

RESOLUTION 26-R-118

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING A TASK ORDER AGREEMENT WITH HALFF ASSOCIATES, INC. FOR THE WEIR ROAD CROSSING REPAIR/REPLACEMENT PROJECT

WHEREAS, the City staff of the City of Schertz (the “City”) has determined that the City requires professional services relating to engineering and design for the Weir Road Crossing Repair/Replacement Project; and

WHEREAS, City staff has determined that Halff Associates, Inc. is uniquely qualified to provide such services for the City; and

WHEREAS, Halff Associates, Inc. is an approved On-Call Engineering Firm for the City of Schertz; and

WHEREAS, pursuant to Section 252.022(a)(4), the City is not required to seek bids or proposals with respect to a procurement for personal, professional, or planning purposes; and

WHEREAS, the City Council has determined that it is in the best interest of the City to contract with Halff Associates, Inc. pursuant to the On-Call Task Order Agreement attached hereto as Exhibit A (the “Agreement”) with a not to exceed amount of \$160,000.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby authorizes the City Manager to execute and deliver the Task Order Agreement with Halff Associates, Inc. in accordance with their approved Master Agreement in substantially the form set forth on Exhibit A in the amount of \$147,575 and authorize the City Manager to execute and deliver the Task Order in a not to exceed total amount of \$160,000.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application

of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this _____ day of _____, 2026.

CITY OF SCHERTZ, TEXAS

Ralph Rodriguez, Mayor

ATTEST:

Sheila Edmondson, TRMC
City Secretary

EXHIBIT A

**TASK ORDER AGREEMENT WITH HALFF ASSOCIATES, INC. FOR WEIR ROAD
CROSSING REPAIR/REPLACEMENT PROJECT**



September 18, 2026
AVO 57460.011

John Nowak, P.E.
Assistant City Engineer
City of Schertz Engineering
11 Commerce Place
Schertz, TX 78154
210.619.1825 | jnowak@schertz.com

RE: Weir Road at Cibolo Creek Crossing Reconstruction

Dear Mr. Nowak:

We are pleased to present this proposal to provide professional services related to the Weir Road at Cibolo Creek Crossing Project. We greatly value our ongoing partnership with the City of Schertz and are grateful for the opportunity to collaborate with you on this project.

Should you require any further information or clarification, please do not hesitate to reach out. We look forward to continuing our successful collaboration on this project!

Sincerely,
HALFF ASSOCIATES, INC.

A handwritten signature in blue ink that reads "Luis A. Cardona".

Luis A. Cardona, P.E. LGPP
Project Manager/Public Works Team Leader

A handwritten signature in blue ink that reads "Lamberto J. Balli".

Lamberto J. Balli, P.E., PWLF
Vice President/Director of Public Works

Attachments: E-505 2020 Part 3 Task Order Form and Exhibit A

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the specific Agreement between Owner and Engineer, and the controlling Laws and Regulations.

EJCDC® E-505, Agreement between Owner and Engineer for Professional Services—Task Order Edition, is published in four parts: (1) the Main Agreement (general provisions governing all Task Orders); (2) the Exhibits to Main Agreement; (3) the Task Order Form (see below); and (4) the Exhibits to Task Order. The Main Agreement contains a Guidelines for Use section that pertains to all four parts of E-505.

AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES— TASK ORDER EDITION

PART 3 OF 4: TASK ORDER FORM

Prepared by



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TASK ORDER NO. X

This is Task Order No. [**X**],
consisting of 6 pages.

In accordance with Paragraph 1.01, Main Agreement, of the Agreement Between Owner and Engineer for Professional Services—Task Order Edition dated [January_____, 2026], Owner and Engineer agree as follows:

1. TASK ORDER DATA

a.	Effective Date of Task Order:	September _____, 2026
b.	Owner:	City of Schertz
c.	Engineer:	Halff Associates, Inc.
d.	Specific Project (title)	Weir Road at Cibolo Creek Crossing Reconstruction
e.	Specific Project (description):	Reconstruction of approximately 150 LF of roadway, culverts, and headwalls for the Cibolo Creek Crossing at Weir Road and Conceptual Analysis of Low Water Crossing Improvements
f.	Related Task Orders Supplemented by this Task Order: Superseded by this Task Order:	N/A

2. BASELINE INFORMATION

Baseline Information. Owner has furnished the following Specific Project information to Engineer as of the Effective Date of the Task Order. Engineer's scope of services has been developed based on this information. As the Specific Project moves forward, some of the information may change or be refined, and additional information will become known, resulting in the possible need to change, refine, or supplement the scope of services.

Specific Project Title:	Weir Road at Cibolo Creek Crossing Reconstruction
Type and Size of Facility:	Roadway and Drainage
Description of Improvements:	Reconstruction of approximately 150 LF of roadway, culverts, and headwalls for the Cibolo Creek Crossing at Weir Road and Conceptual Analysis of Low Water Crossing Improvements
Expected Construction Start:	January 2027
Prior Studies, Reports, Plans:	N/A
Facility Location(s):	Along Weir Road at Cibolo Creek Low Water Crossing
Current Specific Project Budget:	N/A
Funding Sources:	N/A
Known Design Standards:	City of Schertz, City of San Antonio, and TxDOT Design Standards
Known Specific Project Limitations:	N/A
Specific Project Assumptions:	N/A
Other Pertinent Information:	N/A

3. SERVICES OF ENGINEER ("SCOPE")

- A. The specific Basic Services to be provided or furnished by Engineer under this Task Order are:
- ☐ Exhibit A to Task Order, "Engineer's Services for Task Order," as attached to this specific Task Order.
- B. All the services included above comprise Basic Services for purposes of Engineer's compensation under this Task Order, with the exception of Resident Project Representative Services, if any, which are compensated separately.
- C. Resident Project Representative (RPR) Services: **(Does not apply)**
1. If the Scope established in Paragraph 2.A above includes RPR services, then Exhibit D to Task Order is expressly incorporated in this Task Order by reference.
- D. Additional Services: Services not expressly set forth as Basic Services in Paragraph 3.A above, and necessary services listed as not requiring Owner's written authorization, or requiring additional effort in an immediate, expeditious, or accelerated manner as a result of unanticipated construction events or Specific Project conditions, are Additional Services, and

Task Order.

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will be compensated by the method indicated for Additional Services in this Task Order. All other Additional Services require mutual agreement and may be authorized by amending the Task Order as set forth in Paragraph 8.05.B.2 of the Main Agreement, with compensation for such other Additional Services as set forth in the amending instrument.

4. DELIVERABLES SCHEDULE

- A. In submitting required Documents and taking other related actions, Engineer and Owner will comply with the schedule below. Preliminary Schedule is below:

Deliverables	Duration
90% Design Submittal	6 Weeks
100% Design Submittal	4 Weeks
Bid Phase	2 Weeks
Construction Phase Services	16 Weeks
Project Close-Out and Record Documents	2 Weeks
Conceptual Analysis	8 weeks

5. ADDITIONS TO OWNER'S RESPONSIBILITIES

- A. Owner shall have those responsibilities set forth in Article 2 of the Main Agreement, and the following supplemental responsibilities that are specific to this Task Order:
1. The Owner shall provide As-built drawings for public utilities within the ROW, adjacent development plats, and future project utility layouts.

6. TASK ORDER SCHEDULE

- A. In addition to any schedule provisions provided in Exhibit B or elsewhere, the parties shall meet the following schedule: **Not Applicable**

7. ENGINEER'S COMPENSATION

- A. The terms of payment are set forth in Article 4 of the Main Agreement.
- B. Owner shall pay Engineer for services rendered under this Task Order as follows:

Description of Service	Amount	Basis of Compensation
Basic Engineering Services	\$128,855.00	Lump Sum
1. 90%/100% Construction Documents	\$100,145.00	Lump Sum
2. Conceptual Analysis	\$22,420.00	Lump Sum
Bid Phase Services	\$5,550.00	Lump Sum

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Construction Phase Services	\$13,170.00	Lump Sum
GRAND TOTAL	\$147,575.00	Lump Sum

- C. Compensation items and totals based in whole or in part on Hourly Rates or Direct Labor are estimates only. Lump sum amounts and estimated totals included in the breakdown by phases incorporate Engineer's labor, overhead, profit, reimbursable expenses (if any), and Subconsultants' charges, if any. For lump sum items, Engineer may alter the distribution of compensation between individual phases (line items) to be consistent with services actually rendered but shall not exceed the total lump sum compensation amount unless approved in writing by the Owner.

8. ENGINEER'S PRIMARY SUBCONSULTANTS FOR TASK ORDER, AS OF THE EFFECTIVE DATE OF THE TASK ORDER:

- A. Raba-Kistner, Inc. (Geotechnical Services)

9. EXHIBITS AND ATTACHMENTS:

- A. Exhibit A Task Order—Engineer's Services Under Task Order
- B. Exhibit B to Task Order—Task Order Deliverables Schedule (**Schedule provided in Section 4 of this Task Order**)
- C. Exhibit C to Task Order – Basis of Compensation
- D. Exhibit D to Task Order—Duties, Responsibilities, and Limitations of Authority of Resident Project Representative Under Task Order (**Does not apply**)
- E. Exhibit E to Task Order-EJCDC® C-626, Notice of Acceptability of Work (Form) (**Does not apply**)
- F. Other:

Execution of this Task Order by Owner and Engineer makes it subject to the terms and conditions of the Main Agreement and its exhibits and appendices, which Main Agreement, exhibits, and appendices are incorporated by this reference.

OWNER:

By: _____

Print Name: _____

Title: _____

ENGINEER:

By: Lamberto J. Balli

Print Name: Lamberto J. Balli, PE

Title: Vice President/ Director of Public Works

Engineer's License or Firm's F-312

State of: Texas

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: _____

Title: _____

Address: _____

E-Mail
Address: _____

Phone: _____

Date: _____

DESIGNATED REPRESENTATIVE FOR TASK ORDER:

Name: Luis A. Cardona, PE, LGPP

Title: Project Manager/Public Works Team
Leader

Address: 100 NE Loop 410, Suite 701, San
Antonio, Texas 78216

E-Mail
Address: lcardona@halff.com

Phone: 210-704-1379

Date: September 18, 2026

Task Order.

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Page 5 of 6

Task Order.

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Page 6 of 6

EXHIBIT A

SERVICES TO BE PROVIDED BY CONSULTANT

CITY OF SCHERTZ (“CITY”) is proposing to re-construct the existing drainage crossing along Weir Road at Cibolo Creek. Project Location is shown in **ATTACHMENT A**. The work to be performed under this work authorization by **HALFF** (“CONSULTANT”) will consist primarily of the preparation of Plans, Specifications, and Estimate (PS&E), the preparation of Bidding Documents, and performing Construction Phase Services.

1.0 PROJECT ADMINISTRATION AND COORDINATION SERVICES

The CONSULTANT Project Manager and Task Leaders will be responsible for project oversight and the daily management of the project. Frequent and appropriate communications will be maintained between the CONSULTANT and CITY in an effort to expedite completion of the design.

Project Administration Services will include the following:

- 1.1 Prior to the Project Kick-Off Meeting, the CONSULTANT will designate in writing, one (1) Professional Engineer licensed to practice in the State of Texas to be the Project Manager throughout the duration of the project for project management and all communications, including billing. The CONSULTANT will not replace the designated Project Manager without the written approval of CITY;
- 1.2 The CONSULTANT will submit to CITY its invoices of services performed and compensation due, arranged by tasks. The CONSULTANT will show the budgeted and currently authorized amounts for each task, along with the invoiced and to-date amounts. The invoice must be submitted to CITY by the 10th calendar day of each month;
- 1.3 Each month, and included with the submission of each invoice, the CONSULTANT will update the Project Schedule if key milestones have changed and related documents in accordance with the Project Schedule.
- 1.4 Each month, and included with the submission of each invoice, the CONSULTANT will submit a monthly report of the status of work performed through the end of the previous month. The CONSULTANT will summarize decisions or agreements made, and will outline unresolved or pending issues requiring CITY’s involvement or decision.

Project Coordination Services will include the following:

- 1.5 The CONSULTANT will attend a Project Kick-Off Meeting with CITY. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of the meeting.
- 1.6 The CONSULTANT will meet with CITY’s Representative monthly. The CONSULTANT will prepare and distribute the monthly meeting agenda twenty-four (24) hours before the meeting. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of each meeting.
- 1.7 The CONSULTANT will attend a Design Concept Meeting with CITY. At this meeting, the project design criteria will be compiled and documented into a Design Summary Report format which the CONSULTANT will prepare. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of the meeting; and
- 1.8 The CONSULTANT will attend a 90% review meeting with CITY. The CONSULTANT will prepare the necessary documents for the review meeting.
- 1.9 The CONSULTANT will attend Comment Resolution Meetings after the 90% submittal to discuss

review comments. The CONSULTANT will respond in writing to reviewer comments for each submittal. Responses will include explanations for any items in disagreement. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of each meeting.

2.0 PROJECT DESIGN CRITERIA

The Project Design Criteria for the Weir Road Crossing at Cibolo Creek will be as follows:

- 2.1 All engineering documents released, issued, or submitted by or for a registered engineering firm, including preliminary documents, must clearly indicate the engineering firm name and registration number. Additionally, all completed documents submitted for final approval or issuance or a permit must bear the seal with signature and date adjacent thereto of a Professional Engineer licensed to practice in the State of Texas;
- 2.2 The design standards to be used will include but not be limited to the City of Schertz Design Guidelines, TxDOT Roadway Design Manual, TxDOT Bridge Design Manual – LRFD, TxDOT Hydraulic Design Manual, the American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Streets (Green Book), AASHTO LRFD Bridge Design Specifications, Texas Manual on Uniform Traffic Control Devices, ADA Accessibility Guidelines, Texas Pollutant Discharge Elimination System (TPDES) Guidelines.
- 2.3 Project specifications will be developed using the latest City of Schertz Standard Specifications and applicable TxDOT Standard Specifications.

3.0 SURVEYING SERVICES

The CONSULTANT will obtain the services of a Registered Professional Land Surveyor to perform field surveys for the Project. All survey services will comply with the latest revision of the Professional Land Surveying Practice Act of the State of Texas and will be accomplished under the direct supervision of a currently licensed State of Texas Registered Professional Land Surveyor.

Surveying Services will include the following:

- 3.1 Using Bexar County Appraisal District (BCAD), Bexar County Clerk Websites, Guadalupe County Appraisal District (GCAD), and Guadalupe County Clerk Websites, the CONSULTANT will gather ownership and deed information for the base drawing;
- 3.2 If needed, the CONSULTANT will prepare Right-of-Entry (ROE) agreements for approximately (4) adjacent landowners, and coordinate with landowners as required to acquire approval of ROE agreements for field work outside of the existing public Right-of-Way (ROW). CITY will provide the outline of the agreement. The CONSULTANT will submit agreements to CITY for signature and the CONSULTANT will mail the signed agreements to the landowners via regular and certified mail, with a return self-addressed stamped envelope. The CONSULTANT will track receipt of executed agreements. If the initial notice requesting ROE is not returned within one (1) week of delivery, a second notice requesting ROE will be sent by the CONSULTANT. If after one (1) week of delivery of the second notice the property owner is still unresponsive, CITY will be notified, and the process escalated with assistance from CITY. The CONSULTANT will maintain a contact list of the property owners which will be made available to CITY;
- 3.3 The CONSULTANT will establish control for the site in NAD 83 horizontal datum, Texas State Plane Coordinate System South Central Zone surface coordinates and NAVD 88 vertical datum;
- 3.4 The CONSULTANT will research existing plats, ROW maps, deeds, easements and survey for fence corners, monuments, iron pins, etc., within the existing ROW and analyze to establish apparent existing ROW. Apparent ROW is defined as the existing ROW with a plus/minus 1-foot tolerance. The preliminary base map will display the apparent ROW along with Bexar

County/Guadalupe County Appraisal District records of lot or property lines, land ownership, and addresses as publicly available through BCAD/GCAD.

- 3.5 The CONSULTANT will perform a topographic survey of the site in general conformance to a Category 6 Condition 1 standard as referenced in the Manual of Practice for Land Surveying in the State of Texas, latest edition. Topography elements of the Weir Road Low Water Crossing at Cibolo Creek within the existing ROW, including but not limited to surface features such as pavement edges, concrete curb, driveways, sidewalks and ramps, handrails, fences, street signs, trees, ground boxes, fire hydrants, manholes, valves, meters, utility risers, utility poles, mail boxes, etc.;
- 3.6 The CONSULTANT will collect survey data of existing features adjacent to the Project within the existing ROW;
- 3.7 The CONSULTANT will survey elevations at key points, pipe sizes, and the locations of structures at the Project site;
- 3.8 The CONSULTANT will survey existing visible utility facilities (e.g., manholes, valve boxes, any available ground markings showing horizontal location, etc.);
- 3.9 The CONSULTANT will survey approximately 100 feet of the incoming and outgoing approaches at the Project site;
- 3.10 The CONSULTANT will survey approximately 50 feet, upstream and downstream of Cibolo Creek, to include the creek bed at the Project site;
- 3.11 The CONSULTANT will prepare in AutoCAD, 2D drawing files with an ASCII file, along with .tin and .dat files for the DTM model in AutoCAD;

4.0 GEOTECHNICAL ENGINEERING SERVICES

Geotechnical Engineering Services will include the following:

- 4.1 The CONSULTANT will coordinate with Raba Kistner to gather the data outlined in the attached **ATTACHMENT B** (Raba Kistner – Scope of Services) for the Geotechnical Engineering Study.

5.0 ROADWAY DESIGN SERVICES

The tasks performed for the roadway design will include, but are not limited to the following:

- 5.1 The CONSULTANT will design a PS&E level horizontal alignment and vertical profile, develop pavement edges, curbs, sidewalks, barriers, retaining walls, and any other pertinent roadside features as required.
- 5.2 The CONSULTANT will prepare a Title Sheet which will include pertinent project information;
- 5.3 The CONSULTANT will prepare a detailed Index of Sheets that shows each sheet's location in the plan set and corresponding sheet number;
- 5.4 The CONSULTANT will prepare Project Layout Sheets at a 1"=100' scale double stacked that clearly indicate the limits of the entire project;
- 5.5 The CONSULTANT will prepare Existing and Proposed Typical Section Sheets. The existing typical sections will include the current roadway characteristics (pavement section, pavement width, ROW, etc.). The proposed typical sections will include all pertinent information for the proposed roadway construction. Typical sections will be required for all proposed and existing roadways, including side streets, with the best available information. The proposed typical sections must include the following:

- a. Width of travel lanes;
 - b. Width of shoulders;
 - c. Border width;
 - d. Curb offsets;
 - e. ROW width;
 - f. Centerline;
 - g. Profile grade line;
 - h. Pavement structure;
 - i. Side Slopes;
 - j. Sodding/seeding limits; and
 - k. Retaining walls;
- 5.6 The CONSULTANT will prepare Removal Layouts at a 1"=50' scale double stacked. The layouts will indicate pavement, roadway appurtenances, and other pertinent items to be removed with details and descriptions to ensure the intent is clear;
- 5.7 The CONSULTANT will develop Horizontal Alignment Data Sheets that will include all horizontal alignment data
- 5.8 The CONSULTANT will develop Roadway Plan and Profile Sheets at a scale of 1"=50' H and 1"=10' V. The sheets will include coordinates, superelevation data, stations, horizontal curve data, vertical profile data, elevations of key alignment features, drainage features, utilities, and any other items required for the complete construction of the Project;
- 5.9 The CONSULTANT will prepare Miscellaneous Roadway Details which will include all necessary details not included in standard TxDOT detail sheets necessary to fully construct all portions of the Project;
- 5.10 The CONSULTANT will prepare cross-sections at a scale of 1"=20' H and 1"=10' V to be included in the plan set. The cross-sections will be created along the proposed centerline alignment at 50 foot intervals, culvert locations, intersections, existing driveways, and proposed driveways. The cross- sections will show the proposed roadway, roadside features, existing ground, proposed grading, existing ROW, proposed ROW, and easements. The horizontal alignment, pavement cross-slope, existing ROW and proposed ROW must all be labeled. Utilities and storm sewers, if required, will be shown on the cross-sections;
- 5.11 The CONSULTANT will obtain the most current applicable City of Schertz and/or TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data;
- 5.12 The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s);
- 5.13 The CONSULTANT will prepare any required special specifications or special provisions and identify the applicable City of Schertz and/or TxDOT general notes;
- 5.14 The CONSULTANT will prepare an Opinion of Probable Construction Cost utilizing calculated quantities, City of Schertz, TxDOT San Antonio District average unit prices, and TxDOT Statewide average unit prices as appropriate based on the judgment of the CONSULTANT;

6.0 DRAINAGE DESIGN SERVICES

The tasks performed for the drainage design will include, but are not limited to the following:

- 6.1 The CONSULTANT will prepare Culvert Layouts for all culvert crossings. The layouts must be prepared in a plan and profile layout and include geometrics of the culvert reconstruction or modification. The layouts will be prepared at a scale of 1"=20' H and 1"=10' V;
- 6.2 The CONSULTANT will calculate quantities for all culvert crossings and will prepare a Summary Sheet for all culvert quantities;
- 6.3 The CONSULTANT will select the most current applicable City of Schertz and/or TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data;
- 6.4 The CONSULTANT will prepare a request for any design exceptions, including all information necessary to support the request, and submit them to CITY for review and approval;
- 6.5 The CONSULTANT will prepare an Opinion of Probable Construction Cost utilizing calculated quantities, City of Schertz, TxDOT San Antonio District average unit prices, and TxDOT Statewide average unit prices as appropriate based on the judgment of the CONSULTANT;

Assumptions and Exclusions:

- i. Drainage Area Map
- ii. Hydrologic and Hydraulic Data Sheets
- iii. Energy Dissipation and Erosion Protection

7.0 STRUCTURAL DESIGN SERVICES

The tasks performed for the structural design will include, but are not limited to the following:

- 7.1 The CONSULTANT will attend up to four (4) 1-hour virtual meetings with CITY.
- 7.2 The CONSULTANT will coordinate with Geotechnical subconsultant for the headwall design.
- 7.3 The CONSULTANT will perform the structural design of modified TxDOT standard concrete headwalls.
- 7.4 The CONSULTANT will deliver signed and sealed construction documents for concrete headwalls.

Assumptions and Exclusions:

- i. Structural scope of work shall be based on design parameters provided by a site-specific geotechnical investigation.
- ii. No calculation package is provided as part of this fee. This can be included as additional services.
- iii. Existing corrugated metal pipes shall be replaced with like in kind. Structural design of bridge class culvert is excluded from scope of work.
- iv. Headwall profiles shall match the exist road profile.
- v. Value engineering services.

8.0 TRAFFIC, SIGNING AND PAVEMENT MARKINGS SERVICES

The tasks performed for the traffic, signing and pavement marking design will include, but are not limited to the following:

- 8.1 The CONSULTANT will prepare proposed signing layouts, and proposed pavement marking and

delineation layouts on the same sheets at a scale of 1"=50'. The layouts will identify the various types of proposed signing, striping, and delineation. Signing and striping will be in accordance with the latest version of the TMUTCD or applicable TxDOT standards;

- 8.2 The CONSULTANT will prepare pavement marking details for instances in which standards do not apply or are not appropriate;
- 8.3 The CONSULTANT will prepare the Summary of Small Signs table utilizing the most current applicable TxDOT and CITY standards. No large guide signs are anticipated;
- 8.4 The CONSULTANT will select the most current applicable TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data.
- 8.5 The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s);

9.0 ENVIRONMENTAL, STORM WATER MANAGEMENT PLAN, AND TREE PRESERVATION SERVICES

The tasks performed for the Environmental, Storm Water Management Plan, and Tree Preservation will include, but are not limited to the following:

- 9.1 The CONSULTANT will develop a Storm Water Pollution Prevention Plan (SW3P) Narrative sheet that will include information such as the project description, project location, and indicate SW3P structural practices to be provided along the Project. The SW3P will be prepared for the length of the Project;
- 9.2 The CONSULTANT will prepare SW3P Layouts to include the necessary controls to minimize the runoff of sediment during construction. The layouts will include information presented in the WPAP and include permanent storm water features as appropriate. The SW3P control measures will be prepared and designed in accordance with the proposed phasing of construction. The layouts will be at a scale of 1"=50' double stacked;
- 9.3 The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s);
- 9.4 The CONSULTANT will obtain the most current applicable TxDOT and CITY standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data; and
- 9.5 The CONSULTANT will develop Tree Protection Details.

Assumptions and Exclusions:

- i. Environmental Permits, Issues, and Commitments sheet

10.0 SUBMITTAL REQUIREMENTS

Project Design Services Submittals will include the following:

- 10.1 Submittal and Review Meetings:
 - a. 90 and 100 percent submittals will be required; and
 - b. The CONSULTANT will attend 90 percent submittal review meeting. Comments and revisions will be incorporated into the deliverables for the next submittal. The CONSULTANT will prepare meeting minutes of each review meeting and submit to CITY within three (3) business days after the meeting date.

10.2 90 Percent Submittal:

- a. Provide three (3) paper copies for review of the items listed below and one (1) CD or Storage Device containing electronic copies. Plan sheets and cross-sections will be prepared and submitted in 11"x17" tabloid paper format;
- b. The submittal must include the following:
 - i. Title Sheet;
 - ii. Index of Sheets;
 - iii. Project Layout Sheets;
 - iv. Existing & Proposed Typical Sections;
 - v. General Notes & Specifications;
 - vi. Estimate & Quantity Data Sheet;
 - vii. Summary Sheets;
 - viii. Survey Control Data Sheets;
 - ix. Horizontal Alignment Data Sheets;
 - x. Removal Layouts;
 - xi. Roadway Plan & Profile Sheets;
 - xii. Miscellaneous Roadway Details;
 - xiii. Roadway Standards;
 - xiv. Culvert Layouts;
 - xv. Miscellaneous Drainage Details;
 - xvi. Drainage Standards;
 - xvii. Estimated Quantities;
 - xviii. Signing & Pavement Marking Layouts;
 - xix. Signing & Pavement Marking Standards;
 - xx. Summary of Small Signs;
 - xxi. Small Sign Details;
 - xxii. SW3P Layouts;
 - xxiii. Environmental Standards including Tree Preservation Standards;
 - xxiv. Roadway Cross-Sections;
 - xxv. Opinion of Probable Construction Cost;
 - xxvi. Construction Schedule;
 - xxvii. Project Design Schedule;
 - xxviii. Draft Geotechnical Engineering and Pavement Design Report;

10.3 100 Percent Submittal:

- a. The submittal must include the following:

- i. Two (2) original signed (electronic signatures allowed) and sealed 11"x17" tabloid paper sets of the Final Construction Drawings;
- ii. Two (2) original Project Manuals and Bid Documentation for advertisement and letting;
- iii. Two (2) original Storm Water Pollution Prevention Plan for Construction; and
- iv. One (1) CD or Storage Device containing electronic copies of all files including PDFs of the 100 percent submittal documents, all AutoCAD files.

11.0 BID PHASE SERVICES

Bid Phase Services will include the following:

- 11.1 The CONSULTANT will attend the Pre-Bid Meeting with CITY and prospective bidders. The CONSULTANT will prepare meeting minutes and submit to CITY within three (3) business days of the meeting;
- 11.2 The CONSULTANT will respond to Contractor questions raised during the bidding process and develop addenda to the Bid Documentation as required;
- 11.3 The CONSULTANT will attend the formal bid opening;
- 11.4 The CONSULTANT will prepare a bid tabulation, analyze Contractor bids, check references and provide a Recommendation to Award to the apparent lowest responsive responsible bidder within five (5) business days of receiving the bid documents from CITY; and
- 11.5 The CONSULTANT will furnish a set of Final Construction Contract Documents including plan sheets, Project Manual and Storm Water Pollution Prevention Plan to the awarded Contractor.

12.0 CONSTRUCTION PHASE SERVICES

Construction Phase Services will include the following:

- 12.1 The CONSULTANT will attend the Pre-Construction Meeting with CITY and the awarded Contractor. The CONSULTANT will prepare meeting minutes and submit to CITY within three (3) business days of the meeting;
- 12.2 The CONSULTANT will attend monthly status meetings (up to 4 meetings) at the Project location with CITY and the Contractor. The CONSULTANT will prepare meeting minutes and submit to CITY within three (3) business days of the meeting;
- 12.3 The CONSULTANT will review the Contractor's submittals such as Shop Drawings, Product Data and samples and take appropriate action (approve, approve with modifications, reject, etc.), but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such action will be taken with reasonable promptness to minimize delay. Reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto;
- 12.4 CITY will require the Contractor to submit to the CONSULTANT any request for additional information (RFI). The CONSULTANT will review and deliver to CITY its written recommendation regarding the RFI. It is anticipated that there will be two (2) RFI's per month during the Project. If additional RFI's are generated above four (4) per month compensation may be requested. RFIs deemed to be due to inconsistencies in the Contract Documents will not be counted in the estimated number of RFI's in the contract;
- 12.5 The CONSULTANT will review monthly pay estimates and recommend approval or other appropriate action on such estimates;

- 12.6 The CONSULTANT will perform with CITY representative(s) a final inspection of the Project to observe any apparent defects in the completed construction with regard to conformance with the design concept and intent of the specifications, assist CITY in consultation and discussions with the Contractor concerning such deficiencies, and make recommendations as to replacement or correction of the defective work;
- 12.7 After completion of the work, and before final payment to the Contractor, it will be CITY responsibility to require a set of "Record Drawings" from the Contractor, who has control of the work and who is in a position to know how the Project was constructed. The CONSULTANT, after receiving this information, will transfer the information to a set of "Record Drawings" or "As-Builts" for CITY permanent file. The CONSULTANT will also provide the As-Builts in PDF format. CITY will not hold the CONSULTANT responsible for the information provided by the Contractor;

13.0 CONCEPTUAL ANALYSIS

The tasks performed for the conceptual analysis will include, but are not limited to the following:

Drainage Analysis:

- 13.1 The CONSULTANT will perform a desktop analysis to identify an optimal culvert/bridge size and opinion of probable construction cost to replace the existing low water crossing culverts at Weir Road. Multiple options will be reviewed to pass the 2-, 5-, 10, 25- and 100-YR design storms.
- 13.2 The CONSULTANT will collect technical data from CITY, TNRIS, and previous CONSULTANT studies.
- 13.3 The CONSULTANT will perform one (1) field visit to view and measure field conditions for the existing crossing.
- 13.4 The CONSULTANT will utilize the FEMA effective model for this area and update as needed.
- 13.5 The CONSULTANT will check the Hydrology for the referenced HEC-RAS model, and it is expected that the 2- and 5-year peak flows will need to be added.
- 13.6 The CONSULTANT will verify the Hydraulic analysis for existing conditions.
- 13.7 The CONSULTANT will perform post-project modeling to analyze the crossing to pass the 2-, 5-, 10, 25- and 100-YR design storms (5 alternatives) without causing adverse impacts to adjacent properties. CONSULTANT will provide conceptual recommendations to mitigate impacts to adjacent properties.
- 13.8 The CONSULTANT will develop a brief technical memorandum outlining the modeling methodology and results/recommendations for the crossing.
- 13.9 The CONSULTANT will provide an opinion of probable construction cost for each of the 5 alternatives provided.

Structural Analysis:

- 13.10 The CONSULTANT will perform schematic level estimating services for structural solutions for a 2-, 5-, 10-, 25- and 100-YR flood crossing.
- 13.11 The CONSULTANT will prepare an Opinion of Probable Construction Cost (OPCC) for structural solutions for 2-, 5-, 10-, 25- and 100-YR flood crossing.
- 13.12 The CONSULTANT will prepare a 10% schematic level exhibit showing the estimated limits of crossings for 2-, 5-, 10-, 25- and 100-YR floods.

Assumptions and Exclusions:

- i. No designs concept plans included.
- ii. Analysis based on existing field conditions only, not based on future development.
- iii. Deliverables are electronic only
- iv. Survey is not required.
- v. No submittals or coordination with other agencies (i.e. FEMA, City, etc.)
- vi. Schematic level crossings shall include bridge limits and lengths only for estimating purposes only. The estimate excludes preliminary alignments, profiles, bent locations, foundation types, and all similar levels of detail.

14.0 EXCLUSIONS.

14.1 Exclusions are shown below:

- i. Technical reports or applicable documentation for the following items are excluded from the scope of services for this task: indirect impacts, cumulative impacts, Section 4(f) and 6(f) impacts, Chapter 26 impacts.
- ii. Preparation of an Environmental Assessment and Environmental Impact Statement are not included in the scope of work for this task.
- iii. This scope of work excludes any coordination or documentation associated with a Presidential Permit application.
- iv. This scope of work excludes any coordination or documentation associated with the Natural Resources Code, Chapter 183.
- v. The scope of work for this task does not include karst, threatened or endangered species surveys or Section 7 consultation with the USFWS under the Endangered Species Act.
- vi. This scope of work does not include a geologic assessment.
- vii. This scope of work does not include preparation of a USACE Section 408 Application, Individual Permit Application, or a mitigation plan.
- viii. This scope of work does not include preparation of checklists for Section 4(f) exception determinations, Section 4(f) programmatic evaluations, or individual Section 4(f) evaluations.
- ix. Efforts for a virtual public meeting and/or public hearing are not included in this scope of work.
- x. Construction plans, bidding, or development of design details are not included in this scope of work.
- xi. Permitting or review fees are not included in this scope of work.
- xii. Grant writing or administration is not included in this scope of work.
- xiii. The scope of work for this task excludes all subsurface utility investigations.
- xiv. The scope of work for this task does not include the development of a traffic control plan for construction. Half assumes the roadway will remain closed to traffic and all existing signage shall remain in place.
- xv. The scope of work for this task excludes scour analysis.

If the CITY, or a regulatory agency requires additional information other than that specified in this scope of work, then a supplemental services agreement will be required.

Weir Road at Cibolo Creek Crossing Reconstruction PS&E
Estimated Level of Effort for PS&E and Construction Phase Services

POSITION DESCRIPTION		Sr. Project Manager/QAQC	Project Manager	Senior Engineer	Project Engineer	EIT	Senior CADD Tech	Senior RPLS/PSM	RPLS/PSM	Senior Survey Tech/SIT	2-Man Survey Crew	Senior SUE Manager	SUE Field Manager	SUE 1-Man Designator	Admin	SubConsultant Fee	Non-Labor Cost	Total Labor hrs.	Cost
BILLABLE LABOR RATES		\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00	Lump Sum			
1) Project Administration and Coordination																			
1.1	Invoicing/Monthly Reports/Project Coordination																		\$ -
1.2	Prepare Monthly Invoices and Progress Reports (Assumes 2 Invoice Submittals plus 4 construction phase)		6															6	\$ 1,410.00
1.3	Update Project Schedule		6															6	\$ 1,410.00
1.4	Monthly Status Report of Decisions/Agreements made and unresolved or pending issues		3															3	\$ 705.00
1.5	Attend Project Kick-Off Meeting		2			2												4	\$ 790.00
1.6	Attend Monthly Coordination Meeting with City of Schertz (2 Meetings)		2			2												4	\$ 790.00
1.7	Attend Design Concept Meeting		1			1												2	\$ 395.00
1.8	Attend Design Review Meetings (90% Submittal)		1			1												2	\$ 395.00
1.9	Comment Resolution Meetings (90% Submittal)		1			1												2	\$ 395.00
	Total Hours		22			7												29	
SUMMARY																			
	HOURS SUB-TOTALS		22			7												29	\$ 6,290.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				
	TOTAL - Project Administration and Coordination	\$ -	\$ 5,170.00	\$ -	\$ -	\$ 1,120.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			\$ 6,290.00
2) Project Design Criteria																			
2.1-2.3	Project Specifications		8															8	\$ 1,880.00
	Total Hours		8															8	
SUMMARY																			
	HOURS SUB-TOTALS		8															8	\$ 1,880.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				-
	TOTAL - Project Design Criteria Services	\$ -	\$ 1,880.00	\$ -	\$ -	\$ -	\$ -								\$ -	\$ -	\$ -		\$ 1,880.00
3) Surveying Services																			
3.1-3.11	Topographic Survey/Research/Control/Deliverable								20	24	20							64	\$ 11,440.00
	Total Hours								20	24	20							64	
SUMMARY																			
	HOURS SUB-TOTALS								20	24	20							64	\$ 11,440.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				-
	TOTAL - Surveying Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,800.00	\$ 3,240.00	\$ 4,400.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 11,440.00
4) Geotechnical Investigation (Raba-Kistner)																			
4.1	See Raba-Kistner Proposal															\$ 14,700.00		10	\$ -
	Subconsultant Coordination for Geotechnical Services		10															10	\$ 2,350.00
	Total Hours		10															10	
SUMMARY																			
	HOURS SUB-TOTALS		10															10	\$ 2,350.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				-
	TOTAL - Geotechnical Services	\$ -	\$ 2,350.00	\$ -	\$ -	\$ -	\$ -								\$ -	\$ 14,700.00	\$ -		\$ 17,050.00

Weir Road at Cibolo Creek Crossing Reconstruction PS&E
Estimated Level of Effort for PS&E and Construction Phase Services

POSITION DESCRIPTION		Sr. Project Manager/QAQC	Project Manager	Senior Engineer	Project Engineer	EIT	Senior CADD Tech	Senior RPLS/PSM	RPLS/PSM	Senior Survey Tech/SIT	2-Man Survey Crew	Senior SUE Manager	SUE Field Manager	SUE 1-Man Designator	Admin	SubConsultant Fee	Non-Labor Cost	Total Labor hrs.	Cost
BILLABLE LABOR RATES		\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00	Lump Sum			
5) Roadway Design Services																			
5.1 - 5.14	Roadway Design (PS&E)																		
5.1	Develop Horizontal & Vertical Geometry		2			4												6	\$ 1,110.00
5.2	Develop Title Sheet		1			4												5	\$ 875.00
5.3	Develop Index of Sheets		1			4												5	\$ 875.00
5.4	Develop Project Layout Sheets (1"=100' double stacked) (1 Sheet)	2	2			8												12	\$ 2,330.00
5.5	Prepare Existing and Proposed Typical Sections (2 sheets)		4			8												12	\$ 2,220.00
5.6	Prepare Removal Layouts Sheets (1"=50' double stacked) (1 Sheet)		2			16												18	\$ 3,030.00
5.7	Develop Horizontal Alignment Data Sheets.(1 Sheet)		1			4												5	\$ 875.00
5.8	Develop Roadway P&P Sheets (1"=50' H, 1"=10' V) (1 Sheet)		6			24												30	\$ 5,250.00
5.9	Prepare Miscellaneous Roadway Details (2 Sheets)		2			4												6	\$ 1,110.00
5.10	Prepare Cross Sections (50' increment, 1"=20' H, 1"=10') (2 sheets)		4			16												20	\$ 3,500.00
5.11	Assembly of Applicable City of Schertz and/or TXDOT Standards.		2			4												6	\$ 1,110.00
5.12	Prepare Quantity Sheets (2 submittals)		2			8												10	\$ 1,750.00
5.13	Development of Special Specs and General Notes		1			4												5	\$ 875.00
5.14	Opinion of Probably Construction Cost (2 submittals)		2			8												10	\$ 1,750.00
																			\$ -
Total Hours		2	32			116												150	
SUMMARY																			
	HOURS SUB-TOTALS	2	32			116												150	\$ 26,660.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Roadway Design Services	\$ 580.00	\$ 7,520.00	\$ -	\$ -	\$ 18,560.00	\$ -								\$ -	\$ -	\$ -		\$ 26,660.00
6) Drainage Design Services																			
6.1 - 6.5	Drainage Design (PS&E)																		
6.1	Develop Culvert Layout Sheets (1"=20' H, 1"=10' V) (10 sheets)	2	8			24												34	\$ 6,300.00
6.2	Prepare Quantity Sheets (2 submittals)		2			8												10	\$ 1,750.00
6.3	Assembly of Applicable City of Schertz and/or TXDOT Standards.		2			8												10	\$ 1,750.00
6.4	Preparation of Design Exception Requests																		\$ -
6.5	Opinion of Probably Construction Cost (2 submittals)		2			8												10	\$ 1,750.00
Total Hours		2	14			48												64	
SUMMARY																			
	HOURS SUB-TOTALS	2	14			48												64	\$ 11,550.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Drainage Design Services	\$ 580.00	\$ 3,290.00	\$ -	\$ -	\$ 7,680.00	\$ -								\$ -	\$ -	\$ -		\$ 11,550.00
7) Structural Design Services																			
7.1 -7.4	Structural Design (PS&E)																		
	Meetings and Coordiantion, Headwall Design	2	10		38		28											78	\$ 14,350.00
																			\$ -
Total Hours		2	10		38		28											78	
SUMMARY																			
	HOURS SUB-TOTALS	2	10		38		28											78	\$ 14,350.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Bridge Design Services	\$ 580.00	\$ 2,350.00	\$ -	\$ 7,220.00	\$ -	\$ 4,200.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 14,350.00
8) Traffic Signal Design, Signing and Pavement Marking Services																			
8.1	Prepare Signing, Pavement Marking, and Delineation Layouts (1" = 50')	1	4			16												21	\$ 3,790.00
8.2	Special Pavement Marking Details																		\$ -
8.3	Summary of Small Signs		2			4												6	\$ 1,110.00
8.4	Assembly of Applicable City of Schertz and/or TXDOT Standards.		2			4												6	\$ 1,110.00
8.5	Prepare Signing and Pavement Marking Quantity & Summary Sheets (2 submittals)		2			4												6	\$ 1,110.00
Total Hours		1	10			28												39	
SUMMARY																			
	HOURS SUB-TOTALS	1	10			28												39	\$ 7,120.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Traffic, Signing and Pavement Marking Services	\$ 290.00	\$ 2,350.00	\$ -	\$ -	\$ 4,480.00	\$ -								\$ -	\$ -	\$ -		\$ 7,120.00
9) Environmental, Storm Water Management Plan and Tree Preservation Services																			
9.1	SWPPP Narrative		2			8												10	\$ 1,750.00
9.2	SWPPP Layouts		2			12												14	\$ 2,390.00
9.3	Calculate Quantities for Estimate (2 submittals)		2			4												6	\$ 1,110.00
9.4	Standards Development		2			4												6	\$ 1,110.00
9.5	Tree Protection Details		2			4												6	\$ 1,110.00
Total Hours			10			32												42	
SUMMARY																			
	HOURS SUB-TOTALS		10			32												42	\$ 7,470.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Environmental/SW3P/Tree Protection Services	\$ -	\$ 2,350.00	\$ -	\$ -	\$ 5,120.00	\$ -								\$ -	\$ -	\$ -		\$ 7,470.00

Weir Road at Cibolo Creek Crossing Reconstruction PS&E
Estimated Level of Effort for PS&E and Construction Phase Services

POSITION DESCRIPTION		Sr. Project Manager/QAQC	Project Manager	Senior Engineer	Project Engineer	EIT	Senior CADD Tech	Senior RPLS/PSM	RPLS/PSM	Senior Survey Tech/SIT	2-Man Survey Crew	Senior SUE Manager	SUE Field Manager	SUE 1-Man Designator	Admin	SubConsultant Fee	Non-Labor Cost	Total Labor hrs.	Cost
BILLABLE LABOR RATES		\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00	Lump Sum			
10) Submittal Requirements																			
10.1 - 10.3	Submittal Requirements																		
10.1	Submittal Review Meetings (1) & Submittals (2)		1			4												5	\$ 875.00
10.2	Compiling 90% Submittal		1			4												5	\$ 875.00
10.3	Compiling 100% Submittal		1			4												5	\$ 875.00
Total Hours			3			12												15	
SUMMARY																			
	HOURS SUB-TOTALS		3			12												15	\$ 2,625.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Submittal Requirements	\$ -	\$ 705.00	\$ -	\$ -	\$ 1,920.00	\$ -								\$ -	\$ -	\$ -		\$ 2,625.00
11) Bid Phase Services																			
11.1 - 11.5	Bid Phase Services																		
11.1	Attend Pre-Bid Meeting		2			2												4	\$ 790.00
11.2	Respond to Contractor questions		2			4												6	\$ 1,110.00
11.3	Attend formal bid opening		2			2												4	\$ 790.00
11.4	Develop Final Bid Tab Summary and Recommendation		2			4												6	\$ 1,110.00
11.5	Final Plans, Project Manual, and SW3P Manual		2			8												10	\$ 1,750.00
Total Hours			10			20												30	\$ -
SUMMARY																			
	HOURS SUB-TOTALS		10			20												30	\$ 5,550.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Bid Phase Services	\$ -	\$ 2,350.00	\$ -	\$ -	\$ 3,200.00	\$ -								\$ -	\$ -	\$ -		\$ 5,550.00
CONSTRUCTION PHASE SERVICES																			
12) Construction Phase Services																			
12.1-12.7	Construction Services																		
12.1	Attend Pre-Construction conference		2			2												4	\$ 790.00
12.2	Attend Monthly Construction Progress Meeting (Assume 4 Meetings)		4			4												8	\$ 1,580.00
12.3	Review Shop Drawings, Product Data and Samples		4			16												20	\$ 3,500.00
12.4	Answer RFIs (Assume 2 RFIs per month for 4 months @ 2 Hrs/RFI)		4			16												20	\$ 3,500.00
12.5	Review Monthly Pay Estimates		2			2												4	\$ 790.00
12.6	Perform Final Inspection		2			2												4	\$ 790.00
12.7	Create Record Drawings		4			8												12	\$ 2,220.00
Total Hours			22			50												72	
SUMMARY																			
	HOURS SUB-TOTALS		22			50												72	\$ 13,170.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Construction Services	\$ -	\$ 5,170.00	\$ -	\$ -	\$ 8,000.00	\$ -								\$ -	\$ -	\$ -		\$ 13,170.00
TOTAL PROJECT SUMMARY																			
	HOURS SUB-TOTALS	7	151		38	313	28		20	24	20							601	\$ 125,155.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL PROJECT FOR BASIC SERVICES	\$ 2,030.00	\$ 35,485.00	\$ -	\$ 7,220.00	\$ 50,080.00	\$ 4,200.00	\$ -	\$ 3,800.00	\$ 3,240.00	\$ 4,400.00	\$ -	\$ -	\$ -	\$ -	\$ 14,700.00	\$ -		\$ 125,155.00
		1.62%	28.35%		5.77%	40.01%	3.36%									11.75%			
CONCEPTUAL ANALYSIS																			
Conceptual Analysis																			
13.1-13.9	Drainage Analysis	2		20	60													82	\$ 16,380.00
13.10-13.12	Structural Analysis				16		20											36	\$ 6,040.00
Total Hours		2		20	76		20											118	
SUMMARY																			
	HOURS SUB-TOTALS	2		20	76		20									\$ -		118	\$ 22,420.00
	BILLABLE RATE PER HOUR	\$ 290.00	\$ 235.00	\$ 220.00	\$ 190.00	\$ 160.00	\$ 150.00	\$ 245.00	\$ 190.00	\$ 135.00	\$ 220.00	\$ 215.00	\$ 155.00	\$ 150.00	\$ 105.00				\$ -
	TOTAL - Conceptual Analysis	\$ 580.00	\$ -	\$ 4,400.00	\$ 14,440.00	\$ -	\$ 3,000.00								\$ -	\$ -			\$ 22,420.00

ATTACHMENT 'A'

Roadway, Culverts, and Headwall Reconstruction

Legend

 Weir Road at Cibolo Creek Crossing Project Location



Google Earth

Image Landsat / Copernicus

600 ft

