TASK ORDER FORM

This is Task Order No. 05 , consisting of 62 pages.

Task Order

In accordance with Paragraph 1.01 of the Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated [October 17, 2019] ("Agreement"), Owner and Engineer agree as follows:

1. Background Data

a. Effective Date of Task Order:

b. Owner: The City of Schertz

c. Engineer: Kimley-Horn and Associates, Inc.

d. Specific Project (title): Dedicated Transmission Main

e. Specific Project (description): The City of Schertz plans to install a 16-inch dedicated transmission main to connect the ground storage tank at Live Oak Road near FM 3009 (Live Oak Tank) to the elevated storage tank near Hope Lane and Tulip Street (I-35 Tank). The purpose of this task order is to design and construct the proposed transmission main, which will follow up the recently completed route study and preliminary engineering phase.

2. Services of Engineer

A. The specific services to be provided or furnished by Engineer under this Task Order are:

☐ as follows: [Reference Engineer Scope and Fee proposal dated May 14, 2021]

B. Resident Project Representative (RPR) Services: Does Not Apply

C. Designing to a Construction Cost Limit: Does Not Apply

D. Other Services: None

E. All of the services included above comprise Basic Services for purposes of Engineer's compensation under this Task Order.

2. Additional Services

A. Additional Services that may be authorized or necessary under this Task Order are:

☐ as follows: [Reference Engineer scope and fee proposal dated May 14, 2021 for supplemental and additional service tasks. Additionally, items specifically excluded from the basic scope of services are listed under the exclusions section of the referenced scoped and fee proposal and were not included in the base compensation. In the event items excluded from scope and fee are required

to finalize scope associated with this work authorization, or assumptions are modified throughout the project, the need for additional services will be required. Engineer will notify the City of Schertz and submit an additional service proposal for additional tasks and will proceed once an amended work authorization is fully executed. For supplemental service items included in the referenced scope and fee proposal, Engineer will submit a request for authorization of supplemental funds letter to the City prior to commencing work.]

3. Owner's Responsibilities

Owner shall have those responsibilities set forth in Article 2 of the Agreement and in Exhibit B, subject to the following: *[Reference Engineer Scope and Fee Proposal for items to be provided by owner. Additionally, City shall provide results of proposed system model analysis for the review of connection options to the I-35 Tank]*

4. Task Order Schedule

In addition to any schedule provisions provided in Exhibit A or elsewhere, the parties shall meet the following schedule:

The proposed schedule for this work authorization is based on a total duration of 24 months, inclusive of design, bid and construction. This schedule is highly contingent on the receipt of items to be provided by owner, ultimate results of the environmental investigation, cooperation of property owners to access private property, and the timely completion of land acquisition services by property owners for each parcel identified. Any delays with obtaining this information will impact design milestone and the schedule will be adjusted accordingly. For the purposes of this task order schedule, a Notice to Proceed date of June 12, 2021 has been assumed.

Notice to Proceed (NTP) – June 14, 2021
60% Design Services – June 15, 2021 to November 18, 2021
City 60% Design Review – November 19, 2021 to December 10, 2021
100% Design Services (Unsigned Submittal) – December 13, 2021 to February 10, 2022
City 100% Design Unsigned Review – February 11, 2022 to February 23, 2022
Procurement including Signed and Sealed Construction Drawings – February 24, 2022 to April 29, 2022
Anticipated Delivery Date of Signed and Sealed Construction Drawings is March 10, 2022
Construction – May 2, 2022 to June 15, 2023
Includes council action and Contractor NTP

Party	Action	Schedule
Engineer	**Furnish [N/A] review copies of the Report and other Study and Report Phase deliverables to Owner.**	**Within [N/A] days of the Effective Date of the Task Order.**
Owner	**Submit comments regarding Report and other Study and Report Phase deliverables to Engineer.**	**Within [N/A] days of the receipt of Report and other Study and Report Phase deliverables from Engineer.**

Engineer	**Furnish [N/A] copies of the revised Report and other Study and Report Phase deliverables to Owner.**	**Within [N/A] days of the receipt of Owner's comments regarding the Report and other Study and Report Phase deliverables.**
Engineer	**Furnish [N/A] review copies of the Preliminary Design Phase documents,**	**Within [N/A] days of Owner's authorization to proceed with Preliminary Design Phase**
	opinion of probable Construction Cost, and other Preliminary Design Phase deliverables to Owner.	**services.**
Owner	**Submit comments regarding Preliminary Design Phase documents, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables to Engineer.**	**Within [N/A] days of the receipt of Preliminary Design Phase documents, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables from Engineer.**
Engineer	**Furnish [pdf] copies of the 60% Design documents, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables to Owner.**	**[Per Schedule above] from receipt of Owner's Notice to proceed to the 60% Design Phase Deliverable Date, submit 60% Design Phase documents, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables.**
Engineer	**Furnish [pdf] copies of the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables, to Owner.**	**[Per Schedule above] from Owner's delivery of design comments and authorization to proceed with Final Design Phase services.**
Owner	**Submit comments and instructions regarding the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables, to Engineer.**	**Within [13] days of the receipt of the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables from Engineer.**
Engineer	**Furnish [5] copies of the revised final Drawings and Specifications, assembled Construction Contract Documents, bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables, to Owner.**	**Within [15] days of the receipt of Owner's comments and instructions regarding the final Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables**

5. Payments to Engineer

A. Owner shall pay Engineer for services rendered under this Task Order as follows:

Task	Description of Service	Amount	Basis of Compensation
	BASIC SERVICES		
1	Project Management	$ 54,190.00	[Lump Sum]
2	Environmental	$ 48,310.00	[Lump Sum]
3	Land Acquisition Coordination	$ 253,000.00	[Lump Sum]
4	Permit Coordination	$ 26,500.00	[Lump Sum]
5	Geotechnical Investigation and Report Preparation	$ 44,655.00	[Lump Sum]
6	Subsurface Utility Engineering (SUE)	$ 90,705.00	[Lump Sum]
7	Survey Services	$ 180,535.00	[Lump Sum]
8	60% Design	$ 136,720.00	[Lump Sum]
9	100% Design	$ 71,525.00	[Lump Sum]
10	Procurement	$ 27,485.00	[Lump Sum]
11	Construction Phase Services	$ 84,180.00	[Lump Sum]
12	Record Drawing Preparation	$ 7,380.00	[Lump Sum]
13	Reimbursable Project Expenses	$ 5,600.00	[Lump Sum]
	Total Compensation (BASIC SERVICES)	**$ 1,030,785.00**	**[Lump Sum]**
	SUPPLEMENTAL SERVICES		
S-1	Supplemental Design Services	$ 75,760.00	[Lump Sum]
S-2	Environmental	$ 59,400.00	[Lump Sum]
S-3	Land Acquisition Coordination	$ 156,200.00	[Lump Sum]
S-4	Geotechnical	$ 12,860.00	[Lump Sum]
S-5	Subsurface Utility Engineering (SUE)	$ 15,810.00	[Lump Sum]
S-6	Survey	$ 20,890.00	[Lump Sum]
	Total Compensation (SUPPLEMENTAL SERVICES)	**$ 340,920.00**	**[Lump Sum]**
	Total Compensation (BASIC + SUPPLEMENTAL SERVICES)	**$ 1,371,705.00**	**[Lump Sum]**

*Based on a [24] -month continuous design and construction period.

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 Consultants' 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.

B. The terms of payment are set forth in Article 4 of the Agreement and in the applicable governing provisions of Exhibit C.

6. **Consultants retained as of the Effective Date of the Task Order:** Kimley-Horn and Associates, Inc.

7. **Other Modifications to Agreement and Exhibits:** Scope associated with this task order is identified in scope and fee proposal dated May 14, 2021. No other modifications to Agreement and Exhibits are proposed at this time

8. **Attachments:** Engineer scope and fee proposal dated May 14, 2021

9. **Other Documents Incorporated by Reference:** None

10. **Terms and Conditions**

Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is [ ].

OWNER:	ENGINEER:
By: _____	By: _____
Print Name: Dr. Mark Browne	Print Name: Jeffrey A. Farnsworth, PE
Title: City Manager	Title: Asst. Secretary
	Engineer License or Firm's Certificate No. (if required): 80190
	State of: Texas
DESIGNATED REPRESENTATIVE FOR TASK ORDER:	DESIGNATED REPRESENTATIVE FOR TASK ORDER:
Name: Kathryn Woodlee, PE	Name: Stephen J. Aniol, PE
Title: City Engineer	Title: Senior Project Manager
Address: 11 Commercial Place, Schertz, TX 78153	Address: 601 NW Loop 410, Ste. 350 San Antonio, TX 78216
E-Mail Address: kwoodlee@schertz.com	E-Mail Address: stephen.aniol@kimley-horn.com
Phone: (210) 619-1823	Phone: (210) 321-3404

May 14, 2021

Jennifer Shortess, PE
Project Manager
City of Schertz – Engineering
11 Commercial Place
Schertz, Texas 78154

RE: ***16-Inch Dedicated Transmission Main Project (Live Oak Tank Site to I-35 Tank) – Scope and Fee Proposal (Task Order – 05)***

Dear Ms. Shortess:

Kimley-Horn and Associates (Kimley-Horn) is pleased to submit this scope and fee proposal for professional engineering services for the Dedicated Transmission Main (DTM) project. Kimley-Horn previously completed a pipeline routing study with alternative alignments and submitted the final Preliminary Engineering Report (PER) and 30% plans on March 18, 2021. This scope and fee proposal includes design, bid and construction phase services for the proposed 16-inch transmission main, and is based on a design scoping meeting held on February 12, 2021 between Kimley-Horn and the City.

PROJECT UNDERSTANDING

It is our understanding that this project will entail full design, bid and construction phase services for the Dedicated Transmission Main project, with the design building upon the recently completed PER and 30% plans. The selected alignment is approximately 3.53-miles in length and will serve specifically as a transmission main with the intent of minimum connection. The transmission main is currently proposed to connect to the existing system at two locations: 1) west of FM 3009 and approximately 1,000-LF north of Live Oak Road, and 2) at an unknown point at the I-35 elevated storage tank site near Hope Lane and Tulip Street. Kimley-Horn will engage multiple sub-consultants to provide a variety of services for the design development phase, including survey, geotechnical engineering, subsurface utility engineering (SUE), environmental sampling and limited site investigations (LSI), archaeology, and land acquisition support services.

The connection to the I-35 tank site is unknown at this time. Options currently being considered include a direct connection to the elevated storage tank or a tap into the existing main within the site. The City is coordinating with a separate consultant under contract to develop a masterplan to run hydraulic modeling scenarios of the proposed transmission main. The separate consultant will provide modeling results to the City with recommended connection options at the I-35 tank site and confirm the diameter of the dedicated transmission Main.

The City has also expressed an interest to bid out as a separate project two locations where an existing, in-active Chevron petroleum pipeline will require removal for installation of the proposed transmission main. Kimley-Horn coordinated with Chevron's Owners Representative during the PER phase and they have confirmed the pipe to be inactive.

BASIC SERVICES

The tasks below outline the proposed basic scope of services to be completed by Kimley-Horn for this project, and coincide with the detailed project work plan included as an Attachment:

1. Project Management
    - 1.1. Prepare Monthly Summary Reports/Invoicing
    - 1.2. Sub-Contract Management
    - 1.3. Update Project Management Plan
    - 1.4. Schedule Development and monthly updates – Schedule will be developed in Microsoft Project format and pdf copy will accompany the monthly invoice.
    - 1.5. Ongoing coordination and communications with Client and internal team meetings
        - 1.5.1. Includes monthly Project Manager meetings
    - 1.6. Dietz Creek Silt Removal Project Coordination
        - 1.6.1. Kimley-Horn will coordinate with the City's consultant on this project and incorporate any adjustments of the creek boundary into the proposed design. Kimley-Horn recommends the City complete the Dietz Creek project first (if feasible) so it does not impede with the DTM project design schedule.
    - 1.7. Meetings
        - 1.7.1. Prepare for and conduct monthly progress meetings with Client (nine (9) meetings)
        - 1.7.2. Prepare meeting notes
    - 1.8. Deliverables
        - 1.8.1. Project Management Plan in Adobe PDF format
        - 1.8.2. Monthly schedule updates in Adobe PDF format

2. Environmental Desktop Review
    - 2.1. Environmental Phase/Sub-Consultant Coordination
    - 2.2. Waters of the US Memo Study
        - 2.2.1. Archaeologist Desktop Review and Initial THC Submittal
        - 2.2.2. Site Visit
        - 2.2.3. Nationwide Permit (NWP) 58 Memo to File
            - 2.2.3.1. At this time it is unknown if preconstruction notification to the USACE will be required. The 30% alignment developed during the preliminary engineering phase was based on available maps, aerial imagery and windshield studies. Kimley-Horn will evaluate existing conditions along the confirmed alignment, identify the ordinary high-water mark and determine if impacts exceed the threshold for NWP 58.
            - 2.2.3.2. Based on the assumption that pre-construction notification is not required, Kimley-Horn will provide a descriptive memo discussing the use of NWP 58 (Utility Line

Activities for Water and Other Substances) under a non-notification scenario. The memo can be used to document the non-notification permitting scenario and to provide the selected contractor with information relating to permit compliance. A description of selected General Conditions and a suggested list of Best Management Practices (BMPs) required for compliance with the Texas Commission on Environmental Quality (TCEQ) water quality certification will be included. Though no notification with the USACE is anticipated, the use of this permit constitutes compliance with appropriate Federal regulations. All terms and conditions of the permit must be met by the owner.

2.3. Phase I ESA
- 2.3.1. Records Review
- 2.3.2. Site Reconnaissance
- 2.3.3. Interviews
- 2.3.4. Phase I ESA Report Preparation
  - 2.3.4.1. Kimley-Horn will prepare a report of the results of the Phase I ESA in accordance with ASTM E 1527-13. This task assumes preparation of one (1) Phase I ESA for the project corridor

2.4. Cultural Resource Coordination
- 2.4.1. Cultural Resource Survey
- 2.4.2. THC Coordination

2.5. Environmental Monitoring and Sampling
- 2.5.1. Limited Site Investigation (LSI)
  - 2.5.1.1.
  - 2.5.1.2. Includes two soil borings with laboratory analyses, one adjacent to each Chevron pipeline crossing

2.6. Review Phase I ESA/LSI

2.7. Deliverables
- 2.7.1. Phase I ESA (Corridor) in Adobe PDF format
- 2.7.2. Cultural Resources Survey in Adobe PDF format
- 2.7.3. Limited Site Investigation in Adobe PDF format

3. Land Acquisition Coordination

3.1. Land Acquisition Phase/Sub-Consultant Coordination

3.2. Acquisition Services for a total of twenty (20) parcels for both permanent and temporary construction easement.
- 3.2.1. Title &Title Curative
- 3.2.2. Administrative Fee
- 3.2.3. Permanent Easement/Temporary Construction Easement Acquisition (17 parcels)
- 3.2.4. Temporary Construction Easement Acquisition (2 parcels)
- 3.2.5. In Fee Acquisition (1 parcel)
- 3.2.6. Closing Services

3.3. Appraisal Services for eighteen (18) permanent and temporary construction easement combination and one (1) temporary construction easement. Consultant will prepare and complete appraisals to be administratively reviewed and approved by the City.
  3.3.1. Permanent Easement & Temporary Construction Easement
  3.3.2. Temporary Construction Easement Only

4. Permit Coordination

4.1. Perform ongoing coordination and communication with each permitting entity
4.2. Meetings
  4.2.1. Prepare for and conduct coordination meetings with each of the following entities/agencies (assume six (6) meetings total):
    4.2.1.1. TxDOT
    4.2.1.2. City of Cibolo
    4.2.1.3. Guadalupe County
    4.2.1.4. Texas Commission on Environmental Quality (TCEQ)
    4.2.1.5. Other impacted entities/agencies
  4.2.2. Prepare meeting notes
4.3. Permits
  4.3.1. TxDOT Utility Installation Request (UIR)
  4.3.2. Chevron Petroleum Pipeline

5. Preliminary Geotechnical Investigation

Perform soil bores along alignment to establish representative subsurface conditions and at major trenchless crossings (major intersections, creeks, etc.). Seventeen (16) bores to an average depth of twenty (20) feet and seven (7) pavement bores to an average depth of ten (10) feet are assumed. Consultant will complete the following tasks:

5.1. Geotechnical Sub-Consultant Coordination
5.2. Prepare Geotechnical Bore Plan Exhibits
5.3. Review Draft Boring Logs
5.4. Review Draft Geotechnical Engineering Report
5.5. Perform Geotechnical Borings
5.6. Laboratory Testing to determine physical and engineering sample characteristics.
5.7. Report Development
5.8. Deliverables
  5.8.1. Final Geotechnical Engineering Report in Adobe PDF format

6. Subsurface Utility Engineering (SUE)

Perform Quality Level (QL) A and B SUE services to identify the location and depth of existing critical utilities crossing selected alignment. Given the analysis during the 30% Preliminary Engineering Report Phase, a total of forty-seven (47) QL-A SUE services have been assumed. Consultant will complete the following tasks:

6.1. Prepare a detailed SUE plan for Final Design
6.2. SUE and Survey Field Coordination
6.3. SUE QL-A and QL-B Services
6.4. Review draft QL "A" SUE Test Hole Summary Sheet and individual QL "A" Exhibits
6.5. Review draft QL "B" SUE Markings
6.6. Deliverables
    6.6.1. Draft QL "A" SUE Test Hole Data Sheets in Adobe PDF format
    6.6.2. Final QL "A" SUE Test Hole Data Sheets in Adobe PDF format
    6.6.3. Signed and Sealed Test Hole Data Forms and Test Hole Summary Sheet in Adobe PDF format
    6.6.4. Utility file in CAD format depicting all designated and located utilities

7. Survey Services

Provide full topographic survey, in accordance with survey scope detailed in Attachment 5, for development of design drawings:

7.1. Survey Sub-Consultant coordination
7.2. Topographic Survey
7.3. Detailed Tree Survey
7.4. Obtain Geotechnical Information with Support Files
7.5. Obtain SUE Information with Supporting Files
7.6. Dietz Creek Channel Improvements re-survey
7.7. Project Control Sheet
    7.7.1. Review Project Control Sheet 60% Design Phase
    7.7.2. Review Project Control Sheet 100% Design Phase (Unsigned)
7.8. Easement Strip Map
    7.8.1. Review Easement Strip Map 60% Design Phase
    7.8.2. Review Easement Strip Map 100% Design Phase (Unsigned)
7.9. Plat and Field Notes (PFNs) (19 EA)
    7.9.1. Review Plat and Field Notes

8. 60% Design Phase

8.1. 60% Stakeholder and Utility Provider Coordination
8.2. Conduct site visits for 60% design and survey validation
8.3. Prepare Utility Layout Sheets
8.4. Prepare Utility Conflict/Coordination Matrix
8.5. Meetings
    8.5.1. Conduct coordination meetings with impacted utilities (assume four (4) meetings total). Consultant will prepare meeting agenda and necessary exhibits/graphics.
    8.5.2. Prepare and distribute meeting notes
8.6. 60% Construction Drawings
    8.6.1. Perform Design Calculations
        8.6.1.1. Joint Restraint Calculations (for one (1) pipe material)

8.6.1.2. Channel Embankment Stabilization
8.6.1.3. Scour
8.6.1.4. Buoyancy
8.6.1.5. Combination Air Vacuum and Air Release Valve (location)
8.6.1.6. Blow-off Valve (location)

8.6.2. Develop 60% Plan Set
8.6.2.1. All plan sheets to be 22”x34”
8.6.2.2. General Sheets (Cover, Project Layout, General Notes, Overall Quantities, etc.)
8.6.2.3. Overall Dimensional Control Plan
8.6.2.4. Survey Control Sheets
8.6.2.5. Contractor access sheets (including permanent access driveways, low water crossings, etc)
8.6.2.6. Plan and Profile sheets (Scale: 1”=100’ H, 1”=20’ V (22”x34” Sheets))
8.6.2.7. Erosion Control Sheets
8.6.2.8. Standard Details
8.6.2.9. Project Specific Details
8.6.2.10. Traffic Control Sheets
8.6.2.11. Tree Preservation Plans

8.7. Preparation of 60% Project Manual
8.8. 60% Opinions of Probable Construction Cost
8.9. Perform internal QC and address QC comments.
8.10. Prepare and Submit 60% Design Submittal Package
8.11. Review City Comments and Provide Response to Comments
8.12. 60% Design Review Meeting
8.12.1. Conduct 60% Design Review Meeting
8.12.2. Prepare and distribute meeting notes
8.13. 60% Design Phase Deliverables
8.13.1. 60% Design Deliverables (plans and specifications)
8.13.2. Draft Geotechnical Report
8.13.3. Draft Environmental Phase 1 ESAs and LSI Report
8.13.4. Updated list of permits required for the project
8.13.5. SUE Deliverables
8.13.6. Updated Project Schedule
8.13.7. 60% Design Review meeting notes
8.13.8. 60% Opinion of Probable Construction Cost (OPCC)

9. 100% Design Phase
9.1. 100% Stakeholder and Agency Coordination
9.2. Conduct site visits as needed for 100% design
9.3. Update Utility Layout Sheets
9.4. Update utility conflict/coordination matrix
9.5. Meetings

9.5.1. Conduct coordination meetings with impacted utilities (assume four (4) meetings total). Consultant will prepare meeting agenda and necessary exhibits/graphics.
9.5.2. Prepare and distribute meeting notes
9.6. 100% Construction Drawings
9.6.1. General Sheets (Cover, Project Layout, General Notes, Overall Quantities, etc.)
9.6.2. Overall Dimensional Control Plan
9.6.3. Survey Control sheets
9.6.4. Contractor access sheets (including permanent access driveways, low water crossings, etc)
9.6.5. Plan and Profile sheets (Scale: 1"=50' H, 1"=5' V (22"x34" Sheets))
9.6.6. Erosion Control Sheets
9.6.7. Standard Details
9.6.8. Project Specific Details
9.6.9. Traffic Control Plans
9.6.10. Tree Preservation Plans
9.7. 100% Project Manual
9.7.1. Contract Documents to include language for Request for Competitive Sealed Proposals (RFCSP)
9.7.2. To include all applicable specifications approved by the City of Schertz and specific to the project, Special Provisions, and Special Conditions
9.8. 100% Opinions of Probable Construction Cost
9.9. Perform internal QC and address QC comments
9.10. Prepare and Submit 100% Design Submittal Package (Unsigned)
9.11. Review City Comments and Provide Response to Comments
9.12. 100% Unsigned Design Review Meeting
9.13. 100% Unsigned Design Phase Deliverables
9.13.1. 100% Design Deliverables (plans and specifications) – Unsigned and Sealed
9.13.2. Final Geotechnical Report
9.13.3. Final Environmental Phase 1 ESAs and LSI Report
9.13.4. Permits
9.13.5. Updated Project Schedule
9.13.6. 100% Design Review meeting notes
9.13.7. 100% Opinion of Probable Construction Cost (OPCC)

10. Procurement
10.1. Final QA/QC of Construction Drawings and Project Manual
10.2. Signed and sealed 100% Construction Drawings
10.3. Singed and sealed 100% Project Manual
10.4. Submit Final Documents for Advertisement
10.5. Pre-Bid Conference
10.5.1. Prepare Meeting Agenda and attend Pre-Bid Conference
10.5.2. Prepare meeting minutes consolidating contractor questions
10.5.3. Attend Site Walk

10.6. Prepare Addenda and Clarifications
10.7. Attend Proposal Opening
10.8. Review Contractors Proposals
    10.8.1. Perform Contractor References Check
    10.8.2. Confirm Contractor Experience
    10.8.3. Prepare Bid Tabulation
    10.8.4. Prepare Recommendation for Award
10.9. Prepare Conformed Contract Documents

11. Construction Phase Services
    11.1. Pre-Construction Meeting
    11.2. Monthly Construction Progress Meetings (Estimated 12-month construction schedule)
    11.3. Construction Site Visits
        11.3.1. Assume an average of one (1) monthly site visits throughout the construction phase
        11.3.2. An observation report will be prepared and provided for each site visit.

Kimley-Horn will make site visits in accordance with proposed basic scope of work in order to observe the progress of the work. Such observations will not be exhaustive or extend to every aspect of Contractor's work. Observations will be limited to spot checking, selective measurement, and similar methods of general observation. Based on information obtained during site visits, Kimley-Horn will evaluate whether Contractor's work is generally proceeding in accordance with the Contract Documents, and Kimley-Horn will keep the City informed of the general progress of the work.

Additionally, Kimley-Horn will not supervise, direct, or have control over Contractor's work, nor shall Kimley-Horn have authority to stop the Work or have responsibility for the means, methods, techniques, equipment choice and usage, schedules, or procedures of construction selected by Contractor, for safety programs incident to Contractor's work, or for any failure of Contractor to comply with any laws. Kimley-Horn does not guarantee the performance of any Contractor and has no responsibility for Contractor's failure to perform its work in accordance with the Contract Documents.

    11.4. Ongoing construction coordination and communications with Client
    11.5. Pay Estimate Reviews
    11.6. Shop Drawings/Submittals Reviews
    11.7. Request for Information (RFIs)
    11.8. Request for Proposals (RFPs) and Change Orders (COs)
    11.9. Substantial and Final Completion Walk-Throughs

12. Record Drawing Preparation
    12.1. Prepare Record Drawings from Contractor As-Builts
    12.2. Deliverables
        12.2.1. One (1) CD containing final record drawings in .pdf format

12.2.2. One (1) CD with final unsealed drawings in CADD (.dwg) format
12.2.3. One (1) CD with a GIS submittal of as-built infrastructure with asset IDs

13. Reimbursable Project Expenses
    13.1. Mileage for site visits and meetings. Mileage will be reimbursed based on the current standard business mileage rate of $0.575 per mile (Estimated 50 meetings/site visits at 40 mi/RT.
    13.2. ESRI Database Package (for Task 2.2)
    13.3. Large scale plotting for any document or plot in excess of 11" x 17"

SUPPLEMENTAL SERVICES

Kimley-Horn has coordinated with each sub-consultant and identified potential areas that may require supplemental design services to this project. Many of these services are listed in the individual sub-consultant's fee proposal but are not meant to be a complete list. The tasks below provide a brief outline of the proposed supplemental services and will only be completed upon written authorization from the Client. Kimley-Horn will coordinate development of a fee proposal with necessary sub-consultants and submit to the City for review.

1. Supplemental Design Services
    1.1. Chevron Pipeline Removal Package
        1.1.1. If the City elects to move forward with a separate bid package for the Chevron Pipeline removal package, Kimley-Horn will develop a separate construction drawing and bid package set, provide bid phase services, and participate in construction phase services assuming a 2-month duration
    1.2. Unspecified Engineering Design Services
        1.2.1. This task will account for supplemental or additional service tasks that may come up during the design or construction phase

2. Environmental Services
    2.1. Additional environmental Borings for LSI
        2.1.1. Included in the event the environmental borings completed with the basic scope of services yields results that warrant additional soil samples
    2.2. Environmental monitoring during construction
        2.2.1. Includes up to three days of monitoring during excavation of the Chevron Petroleum pipeline
    2.3. Mechanical (deep) testing for archaeological sites
        2.3.1. If required by the THC, Kimley-Horn will engage a sub-consultant to complete deep testing at archaeological sites that may be uncovered during the cultural resources survey
    2.4. Phase I ESA (Individual Parcels along Old Wiederstein) for Fee Simple Purchase

2.4.1. If the City elects to proceed with ROW acquisition for parcels along Old Wiederstein, separate Phase I ESAs will be required, developed to ASTM standards noted above. These parcels include GCAD ID No. 148510, 147296, 68333, 68330, 68331, 68302

3. Land Acquisition Coordination
   - 3.1. Includes acquisition and appraisal for up to 4 additional parcels, with a permanent/temporary construction easement combination
   - 3.2. Appraisal updates for condemnation
     - 3.2.1. Condemnation support services not included in base scope of work
   - 3.3. Supplemental appraisal for complex properties
   - 3.4. In Fee Acquisition for parcels along Old Wiederstein (parcels noted in Sup 2.4 above)
   - 3.5. In Fee Appraisal for parcels along Old Wiederstein (parcels noted in Sup 2.4 above)

4. Geotechnical Engineering
   - 4.1. Kimley-Horn coordination efforts
   - 4.2. Additional Geotechnical borings
   - 4.3. Tree/Brush Clearing
     - 4.3.1. This task is included in the event minor brush clearing is required for the geotechnical subconsultant to adequately complete their work

5. Subsurface Utility Engineering
   - 5.1. Additional SUE services (up to 4 additional potholes)

6. Survey
   - 6.1. Plat and Field Notes (up to 3 additional PFNs)
   - 6.2. Miscellaneous survey services that may be required during the design phase

ASSUMPTIONS

The following tasks document assumptions made by Consultant for development of this scope and fee proposal:

1. Selected alignment will generally remain the same
2. Construction method will follow either open cut or jack and bore method
3. Connection to the existing system near the Live Oak tank site will be as identified in the 30% plans submitted on March 18, 2021
4. Connection to the existing system at the I-35 tank site is unknown at this time. Kimley-Horn will coordinate with the City and their modeling consultant, then will prepare a supplemental services proposal for the ultimate improvements
5. Completion of a separate design package for the Chevron pipeline removal will be considered a supplemental service

6. City will provide all relevant utility block maps and record drawings for City owned utilities within the project area
7. USACE Permitting NWP 58, non-notification and memo to file will suffice for project
8. Impacts to Waters of the US will not trigger notification to the core. Kimley-Horn will prepare a memo to file for the City to maintain for official records. Upon receipt of alignment Kimley-Horn will modify alignment to determine ultimate impacts. If notification to the core is required Kimley-Horn will coordinate with the City to complete this as a supplemental service
9. The project will not include impacts to special aquatic sites including wetlands, and will not result in stream channelization
10. A Phase 1 ESA will be completed for the project corridor and for GCAD Parcel ID 148510, in accordance with ASTM E 1527-13
11. Mechanical (Deep) testing for archaeological sites will be completed as a supplemental service if required by the THC
12. Land Acquisition services will be based off alignment presented in PER, at number and type of parcels noted above. Additional ROEs and/or easement acquisition required due to an alignment change will be coordinated with the City
13. Land Acquisition sub-consultant will analyze preliminary title report to determine potential title problems and propose methods to cure title deficiencies, and will attempt to obtain subordination of liens, waiver of lienholders and clear titles. If sub-consultant cannot cure title through standard practices, City will be responsible for obtaining legal counsel to remedy any title deficiencies as required by title or alternatively, may elect to close the easement without a title policy.
14. Utility coordination meetings will be split into 4 meetings for 60% and 4 meetings for 100% unsigned phases
15. All permit fees will be paid by the City
16. Standard TxDOT Utility Installation Request permit will be required. No temporary construction driveways will be required on TxDOT roadways
17. Per previous coordination calls with Chevron's Owners Representative, additional soil sampling to what is proposed with the LSI at the petroleum pipeline crossing locations will not be required
18. Total of 19 Plat and Field Note (PFN) packages
19. Land Acquisition support includes 17 parcels for permanent and temporary construction easements, 2 parcels with temporary construction easement only, and 1 parcel for fee simple purchase
20. The effort included in supplemental services for in fee purchase for parcels along Old Wiederstein is the cost to perform those services. If the City determines to move forward with acquisition in lieu of easements prior to the Land Acquisition sub proceeding with their work, Kimley-Horn will coordinate with the City to adjust the basic scope of work and bill only for fees listed in the supplement task
21. City of Cibolo will not require acquisition services, they will allow a shared use agreement
22. A price range has been provided for appraisal services to allow flexibility for more complex parcels. The cost estimated for base services assumes middle of the range. The remainder of the range for each parcel is included in Supplemental Services

23. Traffic control design services will be limited to City streets, with minor signage on FM 3009 (TXDOT)
24. City will utilize Request for Competitive Sealed Proposals (RFCSP) Bid Format

EXCLUSIONS

The following services are excluded from the basic scope of this project, but can be completed by Consultant upon execution of an additional service should the City request it:

A. Design schedule assumes a 9-month duration, with an additional 3 months to complete land acquisition closeout
B. Construction schedule assumes a 12-month duration
C. Hydraulic modeling for this project, including proposed transmission main and facility connections
D. Connection to the Live Oak Tank site, including corresponding facility modifications and utility relocations
E. Connection to the I-35 elevated storage tank. The hydraulic modeling results will determine proposed improvements and are not available at the time this scope and fee was developed
F. Utility relocation, drainage, street reconstruction, or structural design services
G. Hike and Bike Trail design. Additional easements or areas required for a hike and bike trail also excluded from scope of services.
H. Channel/stream stabilization design
I. Determination of remediation costs or mitigation measures for hazardous materials for regulatory closure. Based on the results of the proposed environmental services, recommendations may be provided for additional investigation or consulting services, as appropriate, if contaminants are discovered in soil or groundwater
J. Final report for environmental monitoring during construction phase. Environmental monitoring is a supplemental service that will require authorization by the City.
K. Possible development of mitigation plans based on results of LSI
L. USACE pre-construction notification
M. Condemnation support including Kimley-Horn and land acquisition support services. Reference Attachment 3 scope of services for list of items to be considered part of condemnation support services.
N. Additional round of comments to what is specified in the Assumptions
O. Milestones in addition to what is proposed for this project
P. Any other services not listed in the basic services

SCHEDULE

Kimley-Horn estimates a total design schedule of nine (9) months for this project, with an additional (3) months planned to finalize easement and land acquisition. Delays in obtaining information from neighboring jurisdictions or land acquisition closings will add to proposed schedule, and submission of final deliverables will be adjusted accordingly. Kimley-Horn will develop a detailed design schedule to include all scope of services upon execution of the task order for this assignment.

FEE AND BILLING

Consultant will perform the above outlined basic scope of services, including reimbursable project expenses and sub-consultant services, for a lump sum fee of **$1,030,7050**. Supplemental engineering design and sub-consultant supporting services in the amount of $340,920 have been included in this scope and fee proposal in the event additional design tasks are required. The total fee for basic and supplemental services reflective of the scope of services presented within this proposal is a lump sum amount not to exceed **$1,371,705**. Should supplemental services be required, Kimley-Horn will coordinate with necessary sub-consultants to obtain a proposal for submittal to the City, and will begin work upon formal authorization to proceed.

Task	Description of Service	Amount	Basis of Compensation
	BASIC SERVICES		
1	Project Management	$ 54,190.00	[Lump Sum]
2	Environmental	$ 48,310.00	[Lump Sum]
3	Land Acquisition Coordination	$ 253,000.00	[Lump Sum]
4	Permit Coordination	$ 26,500.00	[Lump Sum]
5	Geotechnical Investigation and Report Preparation	$ 44,655.00	[Lump Sum]
6	Subsurface Utility Engineering (SUE)	$ 90,705.00	[Lump Sum]
7	Survey Services	$ 180,535.00	[Lump Sum]
8	60% Design	$ 136,720.00	[Lump Sum]
9	100% Design	$ 71,525.00	[Lump Sum]
10	Procurement	$ 27,485.00	[Lump Sum]
11	Construction Phase Services	$ 84,180.00	[Lump Sum]
12	Record Drawing Preparation	$ 7,380.00	[Lump Sum]
13	Reimbursable Project Expenses	$ 5,600.00	[Lump Sum]
	Total Compensation (BASIC SERVICES)	**$ 1,030,785.00**	**[Lump Sum]**
	SUPPLEMENTAL SERVICES		
S-1	Supplemental Design Services	$ 75,760.00	[Lump Sum]
S-2	Environmental	$ 59,400.00	[Lump Sum]
S-3	Land Acquisition Coordination	$ 156,200.00	[Lump Sum]
S-4	Geotechnical	$ 12,860.00	[Lump Sum]
S-5	Subsurface Utility Engineering (SUE)	$ 15,810.00	[Lump Sum]
S-6	Survey	$ 20,890.00	[Lump Sum]
	Total Compensation (SUPPLEMENTAL SERVICES)	**$ 340,920.00**	**[Lump Sum]**
	Total Compensation (BASIC + SUPPLEMENTAL SERVICES)	**$ 1,371,705.00**	**[Lump Sum]**

Consultant will submit monthly progress invoices to Client in accordance with terms and conditions of executed professional services contract.

We appreciate the opportunity to be of service to the City and look forward to successfully completing this project. Please don't hesitate to contact me at stephen.aniol@kimley-horn.com or (210) 321-3404 should you have any questions on the proposed scope and fee.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.
TBPE# 928

By: Stephen J. Aniol, P.E.
Senior Project Manager

Attachments
1 – Project Work Plan
2 – Geotechincal Engineering/Environmental LSI Sub-Consultant Proposal (Terracon)
3 – Land Acquisition Sub-Consultant Proposal (7 Arrows Land Staff)
4 – SUE Sub-Consultant Proposal (The Rios Group)
5 – Survey Sub-Consultant Proposal (Sherwood Surveying)
6 – Archaeologist Sub-Consultant Proposal (Stone Point Services)

CITY OF SCHERTZ

Fee/Price Proposal Breakdown for Professional Services

ATTACHMENT 1

Project Name:	**Dedicated Transmission Main** **On-Call Engineering Services, Task Order - 05**
Design Firm:	Kimley-Horn and Associates, Inc.
Date Proposal Submitted:	5/14/2021
CoS Project Manager:	Jennifer Shortess, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

			Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Senior Civil Engineer	Civil Engineer	Staff Engineer III	Staff Engineer II	Staff Engineer I	Senior Design Technician	Administrative/ Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
			Contract Approved Rates	$ 225.00	$ 195.00	$ 180.00	$ 145.00	$ 125.00	$ 115.00	$ 105.00	$ 115.00	$ 75.00				
			Task to be performed/Phase Description (including Sub-consultant work)										Total Hours			
			BASIC SERVICES													
1			**Project Management**	**0**	**179**	**0**	**88**	**0**	**45**	**0**	**0**	**18**	**330**	**$ 54,190.00**	**$ -**	**$ 54,190.00**
	1.1		Prepare Monthly Summary Reports/Invoicing		9		18					9	36	$ 5,040.00	$ -	
	1.2		Sub-Contract Management		9		9					9	27	$ 3,735.00	$ -	
	1.3		Update Project Management Plan		2		3		6				11	$ 1,515.00	$ -	
	1.4		Schedule Development and Monthly Updates		9		9						18	$ 3,060.00	$ -	
	1.5		Ongoing Coordination and Communications with Client and Internal Team Meetings		112								112	$ 21,840.00	$ -	
	1.6		Dietz Creek Silt Removal Project Coordination		16		16						32	$ 5,440.00	$ -	
	1.7		Meetings										0	$ -	$ -	
		1.7.1	Prepare for & conduct Design Phase Progress Meetings with Client (Occurring once a month - 9 meetings)		18		27		27				72	$ 10,530.00	$ -	
		1.7.2	Prepare Meeting Notes		4		6		12				22	$ 3,030.00	$ -	
	1.8		Deliverables										0	$ -	$ -	
		1.8.1	Project Management Plan										0	$ -	$ -	
		1.8.2	Monthly Schedule Updates										0	$ -	$ -	
2			**Environmental**	**2**	**12**	**0**	**84**	**0**	**64**	**0**	**0**	**0**	**162**	**$ 22,330.00**	**$ 25,980.00**	**$ 48,310.00**
	2.1		Environmental Phase/Sub-Consultant Coordination		4		12		4				20	$ 2,980.00	$ -	
	2.2		Waters of the US Memo Study										0	$ -	$ -	
		2.2.1	Archaeologist Desktop Review and Initial THC Submittal						5				5	$ 575.00	$ 350.00	
		2.2.2	Site Visit				20		25				45	$ 5,775.00	$ -	
		2.2.3	NWP 58 Memo to File		2		10		30				42	$ 5,290.00	$ -	
	2.3		Phase I ESA										0	$ -	$ -	
		2.3.1	Records Review				1						1	$ 145.00	$ -	
		2.3.2	Site Reconnaissance				10						10	$ 1,450.00	$ -	
		2.3.3	Interviews				2						2	$ 290.00	$ -	
		2.3.4	Phase I ESA Report Preparation (Corridor)	2	2		15						19	$ 3,015.00	$ -	
	2.4		Cultural Resource Coordination										0	$ -	$ -	
		2.4.1	Cultural Resource Survey										0	$ -	$ 13,750.00	
		2.4.2	THC Coordination				10						10	$ 1,450.00	$ -	
	2.5		Environmental Monitoring and Sampling										0	$ -		
		2.5.1	Limited Site Investigation (LSI)										0	$ -	$ 11,880.00	
	2.6		Review Phase I ESA/LSI		4		4						8	$ 1,360.00		
	2.7		Deliverables										0	$ -	$ -	
		2.7.1	Ph I ESA (Corridor)										0	$ -	$ -	
		2.7.2	Cultural Resources Survey										0	$ -	$ -	
		2.7.3	Limited Site Investigation (LSI)										0	$ -	$ -	
3			**Land Acquisition Coordination**	**0**	**80**	**0**	**40**	**0**	**40**	**0**	**0**	**0**	**160**	**$ 26,000.00**	**$ 227,000.00**	**$ 253,000.00**
	3.1		LA Sub-Consultant Coordination		80		40		40				160	$ 26,000.00	$ -	
	3.2		Acquisition Services (Total 20 Parcels - Assumed 17 parcels with PE/TCE, 2 parcels with TCE Only, 1 parcel Fee Simple)										0	$ -	$ -	
		3.2.1	Title & Title Curative										0	$ -	$ 30,000.00	
		3.2.2	Administrative Fee										0	$ -	$ 30,000.00	
		3.2.3	Permanent Easement/Temporary Construction Easement Acquisition										0	$ -	$ 51,000.00	
		3.2.4	Temporary Construction Easement Acquisition										0	$ -	$ 4,000.00	
		3.2.5	In Fee Acquisition										0	$ -	$ 3,000.00	
		3.2.6	Closing Services										0	$ -	$ 30,000.00	
	3.3		Appraisal Services										0	$ -	$ -	
		3.3.1	Permanent Easement & Temporary Construction Easement (18 parcels)										0	$ -	$ 72,000.00	
		3.3.2	Temporary Construction Easement Only (2 parcels)										0	$ -	$ 7,000.00	
4			**Permit Coordination**	**0**	**38**	**0**	**62**	**0**	**80**	**0**	**0**	**12**	**192**	**$ 26,500.00**	**$ -**	**$ 26,500.00**
	4.1		Perform Ongoing Coordination and Communication with each Permitting Entity		8		8						16	$ 2,720.00	$ -	
	4.2		Meetings										0	$ -	$ -	
		4.2.1	Prepare for and conduct coordination meetings with TXDOT, City of Cibolo, Guadalupe County & other impacted entities/regulatory agencies (Assume 6 meetings):		12		18		24				54	$ 7,710.00	$ -	
		4.2.2	Prepare meeting notes		2		4					12	18	$ 1,870.00	$ -	
	4.3		Permits										0	$ -	$ -	
		4.3.1	TxDOT Utility Installation Request (UIR)		4		8		16				28	$ 3,780.00	$ -	
		4.3.2	Chevron Petroleum Pipeline (2 Total)		8		16		24				48	$ 6,640.00	$ -	
		4.3.3	TCEQ		4		8		16				28	$ 3,780.00		
5			**Geotechnical Investigation and Report Preparation**	**0**	**10**	**0**	**20**	**0**	**8**	**0**	**0**	**0**	**38**	**$ 5,770.00**	**$ 38,885.00**	**$ 44,655.00**

CITY OF SCHERTZ

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**Dedicated Transmission Main** **On-Call Engineering Services, Task Order - 05**
Design Firm:	Kimley-Horn and Associates, Inc.
Date Proposal Submitted:	5/14/2021
CoS Project Manager:	Jennifer Shortess, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

			Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Senior Civil Engineer	Civil Engineer	Staff Engineer III	Staff Engineer II	Staff Engineer I	Senior Design Technician	Administrative/ Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
			Contract Approved Rates	$ 225.00	$ 195.00	$ 180.00	$ 145.00	$ 125.00	$ 115.00	$ 105.00	$ 115.00	$ 75.00				
			Task to be performed/Phase Description (including Sub-consultant work)										Total Hours			
	5.1		Geotechnical Sub-Consultant Coordination		4		8						12	$ 1,940.00	$ -	
	5.2		Prepare Geotechnical Bore Plan/Exhibits		2		4		8				14	$ 1,890.00	$ -	
	5.3		Review Draft Boring Logs		2		4						6	$ 970.00	$ -	
	5.4		Review Draft Engineering Report		2		4						6	$ 970.00	$ -	
	5.5		Geotechnical Boring										0	$ -	$ 18,280.00	
	5.6		Laboratory Testing										0	$ -	$ 10,215.00	
	5.7		Report Development										0	$ -	$ 10,390.00	
	5.8		Deliverables										0	$ -	$ -	
		5.8.1	Geotechnical Engineering Report										0	$ -	$ -	
6			**Subsurface Utility Engineering (SUE)**	**0**	**8**	**0**	**24**	**0**	**36**	**0**	**0**	**0**	**68**	**$ 9,180.00**	**$ 81,525.00**	**$ 90,705.00**
	6.1		Prepare detailed SUE Plan for Final Design		2		8		16				26	$ 3,390.00	$ -	
	6.2		SUE and Survey Field Coordination		4		12		12				28	$ 3,900.00	$ -	
	6.3		SUE QL-A and QL-B Services										0	$ -	$ -	
		6.3.1	ROW Permits (City of Schertz)										0	$ -	$ 375.00	
		6.3.2	Traffic Control (Standard)										0	$ -	$ 2,800.00	
		6.3.3	Flowable Backfill										0	$ -	$ 4,050.00	
		6.3.4	Deliverable Preparation										0	$ -	$ 7,500.00	
		6.3.5	QL "B" SUE Designating										0	$ -	$ 12,000.00	
		6.3.6	QL "A" SUE Test Holes (47 Test Holes)										0	$ -	$ 54,800.00	
	6.4/6.5		Review draft QL "A" SUE Test Hole Summary Sheet, QL "B" SUE Markings and individual QL-A exhibits		2		4		8				14	$ 1,890.00	$ -	
	6.6		Deliverables										0	$ -	$ -	
		6.6.1	Draft QL-A SUE test hole data sheets in Adobe PDF format										0	$ -	$ -	
		6.6.2	Final QL-A SUE test hole data sheets in Adobe PDF format										0	$ -	$ -	
		6.6.3	Signed and Sealed Test Hole Data Forms and Test Hole Summary Sheet										0	$ -	$ -	
7			**Survey Services**	**0**	**17**	**0**	**36**	**0**	**20**	**0**	**0**	**0**	**73**	**$ 10,835.00**	**$ 169,700.00**	**$ 180,535.00**
	7.1		Survey Sub-Consultant Coordination		8		8						16	$ 2,720.00	$ -	
	7.2		Topographic Survey										0	$ -	$ 88,500.00	
	7.3		Detailed Tree Survey										0	$ -	$ 29,700.00	
	7.4		Obtain Geotechnical Information with Support Files										0	$ -	$ 5,800.00	
	7.5		Obtain SUE Information with Supporting Files										0	$ -	$ 8,500.00	
	7.6		Dietz Creek Channel Improvements Re-Survey		2		8		4				14	$ 2,010.00	$ 6,300.00	
	7.7		Project Control Sheet										0	$ -	$ 4,800.00	
		7.7.1	Review Project Control Sheet 60%		2		4						6	$ 970.00	$ -	
		7.7.2	Review Project Control Sheet 100%/Final		1		3						4	$ 630.00	$ -	
	7.8		Easement Strip Map										0	$ -	$ 5,200.00	
		7.8.1	Review Easement Strip Map 60%		1		6						7	$ 1,065.00	$ -	
		7.8.2	Review Easement Strip Map 60%/Final		1		3						4	$ 630.00	$ -	
	7.9		Plat and Field Notes (19 EA)										0	$ -	$ 20,900.00	
		7.9.1	Review Plat and Field Notes		2		4		16				22	$ 2,810.00	$ -	
8			**60% Design**	**8**	**114**	**24**	**222**	**0**	**412**	**0**	**240**	**16**	**1036**	**$ 136,720.00**	**$ -**	**$ 136,720.00**
	8.1		60% Stakeholder and Utility Provider Coordination		8		12		16				36	$ 5,140.00	$ -	
	8.2		Conduct Site Visit, Validate Survey		4		16		16				36	$ 4,940.00	$ -	
	8.3		Prepare Utility Layout Sheets		4		12		24				40	$ 5,280.00	$ -	
	8.4		Update Utility Conflict/Coordination Matrix		2		4		16				22	$ 2,810.00	$ -	
	8.5		Meetings										0	$ -	$ -	
		8.5.1	Conduct coordination meetings with Impacted Utilities (Split into 4 meetings)		8		8		12				28	$ 4,100.00	$ -	
		8.5.2	Prepare and Distribute Meeting Notes		2		4		4				10	$ 1,430.00	$ -	
	8.6		60% Construction Drawings										0	$ -	$ -	
		8.6.1	Perform Design Calculations		4	8	12		16				40	$ 5,800.00	$ -	
		8.6.2	60% Plan Set Development		40	16	100		240		240		636	$ 80,380.00	$ -	
		8.6.3	Miscellaneous Details		4		8		24				36	$ 4,700.00	$ -	
	8.7		60% Project Manual		12		16		8			8	44	$ 6,180.00	$ -	
	8.8		60% Opinion of Probable Construction Cost		4		12		12				28	$ 3,900.00	$ -	
	8.9		Internal QA/QC	8	8								16	$ 3,360.00	$ -	
	8.10		Prepare 60% Design Submittal Package		4		4		8			8	24	$ 2,880.00	$ -	
	8.11		Review City Comments and Provide Response to Comments		8		12		12				32	$ 4,680.00	$ -	
	8.12		60% Design Review Meeting & Meeting Notes		2		2		4				8	$ 1,140.00	$ -	
9			**100% Design**	**8**	**91**	**12**	**134**	**0**	**166**	**0**	**80**	**28**	**519**	**$ 71,525.00**	**$ -**	**$ 71,525.00**
	9.1		100% Stakeholder and Agency Coordination		4		8		8				20	$ 2,860.00	$ -	
	9.2		Conduct Site Visit		4		4		4				12	$ 1,820.00	$ -	
	9.3		Update Utility Layout Sheets		2		4		8				14	$ 1,890.00	$ -	

CITY OF SCHERTZ

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**Dedicated Transmission Main On-Call Engineering Services, Task Order - 05**
Design Firm:	Kimley-Horn and Associates, Inc.
Date Proposal Submitted:	5/14/2021
CoS Project Manager:	Jennifer Shortess, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

			Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Senior Civil Engineer	Civil Engineer	Staff Engineer III	Staff Engineer II	Staff Engineer I	Senior Design Technician	Administrative/ Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
			Contract Approved Rates	$ 225.00	$ 195.00	$ 180.00	$ 145.00	$ 125.00	$ 115.00	$ 105.00	$ 115.00	$ 75.00				
			Task to be performed/Phase Description (including Sub-consultant work)										Total Hours			
	9.4		Update Utility Conflict/Coordination Matrix		1		4		8				13	$ 1,695.00	$ -	
	9.5		Meetings										0	$ -	$ -	
		9.5.1	Conduct coordination meetings with Impacted Utilities (Split into 4 meetings)		8		8		12				28	$ 4,100.00	$ -	
		9.5.2	Prepare and Distribute Meeting Notes		2		4		4				10	$ 1,430.00	$ -	
	9.6		100% Construction Drawings		24	12	40		80		80		236	$ 31,040.00	$ -	
	9.7		100% Project Manual		24		40		20			20	104	$ 14,280.00	$ -	
	9.8		100% Opinion of Probable Construction Cost		4		8		8				20	$ 2,860.00	$ -	
	9.9		Internal QA/QC	8	8								16	$ 3,360.00	$ -	
	9.10		Prepare 100% Design Submittal Package (Unsigned)		4		4		4			8	20	$ 2,420.00	$ -	
	9.11		Review City Comments and Provide Response to Comments		4		8		6				18	$ 2,630.00	$ -	
	9.12		100% Design Review Meeting (Unsigned)		2		2		4				8	$ 1,140.00	$ -	
10			**Procurement**	**3**	**40**	**0**	**50**	**0**	**68**	**0**	**16**	**28**	**205**	**$ 27,485.00**	**$ -**	**$ 27,485.00**
	10.1		Internal QA/QC	3	3								6	$ 1,260.00	$ -	
	10.2		Signed and Sealed 100% Construction Drawings		8		8		16		16		48	$ 6,400.00	$ -	
	10.3		Signed and Sealed 100% Project Manual		2		4		8			8	22	$ 2,490.00	$ -	
	10.4		Submit Final Documents for Advertisement		4		4		4			8	20	$ 2,420.00	$ -	
	10.5		Pre-Bid Conference										0	$ -	$ -	
		10.5.1	Prepare Agenda and attend Pre-Bid Conference		3		3						6	$ 1,020.00	$ -	
		10.5.2	Prepare Meeting Notes (Consolidate Contractor Questions)				1		2			4	7	$ 675.00	$ -	
		10.5.3	Attend Site Walk		4		4						8	$ 1,360.00	$ -	
	10.6		Prepare Addenda and Clarifications		4		8		16				28	$ 3,780.00	$ -	
	10.7		Attend Proposal Opening		2								2	$ 390.00	$ -	
	10.8		Review Contractor Proposals										0	$ -	$ -	
		10.8.1	Perform Contractor References Check		2		4		4				10	$ 1,430.00	$ -	
		10.8.2	Confirm Contractor Experience		2		4						6	$ 970.00	$ -	
		10.8.3	Prepare Bid Tabulation				2		6				8	$ 980.00	$ -	
		10.8.4	Prepare Recommendation for Award		2				4				6	$ 850.00	$ -	
	10.9		Prepare Conformed Documents		4		8		8			8	28	$ 3,460.00	$ -	
11			**Construction Phase Services**	**0**	**170**	**0**	**192**	**0**	**186**	**0**	**0**	**24**	**572**	**$ 84,180.00**	**$ -**	**$ 84,180.00**
	11.1		Pre-Construction Meeting		4		4						8	$ 1,360.00	$ -	
	11.2		Monthly Construction Progress Meetings (Anticipate 12 Meetings)		24		18		18				60	$ 9,360.00	$ -	
	11.3		Construction Site Visits										0	$ -	$ -	
		11.3.1	Additional monthly site visit (Anticipate 12 Site Visits)		18		18		24				60	$ 8,880.00	$ -	
		11.3.2	Prepare Observation Report for each Site Visit		8		16		24				48	$ 6,640.00	$ -	
	11.4		Construction Coordination with Client		48		24						72	$ 12,840.00	$ -	
	11.5		Pay Estimate Reviews		8		12		24				44	$ 6,060.00	$ -	
	11.6		Shop Drawings/Submittal Review		16		32		32			12	92	$ 12,340.00	$ -	
	11.7		Requests for Information (RFIs)		24		40		40			12	116	$ 15,980.00	$ -	
	11.8		Requests for Proposals (RFPs) and Change Orders (COs)		16		24		24				64	$ 9,360.00	$ -	
	11.9		Substantial/Final Completion Walk-Throughs		4		4						8	$ 1,360.00	$ -	
12			**Record Drawing Preparation**	**0**	**4**	**0**	**16**	**0**	**32**	**0**	**0**	**8**	**60**	**$ 7,380.00**	**$ -**	**$ 7,380.00**
	12.1		Prepare Record Drawings from Contractor As-Builts		4		16		32			8	60	$ 7,380.00	$ -	
13			**Reimbursable Project Expenses**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$ 5,600.00**	**$ -**	**$ 5,600.00**
	13.1		Mileage for Site Visits and Meetings											$ 1,100.00	$ -	
	13.2		ERIS Database Package (For Task 2.2)											$ 1,500.00	$ -	
	13.3		Large Scale Plotting											$ 3,000.00	$ -	
			Total Hours (Basic Services):	21	763	36	968	0	1157	0	336	134	3415			
			Total Fee (Basic Services):											**$ 487,695.00**	**$ 543,090.00**	**$ 1,030,785.00**

CITY OF SCHERTZ

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**Dedicated Transmission Main** **On-Call Engineering Services, Task Order - 05**
Design Firm:	Kimley-Horn and Associates, Inc.
Date Proposal Submitted:	5/14/2021
CoS Project Manager:	Jennifer Shortess, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

			Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Senior Civil Engineer	Civil Engineer	Staff Engineer III	Staff Engineer II	Staff Engineer I	Senior Design Technician	Administrative/ Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
			Contract Approved Rates	$ 225.00	$ 195.00	$ 180.00	$ 145.00	$ 125.00	$ 115.00	$ 105.00	$ 115.00	$ 75.00				
			Task to be performed/Phase Description (including Sub-consultant work)										Total Hours			
			SUPPLEMENTAL SERVICES													
	S-1		**Supplemental Design Services**	**4**	**28**	**0**	**60**	**0**	**80**	**0**	**0**	**20**	**192**	**$ 75,760.00**	**$ -**	**$ 75,760.00**
	1.1		Chevron Pipeline Removal Design Package	4	28		60		80			20	192	$ 25,760.00	$ -	
	1.2		Supplemental Design Services										0	$ 50,000.00	$ -	
	S-2		**Environmental**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$ 28,360.00**	**$ 31,040.00**	**$ 59,400.00**
	2.1		Supplemental Environmental Borings (Ph. 1/LSI)		4		4		8				16	$ 2,280.00	$ 6,760.00	
	2.2		Supplemental Environmental Monitoring during Construction (3 days at $1,500/day)		2		8						10	$ 1,550.00	$ 4,500.00	
	2.3		Mechanical Deep Testing		4		12		8				24	$ 3,440.00	$ 19,780.00	
	2.4		Phase I ESA (Individual Parcels)										0	$ -	$ -	
		2.4.1	GCAD Parcel ID No's. 148510, 147296, 68333, 68330, 68331, 68302	12	12		90						114	$ 18,090.00	$ -	
		2.4.2	ERIS Database Package (6 parcels at $500/EA)										0	$ 3,000.00	$ -	
														$ -	$ -	
	S-3		**Land Acquisition Coordination**	**0**	**72**	**0**	**80**	**0**	**64**	**0**	**0**	**0**	**216**	**$ 10,700.00**	**$ 145,500.00**	**$ 156,200.00**
	3.1		Land Acquisition Supplemental Coordination		40		20						60	$ 10,700.00	$ -	
		3.1.1	PE/TCE Acquisition @ $7,500 per parcel (4 Additional parcels)										0	$ -	$ 30,000.00	
		3.1.2	PE/TCE Appraisal @ $4,500 per parcel (4 Additional parcels)										0	$ -	$ 18,000.00	
	3.2		Appraisal Updates for Condemnation (3 parcels)										0	$ -	$ 13,500.00	
	3.3		Supplemental Appraisal for Complex Properties										0	$ -	$ 9,000.00	
	3.4		In Fee Acquisition @ $7,500 per parcel (6 parcels)										0	$ -	$ 45,000.00	
	3.5		In Fee Appraisal @ $5,000 per parcel (6 parcels)										0	$ -	$ 30,000.00	
	S-4		**Geotechnical**	**0**	**12**	**0**	**24**	**0**	**24**	**0**	**0**	**0**	**60**	**$ 2,860.00**	**$ 10,000.00**	**$ 12,860.00**
	4.1		Supplemental Geotechincal Engineering Services										0	$ -	$ -	
		4.1.1	Coordination Efforts		2		4		4				10	$ 1,430.00	$ -	
		4.1.2	Additional Geotechnical Borings										0	$ -	$ 5,000.00	
		4.1.3	Tree/Brush Clearing		2		4		4					$ 1,430.00	$ 5,000.00	
														$ -	$ -	
														$ -	$ -	
	S-5		**Subsurface Utility Engineering (SUE)**	**0**	**12**	**0**	**22**	**0**	**24**	**0**	**0**	**0**	**58**	**$ 2,570.00**	**$ 13,240.00**	**$ 15,810.00**
	5.1		SUE QL-A & B (4 Additional Locations)		4		6		8				18	$ 2,570.00	$ 13,240.00	
	S-6		**Survey**	**0**	**6**	**0**	**12**	**0**	**12**	**0**	**0**	**0**	**30**	**$ 4,290.00**	**$ 16,600.00**	**$ 20,890.00**
	6.1		Plat and Field Notes (Up to 3 Additional @ $1,100/PFN)		2		4		4				10	$ 1,430.00	$ 3,300.00	
	6.2		Miscellaneous Survey Services		4		8		8				20	$ 2,860.00	$ 13,300.00	
			Total Hours (Supplemental Services):	4	106	0	152	0	156	0	0	20	438			
			Total Fee (Supplemental Services):											**$ 124,540.00**	**$ 216,380.00**	**$ 340,920.00**
			TOTAL FEE (Basic + Supplemental Services):											**$ 612,235.00**	**$ 759,470.00**	**$ 1,371,705.00**

March 16, 2021

ATTACHMENT 2

Kimley-Horn
601 NW Loop 410, Suite 350
San Antonio, TX 78216

Attn: Mr. Stephen J. Aniol, P.E.
D: (210) 321-3404
M: (210) 612-0546
E: Stephen.Aniol@kimley-horn.com

Re: Revised Proposal for Geotechnical Engineering and Environmental Services
Proposed 16-inch Transmission Main
From I-35 Elevated Storage Tank to Live Oak Tank Site
Schertz, Texas
Terracon Proposal Number: P90205189R1

Dear Mr. Aniol:

Based on an email requests dated June 3, 2020 and March 3, 2021, Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this revised proposal to provide geotechnical / environmental engineering services for the above referenced project. **We understand that we have been selected to provide these services for this publicly funded project. Therefore, providing cost information is in compliance with the Texas Professional Services Procurement Act.** This proposal outlines our understanding of the project and scope of services and provides a lump sum fee for our services.

A. PROJECT INFORMATION

Project information

Kimley-Horn (client) is submitting a proposal to the City of Schertz to install a 16-inch water transmission line. The client has identified an abandoned, underground pipeline owned by Chevron which will be removed during the construction phase of the project. Terracon is not aware of the depth or length of the pipeline, nor the contents formerly transmitted through the pipeline.

Site Location

ITEM	DESCRIPTION
Project Description & Location	We understand a 16” water transmission main is planned that will connect the I-35 Elevated Storage Tank and Live Oak Tank Site in Schertz, Texas.
Existing improvements	Based on the provided information borings will be along TxDOT right-of-way, City Street and in undeveloped land.

B. SCOPE OF GEOTECHNICAL SERVICES

The geotechnical services to be provided by Terracon are summarized in the following paragraphs.

Field Program – Based on the request from the client, our field exploration will consist of:

Number of Borings	Approximate Depth Below Existing Grade, feet	Location
7	10 or auger refusal	Along TxDOT and City Roadway
16	20 or auger refusal	Undeveloped Land

Sampling will be in general accordance with industry standard procedures wherein Shelby tube samples (ASTM D-1587) or split-barrel samples (ASTM D-1586) are obtained. Sampling will be performed in 2-ft intervals to the boring completion depths. Groundwater, if encountered will be measured during and after drilling. Once the samples have been collected and classified in the field, they will be placed in appropriate sample containers for transport to our laboratory.

Permitting and Traffic Control – We understand the Terracon will need to obtain a TxDOT and City permit to allow work in their ROW. Terracon will coordinate with the TxDOT. Terracon will provide traffic control, likely to consist of signage only. We understand, we will be provided a TxDOT and City point of contact to obtain TxDOT/City permit.

Conditions/Items to be provided by Client: Items to be provided by the client include the right of entry to conduct the exploration and the awareness and/or location of any private subsurface utilities existing in the area. We will contact Texas 811, Schertz Water Utilities for location of utilities in public easements. Location of private lines on the property is not part of Terracon scope. All private lines should be marked by others prior to commencement of drilling.

Terracon will take reasonable efforts to reduce damage to the property, such as rutting of the ground surface. However, it should also be understood that in the normal course of our work, some such disturbances could occur. We have not budgeted to restore the site beyond backfilling our boreholes. If there are any restrictions or special requirements regarding this site or exploration, these should be known prior to commencing field work.

The drilling services for this project will be performed by a drilling subcontractor under Terracon's direction. Our fee is based on the site being accessible to our conventional two-wheel drive truck-mounted drilling equipment. Additional costs may result if this is not the case. It does not include services associated with damage of existing landscape or location of

underground utilities beyond contacting Texas811. If such conditions are known to exist on the site, Terracon should be notified so that we may adjust our scope of services and fee, if necessary.

For safety purposes, all borings will be backfilled promptly and patched with asphalt or concrete, as appropriate, after their completion. Because backfill material often settles below the surface after a period of time, we recommend the boreholes be checked periodically and backfilled if necessary.

Laboratory Testing – The samples will be tested in our laboratory to determine physical engineering characteristics. Testing will be performed under the direction of a geotechnical engineer and will include visual classification, moisture content, gradation, Atterberg limits, and sulfate contents.

- Moisture Content Test.
- Gradation Tests or Percent Finer than the No. 200 Mesh (75-µm) Sieve.
- Atterberg Limits.
- Soluble Sulfate Tests.

In addition, three representative bulk samples will be collected from near the roadway and will be tested for the following:

- pH lime series tests.
- PI lime series tests.
- Moisture density relationship (ASTM D698).
- California Bearing Ratio (CBR).

Engineering Report – The results of our field and laboratory programs will be evaluated by a professional geotechnical engineer licensed in the State of Texas. Based on the results of our evaluation, an engineering report will be prepared that details the results of the testing performed, provides logs of the borings, and a diagram of the site/boring layout. A data report will be prided for the watermain and an engineering report will be provided for the pavement design. The engineering report will include the following:

- Boring location plan.
- Subsurface exploration procedures.
- Computer generated boring logs with soil classification.
- Summarized laboratory data.
- Groundwater levels observed during and after completion drilling.
- Encountered soil conditions.
- Subgrade soil modification recommendations for pavement design.
- Observed existing pavement thickness at the pavement boring locations.
- Review of Schertz backfill requirements and comment on suitability for use in light of the encountered conditions.

- Estimation of modulus of soil reaction, E', for pipe design based on backfill.
- Pavement design recommendation in accordance with the Schertz design manual

Schedule - We can generally begin the field exploration program within 9 days after receipt of our signed contract and City/TxDOT permit, if site and weather conditions permit. The field work can be done in 5 days if locations can be accessed. A draft report will be completed within 5 weeks of completion of drilling. A final report can be issued 1 week from receipt of the review comments. In situations where information is needed prior to submittal of our report, we can provide verbal information or recommendations for specific project requirements after we have completed our field and laboratory programs. We will issue a PDF copy of the geotechnical report as the deliverable for this project.

C. SCOPE OF ENVIRONMENTAL SERVICES

The proposed scope for environmental services was developed based on the email dated March 3, 2021 from a client representative (Rebekah Cramblitt) which identified the following recognized environmental conditions (RECs) and/or site concerns.

REC/Site Concern	Description
Underground petroleum pipeline	Abandoned, underground pipeline owned by Chevron

Terracon will conduct a Limited Site Investigation (LSI) and, if requested, environmental monitoring at the site. Environmental services will be limited to the area between borings B-1 and B-2 shown on Exhibit 1.

Please note that Terracon did not conduct a Phase I Environmental Site Assessment (ESA) of the property, and that the scope of services for this proposal is based solely on information provided by the client.

Objectives

The objective of the proposed environmental services is to assess the presence of chemicals commonly associated with the identified RECs and/or site concerns in soil at selected locations considered likely to have been impacted by the concerns identified in Section 2.0. ***This proposed scope of work is not intended to provide a comprehensive understanding of the extent of impact to soil or groundwater, or of potential costs which may be incurred if remediation is necessary, or the time required to achieve regulatory closure, if appropriate.*** Based on the results of the proposed environmental services, recommendations may be provided for additional investigation or consulting services, as appropriate, if contaminants are discovered in soil or groundwater.

Sampling and Laboratory Analytical Program

Limited Site Investigation (LSI) - Terracon will perform an LSI during the design phase of the project. A total of 2 soil borings will be advanced using a Geoprobe with direct push technology (DPT). Refer to the attached Exhibit 1 for the proposed sampling locations provided to Terracon by the client. The proposed sampling locations may be modified in the field to account for utility clearance, access limitations, and/or site conditions. The client will be notified of any significant modifications to the sampling locations.

The geology within the proposed water line right-of-way (ROW) is clay underlain by bedrock. Based on GoogleEarth, the elevation of the bedrock observed in the dry creek bed is 711 feet above mean sea level compared to the ground elevation of 730 feet msl at boring B-1. If bedrock is encountered prior to reaching the desired depth, the drilling method will be switched to air rotary.

Investigation-derived waste (IDW) resulting from the LSI will be managed in accordance with state and local requirements. IDW will be transported to and disposed at an approved receiving facility according to federal and state regulations. The estimated fee assumes transport and disposal of up to two 55-gallon drums of IDW as Class 2 non-hazardous waste. The Client or its authorized agent will be responsible for signing the waste manifest, as required, or authorizing Terracon to sign on its behalf. The IDW will be staged at the site until disposal can be authorized by the landfill and transportation of the waste can be scheduled. ***This process can take 3 or more weeks to complete.***

The sampling and analytical program for the LSI, including the number and types of samples and laboratory analyses, is summarized in Table 1.

Table 1 - Sampling and Analytical Program

Type and Designation[1]	REC/Site Concern	Method	Estimated Depth (ft)[2]	Media	Analytical Parameters				
					TPH	BTEX	PAHs	TCLP Benzene	Moisture
B-1	Chevron pipeline crossing	Geoprobe with direct push technology (DPT)	20	Soil	1	1	2	1	1
		Geoprobe with air rotary		Bedrock	1	1		1	1
B-2		Geoprobe with DPT		Soil	1	1		1	1
		Geoprobe with air rotary		Bedrock	1	1		1	1

Notes:

[1]Type and Designation: B = Soil Boring

[2]Proposed maximum depth based on current knowledge of subsurface conditions and depth to groundwater in area. Depths may be modified based on the actual depth to groundwater or refusal on bedrock. If boring advancement beyond above depths is necessary, client will be notified to discuss options and associated costs.

[3]Number of unsaturated zone soil / bedrock samples to be submitted for analytical testing. Samples will be assigned based on photoionization detector (PID) readings and/or professional judgement considering the type of chemical, nature and depth of source, and chemical fate and transport characteristics.

[4]Analytical Methods:
BTEX: Benzene, toluene, ethylbenzene and xylenes by EPA 8260; TPH: Total Petroleum Hydrocarbons: TCEQ TX1005; PAHs: Polycyclic aromatic hydrocarbons by EPA 8270; Moisture by ASTM or standard method; TCLP: Toxicity characteristic leaching procedure by EPA 1311.

Investigation and sample collection procedures will be conducted in accordance with local industry standard practices. Any temporary investigation locations will be plugged and abandoned in accordance with applicable state requirements.

Supplemental Borings – If requested by the client, Terracon will advance up to three additional borings (B-3 through B-5) during the LSI to investigate the proposed ROW for the water line between borings B-1 and B-2. Based on the boring locations provided by the client, there is approximately 1,200 linear feet between boring B-1 and boring B-2. The supplemental borings will be equally spaced along the proposed ROW. The borings will be advanced using the same methodology and sampling program described for the LSI. The IDW from the supplemental borings will be managed as described for the LSI. We anticipate one additional drums of IDW per boring will be generated during the supplemental LSI.

Please note: The supplemental borings must be drilled on the same day as the LSI borings. Otherwise, additional charges will be applied.

Table 2 - Sampling and Analytical Program

Type and Designation[1]	REC/Site Concern	Method	Estimated Depth (ft)[2]	Media	Analytical Parameters				
					TPH	BTEX	PAHs	TCLP Benzene	Moisture
B-3	Chevron pipeline (adjacent)	Geoprobe with DPT	20	Soil	1	1	1	1	1
		Geoprobe with air rotary		Bedrock	1	1		1	1
B-4		Geoprobe with DPT		Soil	1	1		1	1
		Geoprobe with air rotary		Bedrock	1	1		1	1
B-5		Geoprobe with DPT		Soil	1	1		1	1
		Geoprobe with air rotary		Bedrock	1	1		1	1

Notes:

[1]Type and Designation: B = Soil Boring

[2]Proposed maximum depth based on current knowledge of subsurface conditions and depth to groundwater in area. Depths may be modified based on the actual depth to groundwater or refusal on bedrock. If boring advancement beyond above depths is necessary, client will be notified to discuss options and associated costs.

[3]Number of unsaturated zone soil / bedrock samples to be submitted for analytical testing. Samples will be assigned based on photoionization detector (PID) readings and/or professional judgement considering the type of chemical, nature and depth of source, and chemical fate and transport characteristics.

[4]Analytical Methods:

BTEX: Benzene, toluene, ethylbenzene and xylenes by EPA 8260; TPH: Total Petroleum Hydrocarbons: TCEQ TX1005; PAHs: Polycyclic aromatic hydrocarbons by EPA 8270; Moisture by ASTM or standard method; TCLP: Toxicity characteristic leaching procedure by EPA 1311.

Supplemental Environmental Monitoring – If requested, Terracon will conduct environmental monitoring at the site during the construction phase of the project. Terracon will provide an environmental technician and equipment necessary to measure the lower explosive limit (LEL) as well as the organic vapor concentrations during the removal of the pipeline. No soil samples will be submitted for laboratory analyses during the environmental monitoring. The scope of services is limited to a 10-hour day including round-trip travel between Terracon's San Antonio office and the site. The cost estimate is based on 3 days of environmental monitoring.

Environmental Deliverables

LSI - Following completion of the site activities associated with the LSI, including any supplemental borings, and receipt of the laboratory analytical results, a report will be prepared that will include the following:

- Documentation of field activities;
- Site plan showing pertinent site features;
- Soil boring/monitoring well logs;
- Analytical laboratory results;
- Data evaluation and presentation of findings; and,
- Recommendations concerning further action, if necessary.

The written report will include a summary of the investigation results as well as conclusions and recommendations that will take precedence over any verbal or preliminary reports that Terracon personnel may have provided. The analytical results will be compared to the protective concentration levels (PCLs) established by the Texas Commission on Environmental Quality (TCEQ) for direct exposure based on commercial / industrial land use or construction workers.

Environmental Monitoring - A daily log will be maintained and submitted to the client at the end of each day. A final report, related to environmental monitoring, is not included in this scope of services.

Schedule - The Schedule for the services will be based on the project schedule. The client will notify Terracon within 5 business days of the planned start date to allow for resources to be

coordinated and scheduled. The LSI Report will be submitted to the client within 5 business days of receiving the final laboratory report. The actual project schedule will be based on the availability of environmental drillers and other subcontractors. If schedule delays are anticipated based on subcontractor availability, weather, and/or encountered site conditions, you will be contacted to discuss changes in the schedule. The standard laboratory analytical completion schedule is 10 business days. If you would like to have laboratory analyses completed quicker, please contact the project manager to discuss the options and additional fees.

D. COMPENSATION

For the scope of geotechnical and environmental services outlined in this proposal (including drilling, laboratory testing, and reporting), the lump sum fees are:

Task	Lump Sum Fee
Subsurface Exploration, Laboratory Testing, Geotechnical Consulting & Reporting	$38,885
Limited Site Investigation (LSI)	$11,880

Additional services not part of the base fee include the following:

Additional Services (see Exhibit B)	Lump Sum Fee	Initial for Authorization
Private Utility Locate Service [1]	$2,400	
Supplemental environmental borings	$6,760	
Supplemental environmental monitoring during construction ($1,500 per day – budgeted for 3 days)	$4,500	
Tree Clearing (if required) [1]	$2,500 per day	
Plans and Specifications Review	$850	
Construction Materials Testing Services	TBD	

1. If the owner/client is unable to accurately locate private utilities, we can subcontract a private utility locating firm and/or utilize geophysical equipment, if necessary. The detection of underground utilities is dependent upon the composition and construction of utility lines. Some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private locate service does not relieve the owner of their responsibilities in identifying private underground utilities.

A breakdown of the fees for geotechnical services is attached. Unless instructed otherwise, the invoice will be sent to your attention at the above address. Should it be necessary to expand our services beyond those outlined in this proposal, we will notify you, then send a supplemental proposal stating the additional services and fee. We will not proceed without your authorization, as evidenced by your signature on the Supplement Agreement form.

E. AUTHORIZATION

Terracon and Kimley-Horn have a Master Service Agreement for in place (dated March 22, 2016). The proposed Scope of Services may be authorized by a Purchase Order referencing the existing Master Services Agreement. Services will be initiated upon acceptance of PO and receipt of authorization with written notice to proceed (including e-mail). The terms, conditions and limitations stated in the Master Services Agreement, including sections of this proposal incorporated therein, shall constitute the exclusive terms and conditions and services to be performed for this project.

We appreciate the opportunity to provide this proposal and look forward to the opportunity of working with you. If you have any questions regarding this proposal, please feel free to contact the undersigned.

Sincerely,
Terracon Consultants, Inc.
(Firm Registration: TX F3272)

Tariqul Anwar, P.E.
Project Engineer

Gregory P. Stieben, P.E., D.GE
Senior Consultant

TA/GPS/mhb – P90205189R1

Attachment: Environmental Boring Locations
Fee Breakdown (Geotechnical)

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY GOOGLE EARTH

Project Manager: TA Drawn by: LN Checked by: PJP Approved by: PJP	Project No. P90205189 Scale: AS SHOWN File Name: Exhibit 1 Date: 3-10-2021	Terracon 6911 Blanco Road San Antonio, Texas 78216	Environmental Boring Locations Proposed 16-inch Transmission Main Line **Near Roy Richard Road** **Schertz, Texas**	Exhibit 1

Terracon

Fee Breakdown for Final Geotechnical Study
Proposed 16-inch Water Transmission Main
Schertz, Texas
Proposal No. P90205189R

Geotechnical Borings	Quantity	Unit	Rate	Subtotal
TXDOT / City Permit & Traffic Control	4	each	$1,500.00	$6,000.00
Drill Rig and Crew Mob/Demob	4	each	$350.00	$1,400.00
Drilling and Sampling - Soil	390	ft	$17.00	$6,630.00
Senior Technician (Drilling & Utility Coordination)	50	hour	$75.00	$3,750.00
Vehicle Charge	5	each	$100.00	$500.00
				$18,280.00

Laboratory Testing	Quantity	Unit	Rate	Subtotal
Water Content	146	each	$10.00	$1,460.00
Liquid and Plastic Limits (3 points)	50	each	$95.00	$4,750.00
Sieve Analysis (No. 200)	20	each	$50.00	$1,000.00
Density of Undisturbed Samples - Soil	5	each	$15.00	$75.00
Unconfined Compression - Soil	5	each	$60.00	$300.00
Pocket Penetrometer	40	each	$5.00	$200.00
Soluble Sulfates (TEX-145-E)	10	each	$30.00	$300.00
Maximum Density Relations (proctors)	3	each	$225.00	$675.00
CBR, Three Point	3	each	$150.00	$450.00
Lime modification optimum (using pH)	3	each	$85.00	$255.00
Soil-lime mixture design (using plasticity index)	3	each	$250.00	$750.00
				$10,215.00

Professional Services	Quantity	Unit	Rate	Subtotal
Project Principal	14	hour	$200.00	$2,800.00
Project Manager	33	hour	$150.00	$4,950.00
Staff Engineer	20	hour	$120.00	$2,400.00
Clerical	4	hour	$60.00	$240.00
				$10,390.00

Total Estimated Fee **$38,885.00**

SEVEN ARROWS
LAND STAFF

ATTACHMENT 3

April 6, 2021

Kimley-Horn and Associates, Inc.
Attn: Stephen J. Aniol, P.E.
601 NW Loop 410, Suite 350
San Antonio, TX 78216

Re: City of Schertz
Dedicated Transmission Main
Land Rights Acquisition Services

SCOPE OF SERVICES

GENERAL: The City of Schertz (City) has real estate impacts associated with the Dedicated Transmission Main Project (the Project) which will include appraisal and real estate acquisition services. 7Arrows Land Staff, LLC (7Arrows) shall provide a variety of services to support Kimley-Horn and Associates, Inc. (Kimley-Horn) and the City in execution of the project including appraisal and land rights acquisition services. 7Arrow's services may also include, as directed by City, assistance with open houses or similar meetings with the public, presentations to all approval authorities, and other real estate and property work that may be needed from time to time to support the timely execution of the project.

BASIC SERVICES: 7Arrows shall render the following professional services in connection with the development of the Project.

1. Title Services for 20 Parcels

   a) Review preliminary title commitment (Schedules A, B & C) or preliminary title search information for all properties.

   b) Secure title commitments and updates in accordance with insurance rules and requirements for parcel payment submissions for properties which will be acquired in fee simple and for ROW easements.

   c) Secure title insurance for all parcels, insuring acceptable title. Cure all exceptions on Schedule C, when applicable. Written approval by City will be required for any exceptions to coverage.

   d) Attend closings and provide closing services in conjunction with Title Company for all tracts.

   e) Record all original instruments immediately after closing at the respective County Clerk's Office.

   f) Research title and provide Condemnation Title Report to legal counsel for property rights that will be acquired through Eminent Domain. (See item 7 below)

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2. Appraisal Services for 18 Permanent/TCE and 2 Temporary Construction Easement Acquisitions

a) Kimley-Horn to provide right of entry letters for use by appraiser.

b) Prepare and conduct personal pre-appraisal contact with interest owner(s) for each parcel.

c) Contact property owners or their designated representative to offer opportunity to accompany the appraiser on the appraiser's inspection of subject property. Maintain record of contact in file.

d) Finalize complete appraisal report for each parcel. These reports shall conform to the City's policies and procedures along with the Uniform Standards of Professional Appraisal Practice.

e) All completed appraisals will be administratively reviewed and approved by the City.

f) Appraisal fee could be adjusted based on complexity of evaluation within range provided in Fee Schedule.

3. Negotiation Services for 18 Permanent/TCE and 2 Temporary Construction Easements Acquisitions

a) Analyze appraisal reports and confirm approved value prior to making offer for each parcel.

b) Analyze preliminary title report to determine potential title problems and propose methods to cure title deficiencies. (Exhaust all efforts to obtain subordinations of liens, waiver of lienholders and clear any title, if 7Arrows staff cannot cure title through standard practices, the City will be responsible for obtaining legal counsel to remedy any tile deficiencies as required by title or alternatively, may elect to close the easement without a title policy).

c) Prepare the initial offer letter and any other documents required or requested by the City in an acceptable form.

d) Contact each property owner or owner's designated representative and present the written offer in person where practical. When owners do not wish to have offers delivered in person, they will be mailed via certified mail with return receipt for documentation of delivery/receipt. Maintain follow-up contacts and secure the necessary instruments upon acceptance of the offer for the closing.

e) Provide a copy of the appraisal report for the subject property exclusively to the property owner or authorized representative at the time of the offer.

f) Respond to property owner inquiries verbally and/or in writing within two business days.

g) Prepare a separate negotiator contact report for each parcel file for each contact.

h) Maintain parcel files of original documentation related to the purchase of the real property or property interests/acquisition of the Easement or Right of Way.

i) Present counteroffers in a form as directed by the City. Transmit any written counteroffer from property owners including supporting documentation, and Agent's recommendation with regard to the counteroffer.

j) Prepare second and final offer letter as necessary.

4. Acquisition/Closing Services for 18 Permanent/TCE and 2 Temporary Construction Easement Acquisitions

a) Prepare check request, review closing documents and facilitate execution of all necessary documents. Attend closings and provide closing services in conjunction with Title Company for all tracts.

b) Transport any documents to the City and landowner for signatures.

c) Record or cause to be recorded all original instruments immediately after closing at the respective County Clerk's Office.

d) Review Title Policy and provide to City for permanent storage.

5. Project Administration for 18 Permanent/TCE, and 2 Temporary Construction Easement Acquisitions

a) Maintain current status reports of all parcel and project activities.

b) Provide bi-weekly update reports to Kimley-Horn.

c) Participate in up to 10 project review meetings as requested, all additional meetings will be charged on a per hour basis.

d) Copy designated Kimley-Horn representative on all property owner correspondence.

e) Maintain copies of all correspondence and contacts with property owners.

f) Update database with current status information and documentation.

g) Condemnation Support Services are not included in the Basic Scope of Services.

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SUPPLEMENTAL SERVICES (Not contemplated within BASIC SCOPE & FEE):

6. Condemnation Support

   a) Upon receipt to proceed with Eminent Domain from City, order updated "Condemnation Limited Title Report" (search parameters set by City and/or outside legal counsel)

   b) Prepare condemnation package as directed by City and deliver to City's designee or legal counsel.

   c) Upon notification from City, request update of appraisal.

   d) As necessary, the appraiser will appear and or testify as an Expert Witness in eminent domain proceedings and be available for pre-hearing or pre-trial meetings as directed by City (additional fees to be charged on an hourly basis).

   e) As necessary, ROW Manager will appear and provide Expert Witness testimony when requested (Additional fees will be charged on an hourly basis).

   f) Supplemental Appraisal Fee to be applied for complex appraisals as needed.

7. In Fee Acquisition Services – In the Basic Scope of Services, all land rights are anticipated to be acquired as Permanent Easement or Temporary Construction Easements. Should the City of Schertz determine that In Fee Acquisition is needed, this scope contemplates acquisition of up to 6 In Fee Parcel Acquisitions as a Supplemental Service to the Basic Scope and Fee.

Submitted By: Nicole Costanza

Nicole Costanza, Managing Partner
Date: 4/6/21

SEVEN ARROWS
LAND STAFF

City of Schertz
Dedicated Transmission Main

FEE SCHEDULE – BASIC SERVICES	
Service Item	**Per Parcel Fixed Fee**
ACQUISITION SERVICES:	
Title & Title Curative	$1,500.00
Administrative Fee	$1,500.00
*Permanent Easement/ROW Acquisition	$3,000.00
**Temporary Construction Acquisition	$2,000.00
Closing Services	$1,500.00
**18 Parcels with PE/TCE @ $7,500*	*$135,000.00*
***2 Parcels with TCE Only @ $6,500*	*$13,000*
ACQUISITION SUBTOTAL:	**$148,000.00**
APPRAISAL SERVICES:	
Permanent Easement & TCE	*$3,500.00 to $4,500.00*
Temporary Construction Easement Only	*$3,000.00 - $4,000.00*
18 Parcels with PE/TCE @ $4,000	*$72,000.00*
2 Parcel with TCE Only @ $3,500	*$7,000.00*
APPRAISAL SUBTOTAL:	**$79,000.00**
TOTAL ESTIMATED COST:	**$227,000.00**

SEVEN ARROWS
LAND STAFF

FEE SCHEDULE – SUPPLEMENTAL SERVICES	
Service Item	**Per Parcel Fixed Fee**
4 Additional Parcels	
PE/TCE Acquisition @ $7,500 per parcel	$30,000.00
PE/TCE Appraisal @ $4,500 per parcel	$18,000.00
In Fee Acquisition @ $7,500 per parcel (6 parcels)	$45,000.00
In Fee Appraisal @ $5,000 per parcel (6 parcels)	$30,000.00
Appraisal Updates for Condemnation (3 parcels)	$13,500.00
Supplement Appraisal for complex properties	$9,000.00
ROW Manager Hourly Rate	$200.00
Agent Hourly Rate	$125.00
*7Arrows only charges for services performed on each parcel.	
*Estimate includes up to 10 project meetings with ROW Manager, all additional meetings will be charged at hourly rate.	
*Estimate excludes condemnation support.	

THE RIOS GROUP

March 10, 2021

ATTACHMENT 4

Stephen J. Aniol, P.E.
Kimley-Horn
601 NW Loop 410, Suite 350
San Antonio, Texas 78216
210.321.3404 office
Stephen.Aniol@kimley-horn.com

RE: Subsurface Utility Engineering
City of Schertz - Transmission Main

Dear Mr. Aniol:

The Rios Group, Inc. (TRG) is pleased to submit a cost proposal for Subsurface Utility Engineering (SUE) for the above referenced project. This proposal is based on information provided via email on March 7, 2021.

Introduction

TRG will perform SUE services for this project in general accordance with the recommended practices and procedures described in ASCE publication CI/ASCE 38-02 "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data." As described in the publication, four levels have been established to describe and depict the quality of subsurface utility information. The four quality levels are as follows:

- Quality Level D (QL"D") – Information obtained from existing utility records.
- Quality Level C (QL"C") – Surveyed data depicting visible above-ground features supplemented with QL"D" information.
- Quality Level B (QL"B") – Two-dimensional horizontal information obtained through the application and interpretation of non-destructive surface geophysical methods. Also known as "designating," this level incorporates QL"C" information and provides horizontal positioning of subsurface utilities to within approximately 1.0 foot.
- Quality Level A (QL"A") – Three-dimensional horizontal and vertical information obtained through non-destructive vacuum excavation equipment to expose utilities at critical points. Also known as "locating," this level incorporates QL"B" information and provides horizontal and vertical positioning of subsurface utilities to within approximately 0.05 feet.

Scope of Work

Based on information provided by Kimley-Horn (Client), TRG has developed a proposed scope for SUE services on this project. This scope may be modified, with Client and TRG concurrence, during the performance of work if warranted by changing or unexpected field conditions.

The base scope of this proposal includes QL "B" and QL"A" SUE. In general, SUE services are requested within the limits of the City of Schertz Transmission Main project in Schertz, TX. TRG will research utility records and attempt to designate (QL "B") existing underground utilities within the proposed 16" transmission main alignment at up to **eight (8)** street crossings. TRG will designate all utilities within a 50 radius of the intersection as shown within the red clouded area on Exhibit B to this proposal. As agreed, to with the Client, this scope of work includes mapping of the following utilities: water, reclaimed water, chilled water, wastewater, natural gas, gas/oil pipelines, electric, telephone, fiber,

duct banks, cable TV, and storm sewer. It is assumed that TRG will invert all sanitary sewer and storm sewer lines and that those utilities will be shown as QL "C" within the project limits. Overhead utilities and irrigation lines are excluded from this scope of work.

The base scope also includes up to **forty-seven (47)** QL "A" test holes all located within the limits of the City of Schertz – Transmission Main Project – Schertz, Texas. To layout the test hole locations, TRG will perform QL"B" SUE designating in accordance with the *QL"B" – Designating* procedures described below. TRG will attempt to designate the requested utility for 10 feet on each side of the test hole locations. Forty-two (42) of the proposed test hole locations are shown on Exhibit B. TRG has also included up to **five (5)** additional test holes, if required.

Supplemental Services: As supplemental services, the client has requested TRG to provide an estimated fee for additional QL"A" & QL"B" SUE Services. If required, this supplemental fee estimate includes up to **two (2) days of QL"B"** and up to **five (5) QL"A" SUE test holes.**

*The survey of QL "B" and QL"A" SUE information is **not** included in this scope of work. It is assumed that Sherwood Surveying will provide survey of TRG's paint marks and flags.*

Any necessary Right-of-Entry (ROE) permits, including railroad ROE, will be provided by the Client prior to the start of TRG field work.

TRG Procedures

QL"D" and "C" – Records Research and Surface Feature Survey

It is the responsibility of the SUE provider to perform due-diligence with regard to records research and the acquisition of available utility records. The due-diligence provided for this project will consist of contacting the applicable One Call agency and associated utility owners/municipalities, visually inspecting the work area for evidence of utilities, and reviewing available utility record information. Additional utilities not identified through these efforts will be referred to as Unknown utilities.

QL"B" – Designating

Following a review of the project scope and available utility records with the project manager, TRG field personnel will begin designating the approximate horizontal position of known subsurface utilities within the project area. A suite of geophysical equipment that includes magnetic and electromagnetic induction will be used to designate conductive utilities. Where access is available, a sonde will be inserted into non-conductive utilities to provide a medium for transmission which can then be designated using geophysical equipment. Non-conductive utilities can also be designated using other proven methods, such as rodding and probing. TRG will make a reasonable attempt to designate Unknown utilities identified during field work; however, no guarantee is made that all Unknown utilities will be designated. Utilities will be marked and labeled to distinguish type and ownership. Field data depicting the designated utilities, as well as relevant surface features, will be produced to ensure accuracy and completeness of subsequent survey data. The TRG project manager will review the collected survey data, field data, and utility records for accuracy and completeness.

QL"A" – Locating

TRG will utilize non-destructive vacuum excavation equipment to excavate test holes at the requested locations. To layout the test holes, TRG will follow the *QL"B" – Designating* procedures described above. Once each utility is located, TRG will record the size, type, material, and depth. Test holes will be uniquely marked. Excavations will be backfilled by mechanical means with the appropriate material,

and the original surface will be restored. If necessary, TRG can core pavement up to a depth of 12 inches. Asphalt surfaces will be repaired with an asphalt cold patch, and concrete cores will be epoxied in place, flush with the surrounding surface. TRG assumes that flowable fill will not be required when backfilling test holes and that full-section pavement repair (including sidewalks) will not be required to restore the original pavement surface. If requested, these services can be provided at an additional cost.

TRG will establish any necessary routine traffic control measures at no additional cost. However, if non-routine traffic control measures (lane closures, traffic detours, flagpersons, etc.) are required, this service will be invoiced as a direct expense. Due to the risk of damage, TRG will not attempt to probe or excavate test holes on AC water lines unless approval is obtained from the owner in advance. Additionally, excavation in rock, or to a depth greater than 18 feet, is considered beyond the scope of this proposal.

TRG has made the following assumptions with regard to the test holes on this project:

- All test holes will be accessible to truck-mounted vacuum excavation equipment.
- Right-Of-Way (ROW) permits from the City of Schertz (COS) will be required. TRG will obtain all required permits and ensure that coordination and compliance is provided.
- Designed traffic control plans will **not** be required.
- Non-routine traffic control measures may be required depending on test hole locations. TRG will acquire the services of a qualified Maintenance-Of-Traffic (MOT) Subcontractor and ensure that adequate traffic control is provided.
- The coring of pavement may be required.

Deliverables

TRG will provide the following as a final deliverable to the Client:

- A utility file in CAD format depicting all designated and located utilities. The Client will provide TRG with any necessary background files for use in completing the final deliverables.
- A summary sheet of all test hole coordinate data and depth information.
- 8.5” x 11” Test Hole Data Forms for all test hole locations completed. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

Schedule

TRG can mobilize within three (3) weeks of receiving Notice-To-Proceed (NTP). TRG estimates that the base scope of work can be completed in thirty-seven (37) working days, broken down as follows:

- Layout test holes – 4 days
- QL“B” field work – 3 days
- QL“A” field work – 20 days (after permit approval)
- QL“A” deliverable preparation – 10 days (after receipt of survey data)

TRG estimates that the Supplemental Services Scope of work can be completed in thirteen (13) working days, broken down as follows:

- Layout test holes – 1 day
- QL“B” field work – 2 days
- QL“A” field work – 3 days (after permit approval)
- QL“A” deliverable preparation – 7 days (after receipt of survey data)

Estimated Fee

The total estimated cost to complete the base scope of work described herein is **Eighty-One Thousand Five Hundred Twenty-Five Dollars and 00/100 ($81,525.00)**. An itemized breakdown of cost is provided in Exhibit A-1.

The total estimated cost to complete the supplemental service scope of work described herein is **Thirteen Thousand Two Hundred Forty Dollars and 00/100 ($13,240.00)**. An itemized breakdown of cost is provided in Exhibit A-2.

We look forward to working with you on this project. If there are any questions, please do not hesitate to call at 210.981.3050.

Respectfully,

The Rios Group, Inc.

Albert John Saldivar

Project Manager

THE RIOS GROUP

Estimate for Subsurface Utility Engineering

Transmission Main - Base

Schertz, TX

EXHIBIT A-1

Direct Expenses		*Rate*	*Assumed Quantity*	*Unit of Measure*		*Sub-Total*
ROW Permits (City of Schertz)	$	25.00	15	EA	$	375.00
Traffic Control (Standard)	$	350.00	8	DAY	$	2,800.00
Flowable Backfill	$	270.00	15	EA	$	4,050.00
Deliverable Preparation	$	7,500.00	1	LS	$	7,500.00
Sub-Total					**$**	**14,725.00**
QL"B" SUE Designating		*Rate*	*Assumed Quantity*	*Unit of Measure*		*Sub-Total*
QL"B" SUE (2-Man)	$	2,500.00	3	DAY	$	7,500.00
Test Hole Layout (1-Man)	$	1,500.00	3	DAY	$	4,500.00
Sub-Total					**$**	**12,000.00**
QL"A" SUE Test Holes						
Unit Rate - Depth		*Rate*	*Assumed Quantity*	*Unit of Measure*		*Sub-Total*
0 - 4 feet	$	850.00	24	EA	$	20,400.00
4 - 8 feet	$	1,150.00	14	EA	$	16,100.00
8 - 12 feet	$	1,450.00	9	EA	$	13,050.00
12 - 18 feet	$	2,300.00		EA	$	-
Pavement Coring	$	350.00	15	EA	$	5,250.00
Test Hole Total			47			
Sub-Total					**$**	**54,800.00**
Total Estimated Cost					**$**	**81,525.00**

THE RIOS GROUP

Estimate for Subsurface Utility Engineering
Transmission Main - Supplemental
Schertz, TX

EXHIBIT A-2

Direct Expenses		*Rate*	*Assumed Quantity*	*Unit of Measure*		*Sub-Total*
ROW Permits (City of Schertz)	$	25.00	2	EA	$	50.00
Traffic Control (Standard)	$	350.00	1	DAY	$	350.00
Flowable Backfill	$	270.00	2	EA	$	540.00
Deliverable Preparation	$	1,000.00	1	LS	$	1,000.00
Sub-Total					**$**	**1,940.00**
QL"B" SUE Designating		*Rate*	*Assumed Quantity*	*Unit of Measure*		*Sub-Total*
QL"B" SUE (2-Man)	$	2,500.00	2	DAY	$	5,000.00
Test Hole Layout (1-Man)	$	1,500.00	0.5	DAY	$	750.00
Sub-Total					**$**	**5,750.00**
QL"A" SUE Test Holes						
Unit Rate - Depth		*Rate*	*Assumed Quantity*	*Unit of Measure*		*Sub-Total*
0 - 4 feet	$	850.00	3	EA	$	2,550.00
4 - 8 feet	$	1,150.00	2	EA	$	2,300.00
8 - 12 feet	$	1,450.00		EA	$	-
12 - 18 feet	$	2,300.00		EA	$	-
Pavement Coring	$	350.00	2	EA	$	700.00
Test Hole Total			5			
Sub-Total					**$**	**5,550.00**
Total Estimated Cost					**$**	**13,240.00**

ATTACHMENT 5

April 6, 2021

Mr. Stephen J. Aniol, P.E.
Kimley-Horn and Associates, Inc.
601 NW Loop 410, Suite 350
San Antonio, TX 78216

Submitted electronically via email: ***stephen.aniol@kimley-horn.com***

Subject: City of Schertz 3.53-mile-long pipeline route for the proposed 16" dedicated transmission water main connecting the Live Oak tank site to the I-35 tank site for the City of Schertz.

Dear Mr. Aniol:

Thank you for your interest in Sherwood Surveying & S.U.E. capabilities. We appreciate the opportunity to assist you with your surveying needs for the above-mentioned project. We have a general understanding of the project needs based on your emails and have based our proposal on this understanding.

Scope of Work
The scope of work for this project includes the following:

1. Cross sections at 50-foot intervals at all public street crossings (ROW to ROW/top of curb/gutter/center line and/or striped line).
2. Cross sections at 100-foot intervals along the pipeline alignment
3. Obtain elevation shots in grid format within 100-feet of each public street crossing.
4. Locate and pick up noticeable sags/crests that do not follow the normal terrain.
5. Locate and pick up flowline and channel/creek bed characteristic (Top/Toe) for all drainage areas within project limits. Pick up all changes in drainage channel alignment and boundaries.
6. Pick up dimensions & flow lines of all drainage infrastructure within the project limits; include all pipe sizes and flow direction.
7. Call "One Call" and/or individual entities or service providers for locates, pick up utility locates, and pick up visible utility appurtenances within project limits. Review and include utilities from record drawings and contact Project Manager if additional data is needed to clearly define existing utilities. Water and sewer from all entities must be included in the survey and provide all inverts from manholes. Any manhole lids that are bolted down must be opened by surveyor, utilizing necessary tools required. Notate owner of each utility in separate utility base file.
    1. At each location where transmission main crosses existing sewer, surveyor shall obtain upstream and downstream manhole information, including top of manhole, flowline inverts, direction of flow and size of pipes. This data will be used to calculate approximate top of sewer pipe at pipeline crossing.

8. Locate and pick up all traffic signal equipment at Old Wiederstein and Cibolo Valley to include length of mast arms on signal poles and include location and number of all signal heads, dimensions of any traffic equipment footing or foundations (where designated).
9. Pick up curbing, flatwork, wheelchair ramps, driveway cuts, roadway pavement limits, striping, signage, etc. within project limits.
10. Locate and pick up all trees in the right-of-way and describe size and type (8" diameter and above within City of Schertz. 6" diameter and above within City of Cibolo.). Surveyor is responsible for accurately identifying trees. Provide detail tree survey including tree inventory information.
11. Pick up any visible monumentation, confirmed rights-of-way, property pins and parcel boundaries and show all on files.
12. Provide sufficient control points at a maximum spacing of 250' within project limits, adding additional to account for maintaining line of sight at all bends in alignment. Each control point shall be outside of the currently proposed permanent easement whereas to not be removed during construction. Surveyor shall coordinate with KHA prior to setting control
13. Prepare files using AutoCAD 2018 or higher ensuring thorough quality control and quality assurance.
14. Add break lines at lane lines (center line), face of curb, ROW and grade breaks at drainage channels, including top, toe and flowlines etc. Sufficient breaklines should be added to produce accurate cross sections
15. Locate and pick up geotechnical soil and pavement bores (est. up to 25 locations – combined for soil and pavement bores). This will be completed further into the 60% design phase. Survey will be responsible for coordinating with Geotechnical field representatives to identify locations. Assume 2 trips.
16. Locate and pick up all SUE QL-A and QL-B within project limits (est. 50 QL-A locations and QL-B at each public street crossing (8) in base scope). Assume 50' QL-B at each street crossing, ROW to ROW. Survey will be responsible for coordinating with SUE field representatives to identify locations. Assume 3 trips for QL-A and 4-trips for QL-B.
17. Provide a separate file for all SUE work. Also, update the utility base file that incorporates SUE QL-A and QL-B data collected. Within QL-A and B areas, QL-C and QL-D shall be removed and QL-A/B shall be clearly notated on both files.
18. Provide separate survey file for geotechnical soil and pavement bores
19. All existing easements within project limits shall be included in survey file. Survey shall complete necessary easement research to accurately depict all easements. Easements shall be labeled in survey including owner, type, width, etc.
20. Re-survey Dietz Creek Channel Improvements area in accordance with attached design plans, prepared by others. Process and incorporate new survey data into base file and resubmit. Per

O (830) 228-5788 | F (830) 885-2170 P.O. BOX 992 | 6477 FM 311, SPRING BRANCH, TX 78070 WWW.SHERWOODSURVEYING.COM TBPELS FIRM #10044200

plans prepared by others, channel improvements are limited to grading and re-establishing centerline. Utility relocations are not planned.

21. Locate and pick-up environmental borings (2 EA).

Deliverables:
All survey shall be performed in English Units – US Survey feet, NAD83 Texas State Planes, South Central Zone, surface coordinates. All control will be assumed.

DWG files must contain control points as outlined above, drawn to the proper project coordinates and must represent physical "out-on-the-field" control. The points must be labeled in the file to at least the fourth decimal place.

The survey data shall be prepared and provided in AutoCAD 2018 or higher. The entire survey shall be continuous and contained in one file using standard CADD drafting procedures and practices. Surveyor shall collect all ground features to ensure enough mass data points are included to develop a PS&E quality DTM, to depict the entire terrain within the project limits. All visible utilities and drainage features are to be collected and detailed including any overhead facilities, vegetation must be identified to include species and size. Also, any monuments such as iron pins and TxDOT markers are to be located and included in survey file. All fences, buildings, parking lots, sidewalks and any obvious features shall be located and identified. For all overhead power supply, transmission, and electric lines, survey shall obtain height above existing ground and notate in survey file. Also, for all power transmission foundations, survey shall pick up actual diameter of foundation with at least two survey shots on foundation and two survey shots on existing ground.

Topographic files should be in 2D & 3D format. The 2D file must be prepared to use as a topographic background to represent existing conditions on construction drawings. Provide description of elements, flow lines, pipe sizes, top of manholes, etc. on the 2D file with an arrow pointing to the element in order to maintain clarity. The 3D file must contain 3D points in a separate point group representing the actual terrain, including all spot shots, break lines, and voids suitable for developing a DTM triangle model within AutoCAD Civil 3D.

Level structure on all electronic files developed for Kimley-Horn must follow Kimley-Horn CADD standards, to be provided to surveyor prior data collection, so that elements of distinctive types reside on a specific layer and can be manipulated individually. Layer mixing between infrastructure and entities will not be accepted. Utilities such as sewer lines, water lines, gas lines, telephone, CATV, electric conduits, and aerial must reside on discrete levels and linestyles. Size of utility shall be included in each linestyle. Power poles shall be drawn in a layer of their own as well as any drainage infrastructure, traffic signal, illumination, and concrete surfaces.

Text on DWG files shall be relative to the final plot scale as dictated by the Project Manager (1"=40' is desirable). Font 5 (Bridge) is requested for the text used in the survey. Text must be on discrete levels with similar naming to what it represents so it can be manipulated individually or turned off on construction drawings. Text must also be placed parallel to the roadway or pipeline alignment it corresponds to. For plan development purposes, plan sheets will begin at FM 3009 and work towards the I-35 tank site at Hope and Tulip.

<u>Files Provided by Kimley-Horn</u>

- Survey Boundary .KMZ
- Transmission Main Alignment .KMZ
- Right of Entry exhibit
- Easement spreadsheet identifying current proposed temporary construction and

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permanent easements, and joint use agreements.
- Tentative SUE Plan with QL-D Utility Data
- Dietz Creek Channel Improvements plans prepared by others.

Final Deliverables:
Design Milestones will include 60%, 100% unsigned, and Final

The surveyor shall provide the following deliverables:
- An ASCII file with all point numbers and descriptions, X,Y,& Z, P-code format and a DWG file with a full description of all control and benchmark information.
- Complete topographic AutoCAD 2D and 3D files including surface, code lists, field notes and sketches shall also be submitted when electronic files are delivered.
- Separate utility base file
- Separate base file for geotechnical data
- Separate base file for SUE QL-A/B data
- A project control sheet with pertinent benchmark and control points will be signed and sealed by the RPLS and prepared for submittal, and will be included in the final construction drawings developed for the project.
  - Account for 60%, 100% unsigned and final design milestones
- Develop and submit a parcel and easement strip map signed and sealed by the RPLS, which is to be included into the final construction drawings. Assume 22" x 34" plan sheets, horizontal scale of 1" = 200', double plan (5 plan sheets)
  - Account for 60%, 100% unsigned and final design milestones
- Plat & Field Notes including permanent and temporary construction easements, boundary survey, and PFNs. For basic services, estimate 19 PFNs to be developed. Reference current Right of Entry status exhibit and easement spreadsheet.
- A detailed tree survey and tree inventory for trees within the project limits, listed in CAD file and .XLS spreadsheet
  - for trees with a minimum 8-inch diameter within the City of Schertz project limits and a minimum 6-inch diameter within the City of Cibolo project limits.
  - Revised survey base file for Dietz Creek channel improvements, including updated surface.

Base Services Fee Schedule
1. Topographic Survey – **$88,500.00**
2. Detailed Tree Survey – **$29,700.00**
3. Obtain Geotechnical Information with Supporting Files – **$5,800.00**
4. Obtain SUE Information with Supporting Files – **$8,500.00**
5. Project Control Sheet – **$4,800.00**
6. Easement Strip Map – **$5,200.00**
7. Plat and Field Notes – **$20,900** (**$1,100 per plat and field note set).**
8. Dietz Creek Channel Improvements re-survey. - **$6,300.00**

Total Base Services **= $169,700**

Supplemental Services Fee Schedule
1. Plat and Field Notes (3 EA) – **$3,300 ($1,100 per plat and field note set).**
2. Survey trip to obtain additional Geotech – **$3,500.00 (one mobilization)**
3. Survey trip to obtain additional SUE – **$3,800.00 (one mobilization)**
4. Survey trip for additional Environmental Phase II Sampling – **$3,500.00 (one mobilization)**
5. Additional one (1) day survey trip to obtain miscellaneous survey – **$2,500.00 (one mobilization)**

Total Supplemental Services **= $16,600**

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Any additional reimbursable expenses that may be accrued through the course of this project such as excessive plotting, faxes or other reasonable expenses shall be billed at cost plus 15%. All invoices for reimbursable expenses shall be accompanied with copies of invoices/receipts as needed.

Availability
Sherwood currently has sufficient man-power available to begin the project within 7-10 business days from notice to proceed, if awarded. We will of course make every effort to meet your needs and expectations. Additionally, due to the current situation with COVID, response times may be slower and cannot be guaranteed during these uncertain times. Sherwood Surveying will, however, monitor the situation closely and work hard to keep the project moving in a timely fashion.

Validity
This lump sum proposal is valid for 30 days from the date of the letter. Sherwood is fully insured and will provide proof of same if needed.

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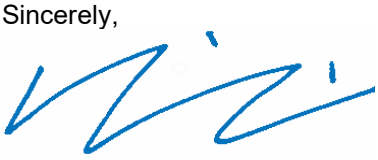
Invoicing
Partial, monthly with progress report, invoicing will be mailed to your attention throughout the course of the project. Invoices will be uploaded to Kimley-Horn SMP and emailed to: Stephen.aniol@kimley-horn.com and Rebekah.cramblitt@kimley-horn.com.

We use Levelset to help manage our payment paperwork such as notices, waivers, and pay apps. These documents notify you that our company is providing labor or materials to help ensure everyone is in the loop. Sending these documents is often legally required because they help create visibility so payment problems can be spotted and addressed. It is our hope to maintain transparency and open communication to ensure this and every job goes smoothly.

We appreciate your consideration of Sherwood for this project. If there is anything that you would like to discuss about this proposal or additional information that you require, please do not hesitate to contact us. Should you find this proposal and terms acceptable, please indicate so by signing and dating this document below and return.

Sincerely,



Rico Laijas
Department Manager
Sherwood Surveying & S.U.E., LLC

Re: Schertz Dedicated Transmission Main Project

Approved Date

Name (print) Title

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ATTACHMENT 6

PROPOSAL TO CONDUCT A CULTURAL RESOURCES ASSESSMENT OF THE SCHERTZ DEDICATED TRANSMISSION MAIN PROJECT, GUADALUPE COUNTY, TEXAS

Proposal Date: March 15, 2021

PREPARED BY:
Todd McMakin
Stone Point Services, LLC
11827 County Road 41
Tyler, TX 75706
903-881-3103

INTRODUCTION

Thank you for the opportunity to provide a scope and fee for this project. Stone Point Services, LLC is a small, woman-owned business with extensive experience working with projects of this nature. We have the personnel available to ensure that this project is conducted in an efficient and timely manner. Our goal is to provide Kimley-Horn with a cultural resources survey that will meet or exceed the requirements of the Texas Historical Commission (THC) and any federal agency with review authority. Our Principal Investigator and Senior Archaeologist, Todd McMakin, has worked directly with the THC on numerous projects. Likewise, Mr. McMakin has worked in the field of archaeology for over 30-years. Our supporting staff includes GIS specialists, senior level archaeologists, architectural historians, and archeological field technicians. Stone Point Services is fully insured for your protection, and we have detailed safety training and protocols to ensure that this project can be completed safely.

Based on our understanding of the proposed project, current site conditions, and our estimate of time and expenses, we can perform the scope of services for the following **lump sum** fees:

Desktop Analysis: **$350**
Cultural resources survey: **$13,750**
Mechanical (deep) testing for archeological sites: **$19,780**

BACKGROUND INFORMATION

Stone Point Services was contacted on March 3, 2021 to provide a scope and fee for this project by Sierra Gibbons of Kimley-Horn via e-mail communication. A linear utility line totaling approximately 3.7-miles is to be surveyed for cultural resources. The purpose of this survey is to identify cultural resources (archaeological and historic) that may be impacted by the proposed construction.

Stone Point Services is providing this proposal to outline the requirements of the THC and how the proposed survey scope will meet these requirements. This proposal includes a cost estimate to conduct a desktop analysis, a pedestrian archaeological survey, and deep testing for archeological materials. The desktop analysis will provide background information about the project area and will be in report format. The archeological survey will include the excavation of shovel test units

in areas where buried cultural resources may be encountered as well as surface inspections, meeting THC standards. The deep testing, a requirement of THC, will include mechanical excavations of trenches to identify deeply buried sites, if present. For each of these options, we will conduct background research for the area which will provide a basic historical overview of the region. Historic aerial maps will be used, along with standard archeological survey techniques, to identify any historic or archeological sites that may be present within the Subject Property.

SCOPE OF SERVICES

Immediately upon receiving notice to proceed, we will begin gathering background information about the project area. This will include reviews of available data on existing archaeological and historic resources in the area as well as research into the history of this part of Guadalupe County. At the completion of background research, we will have crews in the field to complete the survey.

Option 1: Desktop review only

The client may request a desktop analysis of the project area is the preferred first action. The desktop analysis will be conducted by a professional archeologist and will not include a field visit. The desktop analysis will be in report format and will include information about previously recorded archeological sites and historic resources (historic standing structures) within one mile of the project area. The desktop analysis will also include information about potential soil types, underlying geology, and high and low potential areas within the proposed action. We will examine readily available data pertinent to the history, prehistory, ethnography, and environment of the study area, including but not necessarily limited to the Texas Archeological Sites Atlas and the TNRIS. The purpose of this research is to develop a general understanding of the study area and how it may have changed through time, to identify previously recorded historic resources, and to generate the information and perspectives needed to predict the likely presence or absence of resources and the likely character of potential impacts. The records examined will include a review of online data containing information about previously recorded archaeological and historic resources in the vicinity of the project area. The results of the literature review will be a compilation of previously recorded cultural resources that are in or near the project area, and also will serve to provide an historical context for the study area.

The background research will also include information about standing historic structures and known cemeteries located within one mile of the survey area. As noted above, the purpose of the background research is to inform the client of potentially important cultural resources that have been previously identified near the survey area. Using data from the background research, our researchers can pinpoint those areas that are more likely to include archaeological sites. The background research will likewise help to identify historic resources, such as historic buildings and cemeteries that are located within, or close to, the survey area.

Option 2: Cultural Resources survey and Deep Testing

Task 1: Mobilization and Background Research

Because this project is located on public property, SPS will begin the paperwork for a Texas Antiquities Permit immediately upon award of the project. Once the appropriate signatures are obtained, the permit will be submitted to THC for assignment of a permit. This process can take up to one month, but usually is no more than one week. As with the Desktop Analysis, we will examine readily available data pertinent to the history, prehistory, ethnography, and environment of the study area, including but not necessarily limited to the Texas Archeological Sites Atlas and the TNRIS. The purpose of this research is to develop a general understanding of the study area and how it may have changed through time, to identify previously recorded historic resources, and to generate the information and perspectives needed to predict the likely presence or absence of resources and the likely character of potential impacts. The records examined will include a review of online data containing information about previously recorded archaeological and historic resources in the vicinity of the project area. The results of the literature review will be a compilation of previously recorded cultural resources that are in or near the project area, and also will serve to provide an historical context for the study area.

The background research will also include information about standing historic structures and known cemeteries located within one mile of the survey area. As noted above, the purpose of the background research is to inform the Stone Point Services crew of potentially important cultural resources that have been previously identified near the survey area. Using data from the background research, our researchers can pinpoint those areas that are more likely to include archaeological sites.

The background research will likewise act as an early warning of potential problems. Stone Point Services personnel will notify our contact at Kimley-Horn of any potential issues identified during the background research. By having this information early in the process, Kimley-Horn will be better prepared to address potential concerns.

Stone Point Services will begin preparing for field investigations during the background research.

Task 2: Field Investigations

Once necessary research and field preparation are complete, Stone Point Services will be able to start the archaeological survey. The procedures outlined below meet state guidelines for archaeological surveys in Texas. No survey will be conducted until a Texas Antiquities Permit has been awarded for this project.

Cultural Resources investigations of the project area will include an intensive archaeological survey using both pedestrian (surface) survey and shovel testing techniques. A pedestrian survey will be used to locate cemeteries, chimneys, earthworks and other above ground features, as well as artifacts lying on the ground surface. In addition to the pedestrian survey, shovel tests will be excavated along a single transect near the center of the proposed utility line. Given the width of the utility line (50-feet), only a single transect is warranted. Shovel tests will be placed at 30-meter, 50-meter, or 100-meter intervals, depending on the probability of encountering sites. High

potential areas will be excavated at the reduced 30-meter intervals, where highly disturbed or low potential areas will be surveyed with shovel testing at 50-meter or 100-meter intervals. All survey methods will meet the requirements of the THC as stipulated in the Archeological Survey Standards of Texas for Projects of 200 Acres or Less and for linear projects (as modified in 2020).

Shovel tests will be at least 30-centimeters in diameter and excavated to sterile subsoil or at least 80-centimeters below ground surface, whichever is encountered first. Each shovel test will be excavated in no greater than 20-centimeter levels. The location of each shovel test will be recorded with a hand-held GPS and plotted on project maps. Soil from the shovel tests will be screened through 0.25-inch wire mesh screen. All shovel tests will be backfilled for safety upon completion. If artifacts are found, additional shovel tests will be excavated at 10-meter or closer intervals in cardinal directions to delineate site boundaries. Sites will be recorded using a hand-held GPS and plotted on USGS 7.5-minute topographic maps and aerial photography.

All resources will be mapped using a GPS and ArcGIS. Shapefiles of all project related activities and resources, will be available to our contact at Kimley-Horn during the project and will be submitted to the client at the completion of the project. Maps will be prepared in ArcGIS and can be provided to the client as a .JPG (or similar) or .PDF file.

Temporally diagnostic artifacts recovered during the survey may be bagged by site and relative provenience within each site if field analysis is not possible. Non-diagnostic artifacts will be field analyzed and returned to their original provenience. Each site will be photographed with high resolution digital color images (three megapixels or higher) and documented using Texas archaeological site forms that will be submitted to the Texas Archaeological Research Laboratory (TARL) upon conclusion of the fieldwork. The Project Archaeologist will maintain detailed notes on survey methods, sites identified during the survey, and relevant environmental factors associated with each site. This information will be thoroughly documented in the technical report.

Deep Testing

The depositional environment along East Dietz Creek is conducive for deeply-buried archaeological deposits as the result of gradual accumulation of alluvial clay. While shallow sites situated on terraces may be discovered and securely delineated through standard shovel testing methods, archaeological sites located within the floodplain may be positioned below thick alluvium. Deeply-stratified archaeological sites would be below the reach of standard shovel testing capabilities and would require the use of mechanical trenching to discover and/or delineate. The Tinn series soil, which is present along approximately 2.4-kilometers (1.5-miles) of the East Dietz Creek floodplain, has the highest probability of containing buried soil horizons and archaeological materials. The Tinn series consists of very deep, moderately well drained, very slowly permeable soils that formed in calcareous clayey alluvium. These soils are on the floodplain of dissected plains that drain the Blackland Prairies. To address the possibility for deeply-buried archaeological sites, mechanical prospection methods should focus on portions of the proposed transmission line that contain Tinn series soils within the floodplain.

Stone Point Services will complete between ten and fourteen mechanically-excavated trenches to provide sufficient coverage of the survey area. As these soils contain complex stratigraphy across a wide area, trenching operations will employ a qualified professional geoarchaeologist with previous experience in regional allostratigraphic units and geomorphic processes. Upon

completion of the mechanical excavations, trench walls will be examined for cultural materials, and the soil stratigraphy assessed and recorded. Documentation of the soil-stratigraphy will consist of photographs and the completion of a soil-stratigraphic profile form noting the depth and thickness, Munsell color (moist), consistence (moist), texture (using USDA soil texture nomenclature) soil structure and ped surface features, redoximorphic features, bioturbation features, and lower boundary characteristics for each zone delineated within each trench profile. Stratigraphic, pedogenic, and geochronological interpretations of these profiles will be made after completion of the field work making use of the profile descriptions and available geologic, soils, topographic, and archeological data.

Backhoe trenching will follow the mechanical prospection standards and best practices for survey level mechanical prospection, as described in the Intensive Terrestrial Survey Guidelines set forth by the Standards and Guidelines Committee of the CTA (2020). Trenches will be a minimum of 24 inches (60-cenitmeter) wide and at least 4-meters long to the depth of the proposed action. Trenches will be excavated by slowly peeling off thin (5-centimeter or less) sub-horizontal layers under close monitoring using a smooth-bladed bucket, with subsequent hand cleaning and inspection of the walls and monitoring and inspection of spoil. All positive trenches will be delineated within the limits of the project ROW. All mechanical excavation and documentation will be performed in a safe manner in full compliance with all applicable OSHA regulations.

The Project Archaeologist will be available by cellular telephone during the investigations (depending on cellular service availability) and can answer any questions that may arise. Likewise, updates can be provided to our client contact at any time during the survey via e-mail or telephone. We wish to ensure that Kimley-Horn is updated regularly, or at any interval requested by the client.

Immediately after field investigations are concluded, Stone Point Services will begin the final phases of the investigations: analysis, report preparation, and curation.

Task 3: Analysis, Report Preparation, and Curation

Immediately upon completion of the fieldwork, Stone Point Services will prepare a management summary of the background and field investigations and submit this report to Kimley-Horn for review.

The artifacts, notes, photographs, maps, and other project-related materials will be returned to the Stone Point Services office for processing. Artifacts will be washed, accessioned, analyzed, and temporarily housed at Stone Point Services.

Stone Point Services will prepare a draft report of the investigations to be reviewed by Kimley-Horn. We will submit a draft report that will describe the methods used, results, and National Register of Historic Places (NRHP) recommendations for each identified site. We will also include recommendations for additional work that may be necessary under pertinent federal and/or state laws. Once the draft report has been reviewed by the client, Stone Point Services will address these comments in a final technical report. Copies of the final report will be submitted to the client.

After acceptance of the report, Stone Point Services will transfer the artifacts and relevant notes to a curation facility that meets the federal curation standards outlined in 36 CFR Part 79 and accredited by the State of Texas.

PROPOSED SCHEDULE

Proposed Timeline for the Investigations

Stone Point Services will begin gathering background data for this survey immediately upon receipt of notice-to-proceed. It is anticipated that fieldwork will begin within three weeks of receipt of notice to proceed (weather and Covid-19 restrictions permitting). We anticipate the survey will take no more than three weeks, weather permitting. Stone Point Services will work with Kimley-Horn on deep testing timing. This timing will be dependent upon the availability of the geoarcheologist and may be affected by weather or other restrictions. A draft report will be available within three weeks of fieldwork completion.

FEES AND AUTHORIZATION

It is our understanding that this project will begin upon receipt of a task order, work order, or signed contract from Kimley-Horn. The lump sum estimate provided below is based on the assumption that the total project area has been accurately described in the bid package and outlined in this document under Background Information. If this information is not correct, please let us know as soon as possible and our estimate will be adjusted accordingly. Small changes to the project area will not require a cost adjustment.

Based on our understanding of the proposed project, current site conditions, and our estimate of time and expenses, we can perform the scope of services for the following **lump sum** fees:

Desktop Analysis: **$350**
Cultural resources survey: **$13,750**
Mechanical (deep) testing for archeological sites: **$19,780**

CLOSING

Stone Point Services appreciates the opportunity to provide you with this proposal and budget. If you have any questions about our proposal or need any additional information, please do not hesitate to contact Todd McMakin at 903-881-3103 or at 903-952-3819 (cell).

Figure 1: General location map

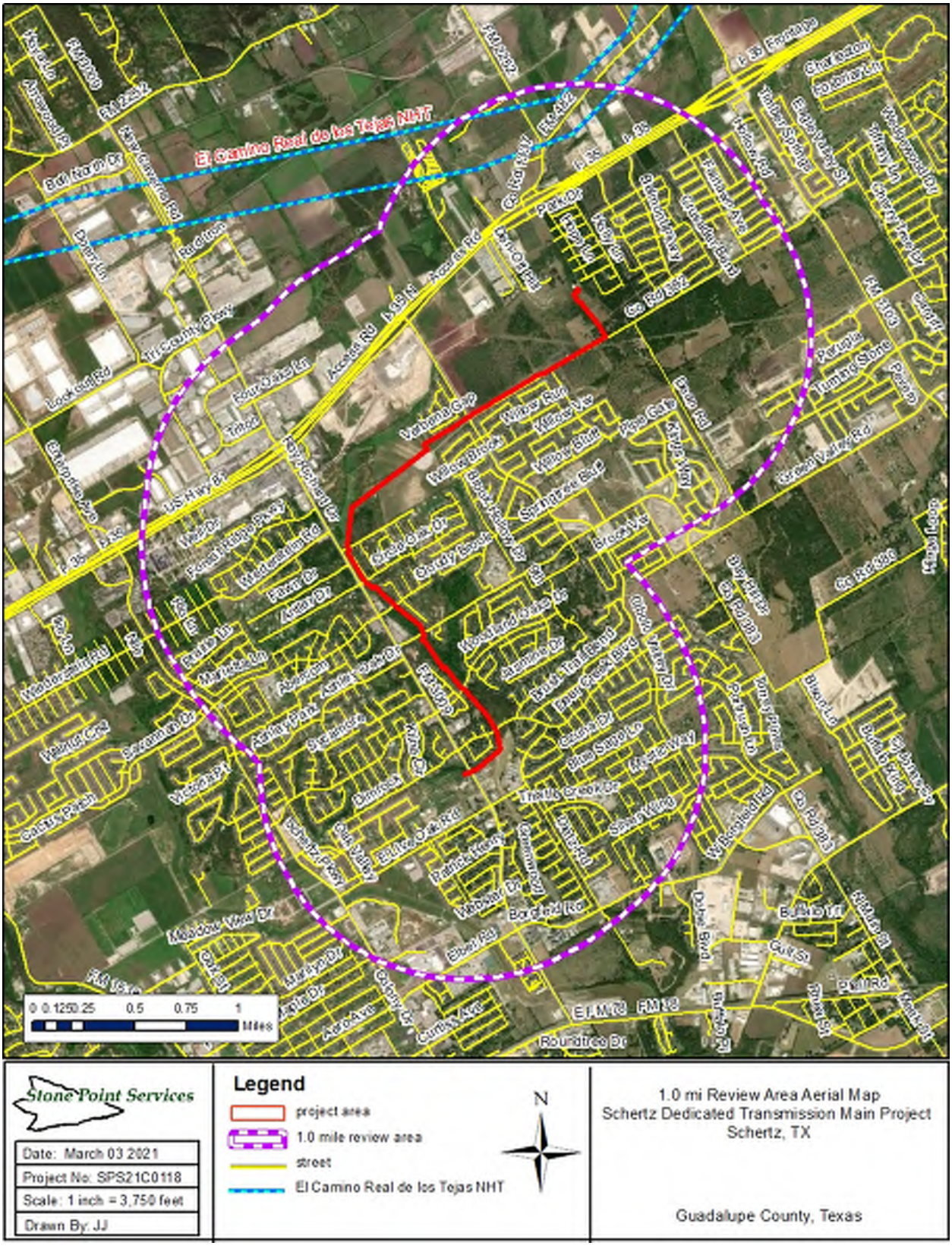

Figure 2: Aerial image showing the project boundaries and the one mile background study area

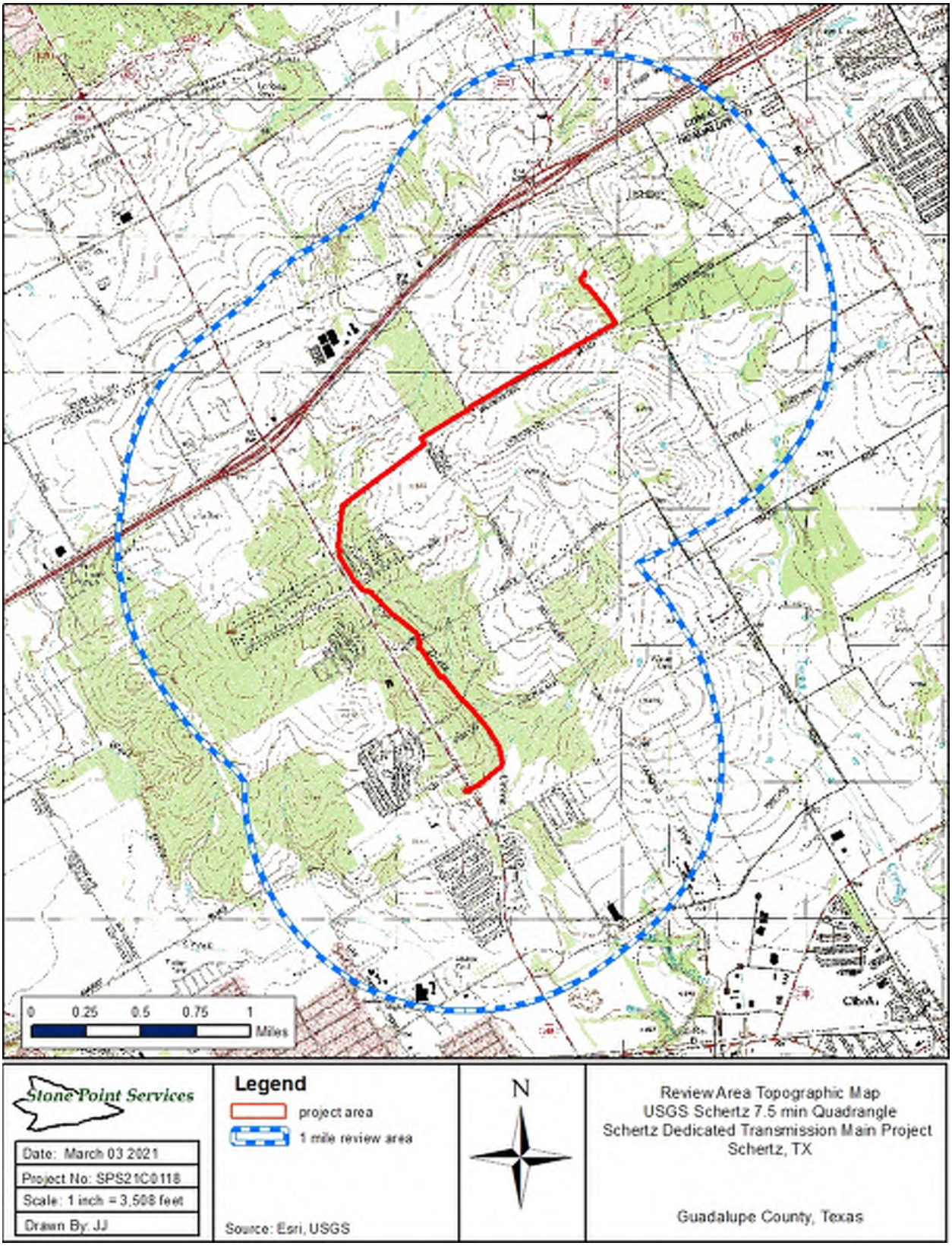

Figure 3: USGS Schertz quadrangle map showing the project boundaries

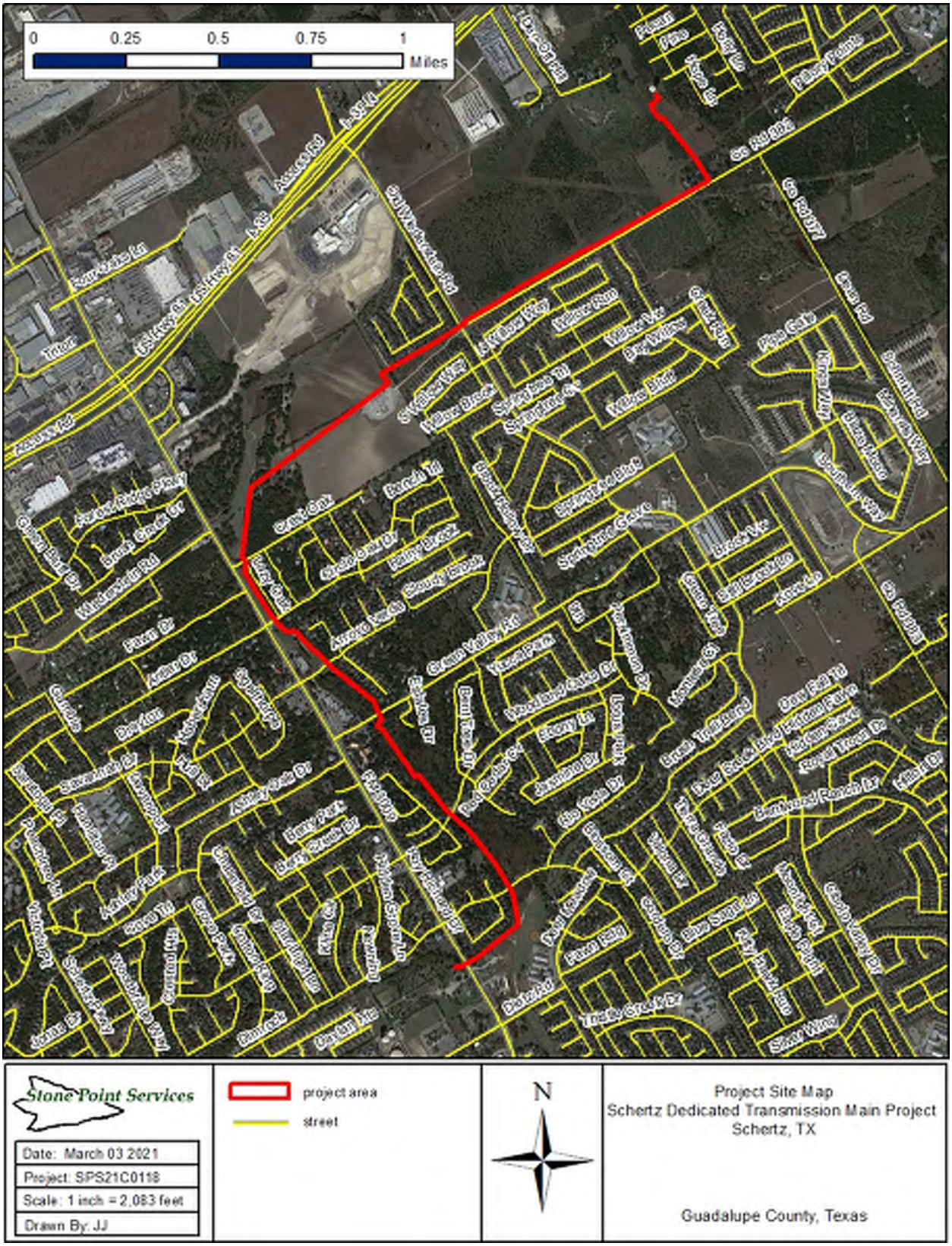

Figure 4: Detailed aerial view of the proposed project area