

EXHIBIT “F”
HIDALGO COUNTY
Professional Engineering Services
Agreement # C-23-0092-05-30

WORK AUTHORIZATION NO. 2

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. C-23-0092-05-30, incorporated herein by reference, for the “**Highway Safety Improvement Program (HSIP)**” made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the “**Owner,**” and COBB, FENDLEY & ASSOCIATES, INC. , hereinafter called “**Engineer**”.

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide preliminary engineering and design phase services to Hidalgo County Precinct No. 4 to develop and submit Plans, Specifications, and Estimates (PS&E) for intersection-related improvements under the TxDOT Highway Safety Improvement Program (HSIP).

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 **\$114,082.00** .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-23-0092-05-30** between the **Owner** and the **Engineer**.

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 the scopes of the Work Authorization, within the limits of Agreement No. C-23-0092-05-30 , provided in this Work Authorization; or on (_____ DATE _____)**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties’ responsibilities and obligations provided under the Agreement No. C-23-0092-05-30.

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. 2**.

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 APRIL 16TH, 2024.

Agenda Item No. 94925

Executive Office: _____

ENGINEER:
COBB, FENDLEY & ASSOCIATES, INC.

COUNTY:
COUNTY OF HIDALGO

Dan Warth, PE

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 A

PROJECT SPECIFIC SCOPE OF SERVICES TO BE PROVIDED BY ENGINEER

ATTACHMENT "A"
(WA SCOPE OF SERVICES – HSIP PRELIMINARY ENGINEERING / DESIGN)

Project Understanding

The work to be performed by CobbFendley & Associates (CF) under this contract will consist of providing preliminary engineering and design phase services to Hidalgo County Precinct No. 4 to develop and submit Plans, Specifications, and Estimates (PS&E) for intersection-related improvements under the TxDOT Highway Safety Improvement Program (HSIP). The proposed improvements under the HSIP program are at the following four intersections:

- 1) Mile 22 ½ at Carmen Avila Rd,
- 2) Tex Mex Rd at 83rd Street,
- 3) Ramseyer Rd at Doolittle Rd, and
- 4) Canton Rd at Cesar Chavez Rd.

The work will consist of the following general steps:

- Surveying to collect data on the proposed intersections
- Plan view layouts for the proposed improvements at the intersections
- PS&E design plans submitted at the 30%, 60%, 90%, and 100% design phases
- Assist the County in coordinating with the TxDOT Pharr District

Surveying Services

PROJECT DESCRIPTION

The project is described as topographic surveys for design at the intersections of Cesar Chavez Rd & Canton Rd., Tex Mex Rd. & 83rd St., Ramseyer Rd. & Doolittle Rd. and Mile 22-1/2 Rd. & Carmen Avila Rd.

SURVEY – CONTROL

1. CobbFendley will utilize the VRS system and GPS Static observations and differential level loops to establish horizontal and vertical survey control for the project site. Survey Control will be based on the Texas State Plane Coordinate System, South Zone, NAD 83 (2011), NAVD 88, Grid Coordinates
2. CobbFendley will set two (2) survey control points within each of the four (4) project areas for a total of eight (8).

TOPOGRAPHIC SURVEY

1. A field survey will be performed in compliance with the current Texas Society of Professional Surveyors (TSPS) Standards and Specifications for a Category 6 Topographic Survey.
2. If Available, the Horizontal and Vertical Control established for this project, will be tied to any local survey control that may exist on-site and be provided by client.

3. Project limits include 500' along each roadway (from each intersection) within the apparent Right-of-Way on each street.
4. A topographic survey will be performed which will include, but not be limited to: 1-foot contours, data will be collected on a 50' grid with grade breaks, edge of concrete, back of curb, gutter flow lines, road crown, structures, overhead power, telephone or signal lines, buried cable markers or signs, above ground visible evidence of underground lines, power poles, guy anchors, and other important features / grade break points. All data collection for this project will take place within the apparent right-of-way.
5. CobbFendley will locate visible above grade utilities and improvements within the project area.
6. CobbFendley will collect flow line elevation data for all storm and sanitary manholes, drop inlets, and curb inlet lengths and flow lines within the project area.
7. CobbFendley will locate and collect flow line elevation data for adjacent upstream and downstream wastewater and drainage structures.
8. An 811 Call for underground utility locates will be made for this survey.
9. A survey drawing in MicroStation format, will be prepared depicting the data collected at time of survey.
10. The drawing will be prepared using MicroStation and delivered in electronic format.
11. Where appropriate CobbFendley will utilize drone flight imagery and Aerial LiDAR to supplement the on the ground (conventional) survey for this project.

CobbFendley will use reasonable efforts to begin the survey within 48 hours of notice to proceed and complete its Services within thirty (30) business days upon commencement of work. However, due to possible adverse effects of weather, the survey date may change.

Plan View Layouts

Plan View Layouts. CobbFendley will prepare plan view layouts on aerial photographs (with approximate scale) for each of the four intersections. Turn lane geometry will be determined during analysis using available existing traffic counts. The plan view layouts will provide the geometric design for any mitigation strategies to address safety and mobility based on the analysis outlined above. Impacts and mitigation to the existing traffic signal will be included in the evaluation. The plan view layouts will be developed using AASHTO and TxDOT design standards.

Existing Utilities Assessment. CobbFendley will gather information on existing utilities, including as-builts, and make preliminary determination on utility coordination requirements.

Pavement Analysis / Design. This proposal assumes that the proposed pavement widening sections will be in accordance with the County's standard pavement design policy, to be provided by the County.

Environmental Services

TASK 1 PROJECT MANAGEMENT AND COORDINATION

Raba Kistner, Inc. (RKI) will conduct environmental project management activities including initial project set-up, preparing invoices and monthly progress reports, prepare for and attend up to 2 conference call progress meetings, ECOS support, and updating schedules.

RKI understands this project will be environmentally cleared as a Categorical Exclusion.

TASK 2 TECHNICAL STUDIES/REPORTS AND SUPPORTING DOCUMENTATION

Based on information provided by CLIENT, the following technical deliverables are required to environmentally clear this project.

- **Surface Waters Analysis Form:** **RKI** will prepare the Surface Water Analysis Form, released by TxDOT in August 2019. This form includes discussions regarding Sections 401, 402, and 404 of the Clean Water Act (CWA), Section 14 of the Rivers and Harbors Act (RHA), Section 303(d) of the CWA, General Bridge Act/Section 9 of the RHA, Section 10 of the RHA, Executive Order (EO) 11990: Wetlands, EO 11988: Floodplain Management, and Drinking Water.

Unless otherwise directed, **RKI** will prepare and provide one electronic version of the letter report for CLIENT use.

- **Archeology Background Study:** The Background Study will consist of a comprehensive review of records that pertain to the proposed project area or Area of Potential Effect (APE). Specifically, during the Background Study, an **RKI** archaeologist will consult the available resources from the THC, site files, and maps will be examined to gather more detailed information regarding the project area and its immediate vicinity. In addition, aerial photos, topographic maps, geologic maps, and soil survey maps will also be reviewed to provide information on land use, topography, soils, vegetation, geology, and levels of development within the project vicinity. The goal of the Background Study is to determine the likelihood that the project will impact significant historic cultural resources (prehistoric and historic archeological sites). Significant historic cultural resources may consist of standing structures and/or prehistoric cultural deposits that have the potential to be listed on the National Register of Historic Places and to be formally designated as State Antiquities Landmarks. The desktop study will result in the production of a report, summarizing the resources consulted, the findings of the review, and recommendations regarding any additional field investigations that may be warranted prior to the inception of the development activities. The document will be submitted to the CLIENT to submit for review. Once the CLIENT has reviewed the report, and all comments addressed, **RKI** will produce a final version of the background study to submit to TxDOT. The submittal can be done by the CLIENT or by **RKI**, depending on the CLIENT preference
- **State and Federal Protected Species Compliance:** **RKI** will evaluate all pertinent ecological data in order to adequately complete one Species Analysis Form and Species Analysis Spreadsheet. This will include a review of Endangered Species Act compliance, Texas Parks and Wildlife Department (TPWD) Coordination, Bald and Golden Eagle Protection Act, Migratory Bird Protection, and other considerations. Supporting documentation will be provided (e.g. TPWD Natural Diversity Database, U.S. Fish and Wildlife Service (USFWS) Critical Habitat Map data, USFWS Information for Planning and Consultation, etc.). This work will be conducted by a qualified biologist.

All tasks (Standard and Optional) include quality assurance measures related to all environmental documentation prepared by **RKI**. It also includes coordination with agency stakeholders such as TxDOT Pharr District and TxDOT Environmental Affairs, as appropriate. This task will include providing relevant attachments, GIS support, quality reviews, clerical support, and addressing TxDOT comments on all technical deliverables.

RKI understands that the following items are to be provided by the County:

- Property Access (i.e., right-of-entry)
- Project footprint file for SITES (CAD, kml, shapefile, or .pdf)

Only those activities and technical reports outlined herein are proposed at this time. Any additional studies/reports requested by CLIENT or others due to unforeseen circumstances, changes in design or regulatory requirements, environmental scoping outcome (ECOS requirements), or others are not included in this scope and would require separate authorization. This proposal assumes one deliverable per task for the combined four intersections.

RKI understands that no right-of-way (ROW) acquisition is required for this project. If ROW, permanent easements, or temporary easements are required, or if TxDOT requires additional deliverables not listed in the Standard Services, Optional Services tasks may be required. If Optional Services are required, **RKI** will require a separate formal notice to proceed.

RKI will provide the above scope of services on a **LUMP SUM** basis.

RKI is prepared to initiate this project immediately and anticipate the scope of work under the Standard Services can be completed within 45 business days after we receive written authorization to proceed, items to be provided by client, and scoping meeting with TxDOT. If required, Optional Services can be completed within 45 business days of NTP, items to be provided by client, and scoping meeting with TxDOT.

Design Plans

CobbFendley will prepare design plans for the project. This proposal assumes design submittals at the 30%, 60%, 90%, and 100% design phases. Below is a list of the anticipated sheets:

- Title Sheet;
- Index Sheet;
- General Notes;
- Quantity Summary Sheets (2 sheets);
- Project Layout Sheets (2 sheets);
- Existing and Proposed Typical Section Sheets (5 sheets);
- Horizontal Data Sheets (2 sheets);
- Plan Sheets (1"=40') (5 plan sheets, no profiles);
- Drainage Sheets (4 sheets);
- Signing and Pavement Markings (4 sheets);
- Summary of Small Signs Sheet (1 sheet);

- Traffic Control Layout Sheets (5 sheets);
- SW3P Index Sheet;
- EPIC Sheet;
- SW3P Layout Sheets (4 sheets); and
- TxDOT Standards.

Specifications and Estimate

- Determine quantities for roadway, pavement markings, signing, flashing beacon, TCP, and drainage items for each intersection.
- Develop and include a specification list, a special provisions list, and general notes with the 90% and 100% submittals.
- Develop and include supplemental documents and miscellaneous forms (Form 1002, contract time schedule, certification forms, etc) with the 90% and 100% submittals.
- CobbFendley will prepare a cost estimate at 60%, 90% and 100% submittals.
- Final Cost Estimate. CobbFendley will enter the final cost estimate at the 100% stage in TxDOTCONNECT.

Design QA/QC

Quality Control / Quality Assurance. CobbFendley will conduct an independent quality control review of the drawings, specifications, quantities, and estimate at each submittal.

Project Management

- Coordination meetings. CobbFendley will attend and conduct two (2) coordination meetings with the County and one (1) coordination meeting with TxDOT.
- Status Updates. CobbFendley will submit monthly status updates, with their invoices, to the County to keep the County informed of recent and upcoming activities, needs for the County, and outstanding issues.
- Prepare Submittal Packages. CobbFendley will submit design packages at 30%, 60%, 90%, and 100% design phases. Submittals will be submitted electronically as pdf files, or as the County desires.

Utility Coordination

CobbFendley will provide support to the County's Utility Coordination (UC) efforts with the following items:

1. Provide layout from plan deliverables for each utility company's conflict to be included for each conflict notification letter (up to one exhibit per utility).
2. Provide sample draft conflict notification letter.
3. Communicate and coordinate with the County during their UC efforts with the utility companies (up to 15 hours).

Exclusions (Optional Services)

The services listed below are not included in this proposal. Should the County decide to include these services to the scope of this project, additional fee negotiation between the County and CobbFendley will be needed.

SURVEYING SERVICES

1. Right of Entry (ROE), if required, will be provided by the client.
2. Deed research will not be performed, and right-of-way determinations will not be made.
3. The survey will not address compliance or assessment of existing utilities, wetland determinations, fault lines and/or environmental assessments that are beyond the surveyor's expertise.
4. "Standard traffic control" is performed by CobbFendley and is included in our standard rates. "Standard traffic control" can be described as short-term lane closure necessary for manhole entry or access to utility features located in the roadway. Should "NON STANDARD" control be required (lane closures, police office present, arrow board, etc...) these services will be considered extra.
5. Any other service not specifically included within this description of Scope of Services described above.
6. This survey DOES NOT conform to the ALTA/ACSM Standards. A revised estimate can be provided should those standards be required. No title reports or abstracting will be performed for this project unless requested.

PLAN VIEW LAYOUTS SERVICES

ROW Needs Assessment. CobbFendley would conduct a needs assessment and determine acquisition requirements for the turn lanes, slope easements, and/or drainage easements.

Preliminary Drainage Assessment. CobbFendley would perform a preliminary drainage assessment to determine potential drainage impacts and improvements required because of the intersection improvements.

ENVIRONMENTAL SERVICES

- **Project Coordination Request (PCR) for Historical Studies:** One Historical Background Study will be conducted by a qualified Architectural Historian as defined in 13 TAC §26.4(2). The purpose of the Historical Background Study is to gather information used to prepare the TxDOT's Historical Studies Project Coordination Request (PCR) form. The Architectural Historian will review the area of direct impact (project limits) and 150-feet outside the project limits (indirect effects) within the project limits. During the background study, the TxDOT atlas, called the Historic Districts and Properties of Texas website, will be searched. In addition, the Texas Historic Sites Atlas, maintained by the Texas Historical Commission (THC), will be searched. Historic aerial and topographic maps will be utilized to identify possible historic structures as well as local and online archives, as needed. Additionally, the Architectural Historian will conduct a site visit and photograph resources including representative buildings and structures adjacent to the roadway as well as road features, such as bridges and landscaping, thus providing a representative sample of photographs to satisfy TxDOT requirements for the PCR. Historic age bridges, if any, will receive special attention.
- **Hazardous Materials Initial Site Assessment (ISA):** The ISA will be conducted to: 1) identify and assess potentially contaminated sites early in project development; 2) coordinate early with federal/ state/ local agencies to assess the contamination and the cleanup needed; and 3) determine and implement measures early to avoid or minimize involvement with substantially contaminated properties. **RKI** will complete the ISA and include applicable figures and appendices (e.g. Project Location Map, USGS Topographic Map, Aerial

Photograph, and Site Photographs). Requirements for addressing hazardous materials as they relate to the environmental process will be addressed in accordance with TxDOT's Environmental Handbook for Hazardous Materials.

- **Waters of the U.S. Delineation:** RKI certified wetland delineators will conduct a Waters of the U.S. Delineation in accordance with applicable U.S. Army Corps of Engineers' guidance, in addition to TxDOT's Documentation Standard for Waters of the U.S. Delineation Report and Template: Waters of the U.S. Delineation Report. Desktop resources including historical aerial photographs, historical topographic maps, USFWS National Wetlands Inventory maps, floodplain maps, Texas Commission on Environmental Quality (TCEQ) Surface Water Quality Viewer, and other resources will be consulted and referenced, as applicable.
- **Community Impacts Assessment:** RKI will prepare a technical report related to community impacts, which will include the following elements:
 - Community Profile: Population and Demographic Characteristics: U.S. Department of Commerce, Bureau of the Census information will be obtained and summarized within appropriate cartographic boundaries. This will include an analysis of census-derived income and poverty characteristics, as well as race and origin data for the project area. Once demographics are adequately identified, this data will be reviewed to identify whether any of the above populations would receive disproportionate adverse impacts because of implementing the project. Public facilities, meeting places, transportation, and other community amenities will be identified.
 - Displacements: A detailed description of anticipated displacement will be included, as well as a discussion of compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act).
 - Travel Pattern and Access: This section will describe potential temporary and permanent impacts to travel patterns and access in the project area, and how this might impact the community.
 - Community Cohesion: Based on public information, the field visit, and public involvement results, the document will define the community's characteristics and identify whether the project has the potential to adversely impact community cohesion in the vicinity.
 - Environmental Justice: Using published demographic data, minority and low-income populations will be identified in order to assess whether the project will result in disproportionately adverse impacts on such populations.
 - Limited English Proficiency: U.S. Census Bureau data for English-speaking proficiency will be reviewed to identify the presence of non-English speaking persons and to appropriately plan for public involvement activities.
 - Utilities and Emergency Services: This section will describe any project-related impact to utilities and access for emergency services.

UTILITY COORDINATION SERVICES

Utility adjustment coordination includes utility coordination meetings with individual utility companies, communication and coordination with utilities, and conflict assessment and analysis for the four identified project locations. Utility coordination activities will be in accordance with the TxDOT process. There are nine (9) utilities anticipated at the 4 intersections, including AEP, AT&T, Charter (formerly Time Warner Cable), Foremost Telecom, Magic Valley Electric Coop, Vexus, Smartcom Telecom, KinderMorgan and Texas Gas Service.

- Utility Agreements

- Coordination with any new utilities installed in the ROW during the design process
 - Proposed Utility Layouts
 - Preparation of Utility Certifications
- A. 30% Design Phase
- I. Develop Utility Layout: Will reach out to utilities, collate as-builts and create a utility base map.
 - II. Project Team Meetings: Shall attend virtual project team meeting (up to 1 meeting) to assist in minimizing utility impacts and discuss alternatives. These meetings will include meeting preparation, and meeting.
 - III. Develop Utility Contact List: Will establish contact with existing utility companies within and adjacent to the project area and create a utility contact list. This list will be maintained throughout the project.
 - IV. 30% Conflict Assessment: Will utilize the existing utility layout to perform a preliminary conflict assessment to determine utility conflicts within the proposed roadway alignment.
 - V. Initial Project Notification Letters: Will prepare and mail written notification letters to all known Utility Owners within and adjacent to the project site.
 - VI. Project Kick-Off Utility Coordination Meeting (up to 1): Shall establish contact with existing utility companies within and adjacent to the Project and set up a utility coordination meeting to discuss proposed roadway alignment. This meeting will include meeting preparation, travel time, meeting and follow-up meeting minutes. Will set agenda for all coordination meetings as directed by the County.
- B. 60% Design Phase
- I. Coordination/Project Meetings: Shall attend virtual project team meetings to assist in minimizing utility impacts and discuss alternatives. In addition, will conduct meetings with individual utilities as needed (up to 2 meetings). These meetings will include meeting preparation, and meeting minutes.
 - II. 60% Conflict Assessment: Will update conflict assessment at the 60% design phase to identify which utilities will conflict with roadway construction and City or TxDOT guidelines and make the utility company aware of any changes in conflict locations from the 30% submittal. We will be reviewing for direct conflicts with proposed roadway improvements, constructability conflicts, and conflicts with current rules/guidelines. The detailed list will be updated at each of these design milestones and will be communicated with the Utility Owners and design team.
 - III. Group Utility meeting: Will hold 1 group utility meeting with utilities to discuss the updated project alignment and any correlating new and/or removed conflicts.
 - IV. Utility Relocation Design Plan Review: Will review up to 4 utility designs to verify that each proposed design meets City and TxDOT guidelines as well as alleviates known conflicts with improvements associated with the roadway project.

C. 100% Design Phase

- I. Coordination/Project Team Meetings: Shall attend project team meetings to assist in minimizing utility impacts and discuss alternatives. In addition, will conduct meetings with individual utilities as needed (up to 2 meetings). These meetings will include meeting preparation, travel time, and meeting minutes.
- II. 100% Conflict Assessment: Will update conflict assessment at the 100% design phase to identify which utilities will conflict with roadway construction and City or TxDOT guidelines and make the utility company aware of any changes in conflict locations from the 90% submittal. We will be reviewing for direct conflicts with proposed roadway improvements, constructability conflicts, and conflicts with current rules/guidelines. The detailed list will be updated at each of these design milestones and will be communicated with the Utility Owners and design team.
- III. Group Utility meeting: Will hold 1 group utility meeting with utilities to discuss the updated project alignment and any correlating new and/or removed conflicts.
- IV. Utility Relocation Design Plan Review: Will review up to 4 utility designs to verify that each proposed design meets City and TxDOT guidelines as well as alleviates all known conflicts with improvements associated with the roadway project.
- V. Utility Schedule and Sequencing. Review the utility adjustment schedule in relation to construction sequencing and schedule for timely relocation of the utility.
- VI. Construction coordination and follow ups with the utilities once they have received their approved relocation plans and permits



ATTACHMENT B

FEE PROPOSAL

Hidalgo County Pct 4 HSIP Intersection Improvements
 Design for Canton Rd/Cesar Chavez Rd, Ramseyer Rd/Doolittle Rd, Tex Mex Rd/83rd St, & Carmen Avila Rd/Mi 22 1/2 Rd Intersections
 February 1, 2024

	\$300.00	\$250.00	\$250.00	\$188.00	\$172.00	\$142.00	\$131.00	\$142.00	\$102.00	\$164.00	\$109.00	\$62.00	\$0.660	\$91.000	\$51.000	\$5.00	\$2.00	\$0.15				
	per hour	per hour	per hour	per hour	per hour	per hour	per hour	per hour	per hour	per hour	per hour	per hour	per mile	per day	per day	per delivery	per sf	per copy				
Task	Principal	Project Manager IV	Senior RPLS	Senior Technician III	Engineer II	Engineer I	Graduate Engineer II	Senior Technician I	Technician II	2 Person Survey Crew	Project Coordinator	Clerical	Mileage	Lodging	Per Diem	Postage - Regular	Repro (full-size)	Copies	Total Hours	Total Fee Budget	Expenses	Total Budget
I. Preliminary Engineering																						
Plan View Layouts	0	2			0	0	18	10											30	\$4,278.00	\$237.00	\$4,515.00
Prepare plan view layouts for four intersections		1					16	8					56				100		25	\$3,482.00	\$237.00	
Existing Utilities Assessment		1					2	2											5	\$796.00	\$0.00	
Environmental Services (Raba Kistner)																				\$25,004.00	\$0.00	\$25,004.00
Project Management and Coordination																						
Technical Studies/Reports and Supporting Documentation																						
Expenses																						
Survey			8	44				4		66				6	6				122	\$21,664.00	\$852.00	\$22,516.00
Pre-Field Office																						
Control Work Order				1															1	\$188.00		
Primary Field Work																						
Set Control										16									16	\$2,624.00		
Topo - Mile 22 1/2 @ Carmen Avila			0.5					1		10									11.5	\$1,907.00		
Topo - Ramseyer Rd @ Doolittle Rd			0.5					1		10									11.5	\$1,907.00		
Topo - Tex Mex Rd @ 83rd St			0.5					1		10									11.5	\$1,907.00		
Topo - Canton Rd @ Cesar Chavez Rd			0.5					1		10									11.5	\$1,907.00		
Drive Time										10									10	\$1,640.00		
Office Work																						
Data Processing / drafting / Surface Generation			2	40															42	\$8,020.00		
QA / QC																						
Control			2	1															3	\$688.00		
Topo Data / Surface			2	2															4	\$876.00		
Subtotal Phase 1 - Preliminary Engineering	0	2	8	44	0	0	18	14	0	66	0	0							152	\$50,946.00	\$1,089.00	\$52,035.00
II. Design Phase																						
Design Plans	0	14.5			0	31	186	29											260.5	\$36,511.00	\$111.00	\$36,622.00
Title Sheet		0.5					6												6.5	\$911.00	\$0.00	
Index Sheet		0.5					4												4.5	\$649.00	\$0.00	
General Notes		1					4												5	\$774.00	\$0.00	
Quantity Summary Sheets (2 sheets)		1				2	8												11	\$1,582.00	\$0.00	
Project Layout Sheets (2 sheets)		0.5					8												8.5	\$1,173.00	\$0.00	
Existing and Proposed Typical Section Sheets (3 sheets)		1					12	6											19	\$2,674.00	\$0.00	
Horizontal Data Sheets (2 sheets)		0.5				1	4												5.5	\$791.00	\$0.00	
Plan Sheets (1"=40') (5 plan sheets)		2				5	30						168						37	\$5,140.00	\$111.00	
Drainage Sheets (4 sheets)		2				8	24												34	\$4,780.00	\$0.00	
Signing and Pavement Markings (4 sheets)		1				6	24	6											37	\$5,098.00	\$0.00	
Summary of Small Signs Sheet (1 sheet)		0.5					6	2											8.5	\$1,195.00	\$0.00	
TCP Layout Sheets (5 sheets)		1.5				5	30	5											41.5	\$5,725.00	\$0.00	
SW3P Index Sheet		0.5				1	4	2											7.5	\$1,075.00	\$0.00	
EPIC Sheet		0.5				1	4	2											7.5	\$1,075.00	\$0.00	
SW3P Layout sheets (4 sheets)		0.5				1	12	4											17.5	\$2,407.00	\$0.00	
Standards (roadway, pavement markings, TCP, drainage)		1				1	6	2											10	\$1,462.00	\$0.00	
Specifications and Estimate	0	7.5			0	14	68	8											97.5	\$13,907.00	\$0.00	\$13,907.00
Determine quantities (roadway, pavement markings, TCP,		1.5					16	8											25.5	\$3,607.00	\$0.00	
Compile specifications list, general notes and special provisions		1				4	8												13	\$1,866.00	\$0.00	
Supplemental docs, misc. forms (1002, Contract Time, Certifications) at 90% & 100%		1.5				4	16												21.5	\$3,039.00	\$0.00	
Cost Estimates at 60%, 90% & 100% phase submittals		3				6	20												29	\$4,222.00	\$0.00	
Enter final estimate at 100% phase in TXDOTCONNECT		0.5					8												8.5	\$1,173.00	\$0.00	
Design QA/QC	0	18			0	0	0	0											18	\$4,500.00	\$0.00	\$4,500.00
30% Submittal		3																	3	\$750.00	\$0.00	
60% Submittal		6																	6	\$1,500.00	\$0.00	
90% Submittal		6																	6	\$1,500.00	\$0.00	
Final Submittal		3																	3	\$750.00	\$0.00	
Project Management	0	6			3	0	3	6						6					24	\$3,633.00	\$45.00	\$3,678.00
Coordination meetings (2 with County, 1 with TxDOT)		3					3								45				6	\$1,143.00	\$30.00	
Status updates		3												6					9	\$1,122.00	\$0.00	
Prepare submittal packages					3			6									3		9	\$1,368.00	\$15.00	
Utility Coordination	0	2			0	8	12	0	0	0	0	0	0						22	\$3,340.00	\$0.00	\$3,340.00
Support for the County's Utility Coordination Efforts		2				8	12												22	\$3,340.00	\$0.00	
Subtotal Phase 2 - Design Phase	0	48			3	53	257	55				6							422	\$61,891.00	\$156.00	\$62,047.00
Total Preliminary and Design Phase	0	50			3	53	275	69	0			6							574	\$112,837.00	\$1,245.00	\$114,082.00