydraulic opening under existing bridges  |
| <u>YES</u> | <u>NO</u>  | (17) Obtain elevations of manholes and valves of utilities  |
| <u>YES</u> | <u>NO</u>  | (18) Provide temporary signs, traffic control, flags, safety equipment, etc.  |
| <u>YES</u> | <u>NO</u>  | (19) Ties to existing bridges or culverts that may conflict with new construction.  |
| <u>N/A</u> | <u>N/A</u> | (20) Bridge widening top of deck and/or top of cap elevations at the Profile Grade Line (PGL) and the edges of slab at bent locations.  |
| <u>YES</u> | <u>NO</u>  | (21) Inventory signs, mailboxes, and driveways  |
| <u>YES</u> | <u>NO</u>  | (22) Survey controlled data sheets per TxDOT guidelines.  |
| <u>YES</u> | <u>NO</u>  | (23) Recover and/or re-establish the existing center line and existing Right-of-Way. Have said existing centerline approved by the Engineer. Provide a digital computer dump of both.   |
| <u>YES</u> | <u>NO</u>  | (24) Coordinate with the Engineer to set the existing centerline stationing.  |
| <u>N/A</u> | <u>N/A</u> | 2. Photogrammetric Products<br>a. Uncontrolled Photography<br>(1) Contact Prints<br>(2) Mosaics<br>(3) Digital ortho plots<br>b. Mapping<br>(1) Planimetric Maps<br>(2) Contour Maps<br>(3) Cross Sections<br>(4) Profiles<br>(5) Digital Terrain Models (DTM)  |

**SECTION 7 – ROADWAY DESIGN CONTROLS**

Services  
Provided By:  
ENGINEER COUNTY

YES      NO  
NO        NO

1. Geometric Design
  - a. Horizontal and Vertical Alignment
  - b. Schematic Layout
    - (1) The location of interchanges, main lanes, grade separations, frontage roads and ramps.
    - (2) Develop vertical and horizontal alignment of main lanes, ramps and cross roads at proposed interchanges or grade separations. Frontage road alignment data need not be shown on the schematic; however, it should be developed in sufficient detail to determine R.O.W. needs. The degree of horizontal curves and vertical curve data, including “K” values, shall also be shown for ease of checking.
    - (3) A complete explanation of the sequence and methods of stage construction, if proposed, including the initial and ultimate proposed treatment of crossovers and ramps.
    - (4) The tentative R.O.W. limits.
      - (a) Provide a roadway Design System (R.D.S.) or (GEOPAK) computer tape of the preliminary earthwork to verify R.O.W. requirements.
      - (b) Provide a graphics file containing the approved schematic.
    - (5) The geometric (pavement cross slopes, lane and shoulder widths, slope rates for fills and cuts) of the typical sections of proposed highway main lanes, ramps, frontage roads, and cross roads.
    - (6) Direction of traffic flow on all roadways.
    - (7) The geometric of speed change (acceleration, deceleration, climbing) lanes.

NO            NO

2. General Guidelines for Project Development
  - a. Prior to preparing detailed plans for a proposed project, a preliminary schematic layout shall be prepared which indicates the general geometric features and location requirements peculiar to the project. An uncontrolled aerial mosaic will be provided for this use. Four copies of the schematic layout shall be submitted through the district to the Design Division for approval and subsequent coordination with the Federal Highway Administration (FHWA) where applicable. **No geometric design is to be performed until the COUNTY has given the Engineer written approval of the preliminary schematic layout.**
  - b. All geometric design shall be in conformance with the State's Design Division, Operations and Procedures Manual, except where variances are permitted in writing by the STATE.
  - c. The schematic layout shall include basic information which is necessary for the proper review and evaluation including the items listed above in the checklist for schematic layout.
  - d. Handling of traffic during construction shall be a consideration in the development of preliminary designs.

Services  
Provided By:

ENGINEER COUNTY

- |                                   |   |
|-----------------------------------|---|
| <p><u>YES</u>      <u>NO</u></p>  | <p>3. Pavement Design</p> <p>a. Prior to initiating detailed plan preparations for a project, a preliminary investigation shall be made to determine the approximate section and pavement type to be used for the pavement structure. The Flexible Pavement Design Manual for flexible pavement, “Appendix F” of the Design Division, Operations and Procedures Manual, and the current AASHTO Guide for the Design of Pavement Structures, may be used for this purpose.</p> |
| <p><u>YES</u>      <u>NO</u></p>  | <p>b. The typical section shall also reflect proposed geometric including pavement cross slopes, lane and shoulder widths, and slope rates whenever this data have not been previously shown on a schematic submission.</p>   |
| <p><u>YES</u>      <u>N/A</u></p> | <p>c. Embankment and Subgrade</p>   |
| <p><u>YES</u></p>                 | <p>(1) Soil Core Holes (Show cost estimate with Function Code 110)</p>  |
| <p><u>YES</u></p>                 | <p>(a) Along center line</p>  |
| <p><u>YES</u></p>                 | <p>(b) Along center line of each roadway</p>  |
|                                   | <p>The location and minimum number of soil core holes required for this project are as follows: (To be determined when schematic is being completed)</p>  |
|                                   | <p>4. Pavement Design (<i>continued</i>)</p>  |
| <p><u>YES</u>      <u>NO</u></p>  | <p>c. Embankment and Subgrade (<i>continued</i>)</p>  |
|                                   | <p>(2) Identify, interpret and summarize geologic features that affect engineering design (P.I., Sulfate content, % of lime)</p>  |
| <p><u>YES</u></p>                 | <p>d. Traffic Data for Pavement Design by STATE</p>   |
| <p><u>YES</u></p>                 | <p>e. Basic Design Criteria</p>   |
| <p><u>NO</u></p>                  | <p>f. Life Cycle Cost Analysis(es)</p>  |
| <p><u>YES</u></p>                 | <p>g. Cost Data</p>   |
| <p><u>YES</u></p>                 | <p>h. Pavement Material Properties</p>  |
| <p><u>N/A</u></p>                 | <p>i. Rehabilitation Investigations</p>   |
| <p><u>N/A</u></p>                 | <p>(1) Core Hole Survey (Show cost estimate with Function Code 110)</p>   |
|                                   | <p>(a) Determine type and depth of existing material, pavement, etc. The Engineer will determine whether to salvage A.C.P. and FLEXBASE as well as their properties and provide this information to TxDOT.</p>  |

**SECTION 8 – DRAINAGE**

Services

Provided By:

ENGINEER COUNTY

All hydraulic design shall be in accordance with the TxDOT’s Hydraulic Manual, except where variances are permitted in writing by the COUNTY.

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|-------------------|---|
| <p><u>NO</u></p>  | <p>1. Hydrologic Studies, Discharges</p>  |
| <p><u>YES</u></p> | <p>a. Drainage area maps showing existing conditions and proposed improvements.</p> |
|                   | <p>b. Hydrologic data/discharge determination</p>                                   |
|                   | <p>2. Hydraulic Drainage Study and Documentation</p>                                |
|                   | <p>a. Hydraulic computations</p>  |

- |            |           |  |
|------------|-----------|--|
| <u>YES</u> | <u>NO</u> | (1) Storm water detention available within the R.O.W. (linear ft. along side drain ditch). |
| <u>NO</u>  | <u>NO</u> | (2) Storm water detention required outside the R.O.W. (as per HCDD#1)                      |
| <u>YES</u> | <u>NO</u> | (3) Culverts   |
| <u>YES</u> | <u>NO</u> | (4) Bridge waterways   |
| <u>YES</u> | <u>NO</u> | (5) Channels   |
| <u>YES</u> | <u>NO</u> | (6) Storm sewers/inlets  |
| <u>NO</u>  | <u>NO</u> | (7) Pump stations  |
| <u>NO</u>  | <u>NO</u> | (8) Storm Water Management facilities  |
| <u>YES</u> | <u>NO</u> | (9) Other  |
|            |           | (a) Irrigation Canals/Siphons  |
| <u>NO</u>  | <u>NO</u> | b. Hydraulic report(s)   |
| <u>YES</u> | <u>NO</u> | c. Federal Emergency Management Agency (FEMA) floodway requirements                        |
| <u>YES</u> | <u>NO</u> | d. Determine impact of proposed drainage plan on the following receiving stream(s)         |
|            |           | (1) Hidalgo County Drainage District Outfalls  |
|            |           | (2) All Irrigation District Outfalls impacted  |
| <u>YES</u> | <u>NO</u> | 3. Storm Water Pollution Prevention Plan (SW3P)  |

**SECTION 10 - MISCELLANEOUS (ROADWAY)**

Services

Provided By:

ENGINEER COUNTY

- |            |            |   |
|------------|------------|---|
|            |            | 1. Retaining Walls  |
|            |            | a. Structural Details   |
| <u>N/A</u> | <u>N/A</u> | (1) Cast-in-Place Cantilever at _____ locations. (TxDOT Standard Retaining Wall)* |
| <u>N/A</u> | <u>N/A</u> | (2) Tiedback Retaining Wall at _____ location. (TxDOT standard retaining wall)    |
| <u>N/A</u> | <u>N/A</u> | (3) Specialized Retaining Wall at _____ locations (Unique Design).*               |
|            |            | b. Alternate Patented Retaining Walls at all locations. (Layouts Only)**          |
| <u>N/A</u> | <u>N/A</u> | (1) Mechanically Stabilized Earth   |
| <u>N/A</u> | <u>N/A</u> | (2) Concrete Block Wall Systems   |
| <u>YES</u> | <u>NO</u>  | c. Retaining Wall Layout (PLAN)   |
|            |            | (1) Designation of reference line   |
|            |            | (2) Beginning and ending retaining wall stations                                  |
|            |            | (3) Station of each retaining wall joint***                                       |
|            |            | (4) Offset from reference line  |
|            |            | (5) Horizontal curve data   |
|            |            | (6) Number of retaining wall panels and lengths***                                |
|            |            | (7) Total length of wall  |
|            |            | (8) Indicate face of wall   |
|            |            | (9) All wall dimensions and alignment relations (alignment data as necessary)     |
|            |            | (10) Soil core hole locations   |
| <u>YES</u> | <u>NO</u>  | d. Retaining Wall Layout (ELEVATION)  |
|            |            | (1) Top of wall elevations at each joint or intervals***                          |
|            |            | (2) Existing and finished ground line elevations                                  |
|            |            | (3) Height of stem at each joint***   |
|            |            | (4) Wall panel designations***  |
|            |            | (5) Top of footing elevations***  |
|            |            | (6) Limits of measurement for payment****   |
|            |            | (7) Type, limits and anchorage details of railing (If applicable)                 |

**Hidalgo County Pct. 3 – WA#1  
5K Mansion Linear Park Trail Project – PS&E**

- |            |           |  |
|------------|-----------|--|
|            |           | (8) Top and bottom of wall profiles and soil core hole data plotted at correct station and elevation. The plot shall be at the same scale as the wall profile. Ground water elevations and the observation date shall be shown.                          |
| <u>YES</u> | <u>NO</u> | e. Foundation Studies (Show cost estimate with Function Code 110)  |
| <u>YES</u> | <u>NO</u> | (1) The soil core holes shall be obtained at approximately 200 foot intervals along retaining wall alignments. The core holes shall extend 25 feet below the footing elevation.  |
| <u>YES</u> | <u>NO</u> | f. Stability Analysis (the ENGINEER shall estimate this task as part of his bid to complete the work).   |
| <u>YES</u> | <u>NO</u> | g. Estimate  |
| <u>YES</u> | <u>NO</u> | h. Summary of Quantities   |
| <u>YES</u> | <u>NO</u> | i. Typical X-section.  |
| <u>YES</u> | <u>NO</u> | j. General Guidelines for Retaining Walls  |
|            |           | (1) The ENGINEER shall make final design calculations and final detail drawings in accordance with standard requirements of the Texas Department of Transportation. <b>The designer and reviewer shall check all calculations and initial each page.</b> |
|            |           | (2) The ground water level should be observed at the water strike.   |
|            |           | (3) For purposes of uniformity statewide, soil core hole data shall be shown on layouts as illustrated in the Bridges and Structures Foundation Exploration and Design Manual.   |
|            |           | (4) Foundation exploration shall conform to the requirements set forth in Administrative Circular No. 25-84, Administrative Circular 33-87 and Administrative Circular No. 25-92.  |

Services  
Provided By:  
ENGINEER COUNTY

- |            |           |  |
|------------|-----------|--|
|            |           | 2. Traffic Control Plan, Detours and Sequence of Construction  |
| <u>YES</u> | <u>NO</u> | Traffic Control Plans (TCP) are required for all projects. A detailed TCP shall be developed when traffic handling during construction involves complications for which a feasible solution is not covered by the Texas MUTCD or the current Barricade and Construction (B.C.) Standards. The following items are required on all Traffic Control Plan Layouts:                  |
|            |           | a. The sequence of construction and method of handling traffic during each phase.  |
|            |           | b. The existing and proposed traffic control devices that will be used to handle traffic during each construction sequence. Include signals, regulatory signs, warning signs, construction warning signs, guide signs, route markers, construction pavement markings, channelizing devices, portable changeable message signs, flashing arrow boards, barricades, barriers, etc. |
|            |           | c. The proposed traffic control devices (stop signs, signals, flag person, etc.) at grade intersections during each construction sequence.   |
|            |           | d. Where detours are provided, typical cross sections shall be shown.  |
|            |           | e. Road construction work hours shall be developed after an investigation of the traffic volumes has been performed.   |

Services  
Provided By:  
ENGINEER COUNTY

<p><u>YES</u></p> <p><u>N/A</u></p>	<p><u>NO</u></p> <p><u>N/A</u></p>	<p>4. Miscellaneous Drafting/Standards</p> <p>a. Erosion Control</p> <p>b. Landscape Development</p>
<p><u>YES</u></p>	<p><u>NO</u></p>	<p>5. Compute and Tabulate Quantities</p>
<p><u>YES</u></p>	<p><u>NO</u></p>	<p>6. Special Utility Details (Irrigation lines)</p>
<p><u>N/A</u></p> <p><u>N/A</u></p>	<p><u>N/A</u></p> <p><u>N/A</u></p>	<p>7. Miscellaneous Structures</p> <p>a. Type of Structure*</p> <p>(1) Overhead Sign Bridges (O.S.B.) Modifications or special O.S.B. designs shall be prepared using the same design assumptions that are used for the standard O.S.B structures.</p> <p>(a) New O.S.B. structure(s)</p> <p>(b) Structural evaluation of existing O.S.B. structure(s) that are to remain in place or to be relocated.</p> <p>(2) High Mast Illumination Poles (HMIP)</p> <p>(3) Traffic Signal Supports</p> <p>(4) Conventional Illumination Poles</p> <p>(5) Sound Barrier Walls</p> <p>b. Checklist for Layouts</p> <p>(1) Reference appropriate O.S.B. standard</p> <p>(2) Drilled shaft size and length</p> <p>(3) Soil strength used for design {indicate basis and boring(s) used}</p> <p>(4) Design height</p> <p>(5) Tower heights</p> <p>(6) Leg spacings</p> <p>(7) Design wind speed</p>
<p><u>N/A</u></p>	<p><u>N/A</u></p>	<p>c. Foundation Studies (Show cost estimate with Function Code 110) The soils exploration requirements for miscellaneous structures on this project are as follows: (To be provided by the Engineer on an as-needed basis)</p>
<p><u>N/A</u></p> <p><u>N/A</u></p> <p><u>N/A</u></p>	<p><u>N/A</u></p> <p><u>N/A</u></p> <p><u>N/A</u></p>	<p>8. Agreements</p> <p>a. Utility Agreements</p> <p>b. Exhibits for Utility Agreements</p> <p>c. Railroad Agreements</p> <p>d. Railroad Exhibits</p> <p>(1) Railroad Underpasses</p> <p>(2) Railroad Overpasses</p> <p>(3) Railroad Grade Crossing (Replanking)</p> <p>(4) Railroad Grade Crossing Warning Systems (Signals)</p> <p>(5) Other Miscellaneous Sketches for Railroads</p> <p>e. Traffic Signal Agreements</p> <p>f. Exhibits for Traffic Signal Agreements</p>
<p><u>N/A</u></p> <p><u>N/A</u></p>	<p><u>N/A</u></p> <p><u>N/A</u></p>	<p>9. Estimate</p>
<p><u>N/A</u></p>	<p><u>N/A</u></p>	<p>10. Specifications and General Notes</p>



# **ATTACHMENT B**

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## **FEE PROPOSAL**

**EXHIBIT "B"**  
**FEE PROPOSAL**  
**Hidalgo County Precinct 3: 5K Mansion Linear Park Trail**  
**Work Authorization #1**

WA #1 - Schematic, Survey, Geotech., and PS&E		MANHOURS							Total Hours	Subtotal
		PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	EIT	ENGINEER TECH	CADD OPERATOR	ADMIN/ CLERICAL		
TASKS										
1	Survey Fee (Aerial Flight Data Processing, Base Map, Full Topo, and Utilities)									\$20,000.00
2	Geotechnical Evaluation & Pavement Design									\$10,618.50
3	Hydrology & Hydraulics of Proposed Trail	4	12	20					36	\$6,352.52
4	Schematic Development & Alignment Refinement	16	20	40	60	40	40	16	232	\$26,988.44
5	PS&E Development	60	100	200	300	220	220	80	1,180	\$133,616.20
6	Permitted Utilities Coordination to Adjust	2	6	10				8	26	\$3,759.78
7	Meetings & Coordination w/ HCDD#1, La Joya ISD, etc	24	16					12	52	\$9,575.04
8	Coordination & Outreach with Affected Municipalities (Mission)	10	8	16				10	44	\$7,015.58
9	Meetings & Coordination w/ P3 in Support Project Development Activities	20	10	16				20	66	\$10,410.60
<b>SUB-TOTAL</b>									<b>1,636</b>	<b>\$228,336.66</b>
<b>Labor Hours</b>		<b>120</b>	<b>152</b>	<b>262</b>	<b>300</b>	<b>220</b>	<b>220</b>	<b>130</b>	<b>1,636</b>	
Hourly Base Rates		\$ 68.00	\$ 62.00	\$ 45.00	\$ 29.00	\$ 25.00	\$ 23.00	\$ 22.00		
Contract Rate FY2023		\$ 225.45	\$ 205.56	\$ 149.20	\$ 96.15	\$ 82.89	\$ 76.26	\$ 72.94		
<b>Total Labor Costs</b>		<b>\$ 27,054.00</b>	<b>\$ 31,245.12</b>	<b>\$ 39,090.40</b>	<b>\$ 28,845.00</b>	<b>\$ 18,235.80</b>	<b>\$ 16,777.20</b>	<b>\$ 9,482.20</b>		<b>\$228,336.66</b>

<b>Direct Expenses</b>	Units	
Mileage (\$0.655/mile)	280	\$ 183.40
Aerial Drone Flight (\$250/hr)	6	\$ 1,500.00
<b>Total Direct Expenses</b>		<b>\$ 1,683.40</b>

**WA#1 - Total Cost \$ 230,020.06**







# ATTACHMENT C

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## APPROVED WORK/PROJECT SCHEDULE

**ATTACHEMENT C  
PROJECT SCHEDULE  
Hidalgo County Precinct 3 - 5K Mansion Linear Park Trail**

**WA #1**

TASK AND DESCRIPTION	2023				
	JUN	JULY	AUG	SEP	OCT
Geotech					
Survey					
PS&E					

 B2Z Engineering