TASK ORDER FORM

This is Task Order No. 2, Add. Svcs. No. 1, consisting of 47 pages.

Task Order

[NOTE TO USER: Modify as to scope, compensation, schedule, and other key items.]

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: May 20, 2020

b. Effective Date of Additional Service No. 1:

c. Owner: The City of Schertz

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

e. Specific Project (title): **2020 Roadway Improvements**

f. Specific Project (description): Work associated with this project is associated with the City's Street Preservation and Maintenance (SPAM) Program. Kimley-Horn will assess approximately 135 streets totaling nearly 27 centerline miles, identify base repair and overall chip seal quantities, prepare limited construction drawings and contract documents, assist the City with project advertisement and Contractor selection, and provide limited construction phase services.

This additional service proposal includes changing the proposed preservation treatment for 2020 projects from chip seal to slurry seal, consideration of street rehabilitation for ten streets, applying fog and slurry seal to chip seal projects completed with the 2018 SPAM program, and bidding out multiple construction contracts for the different preservation and rehabilitation applications. Additionally, the reconstruction of Lindbergh Avenue from Main Street to Curtiss, and partial repair on Exchange Avenue from Lindbergh to Randolph, will be added to this work order. A full street reconstruction on Lindbergh will be completed including a new pavement section, underground storm drain system, new concrete curbs, sidewalks, driveways, modified striping and signage, and parking stalls.

2. Services of Engineer

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

- as follows: [Reference Engineer Additional Services No. 1 scope and fee proposal dated April 7, 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 associated with Additional Services No. 1 for purposes of Engineer's compensation under this Task Order.

3. Additional Services

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

- as follows: [This scope and fee proposal serves as Additional Service No. 1 to the previously approved task order for the 2020 Roadway Improvements project. Additional services that may apply to this scope and fee proposal are items that differ from assumptions made by Engineer, services listed under Exclusions that may be requested by the City, or any other service requested by the City that is not specifically listed in the basic scope of services for this Additional Service No. 1 proposal]

4. Owner's Responsibilities

Owner shall have those responsibilities set forth in Article 2 of the Agreement and in Exhibit B, subject to the following: *[No additions or modifications to Exhibit B are required for this project.]*

5. Task Order Schedule

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

At the request of the City, multiple construction contracts are proposed for the 2020 Roadway Improvements project and included in this Additional Service No. 1 Proposal. Upon approval of this contract amendment, Engineer will coordinate with the City on an acceptable bid schedule for each construction contract, including Lindbergh Avenue street reconstruction.

Party	Action	Schedule
Engineer	**Furnish [NA] review copies of the Report and other Study and Report Phase deliverables to Owner.**	**Within [NA] days of the Effective Date of the Task Order.**
Owner	**Submit comments regarding Report and other Study and Report Phase deliverables to Engineer.**	**Within [NA] days of the receipt of Report and other Study and Report Phase deliverables from Engineer.**
Engineer	**Furnish [NA] copies of the revised Report and other Study and Report Phase deliverables to Owner.**	**Within [NA] days of the receipt of Owner's comments regarding the Report and other Study and Report Phase deliverables.**
Engineer	**Furnish [NA] review copies of the Preliminary Design Phase documents,**	**Within [NA] 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 [NA] days of the receipt of Preliminary Design Phase documents, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables from Engineer.**
Engineer	**Furnish [NA] copies of the revised Preliminary Design Phase documents, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables to Owner.**	**Within [NA] days of the receipt of Owner's comments regarding the Preliminary Design Phase documents, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables.**
Engineer	**Furnish [5] copies of the final Drawings and Specifications, assembled 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.**	**Within [TBD] days of Owner's 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 [NA] 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 [NA] 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 [NA] 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**

6. Payments to Engineer

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

Task	Description of Service	Amount	Basis of Compensation
	TASK A - 2020 PRESERVATION & REHABILITATION PROJECTS		
	BASIC SERVICES		
1A	Project Management	$ 8,460.00	[Lump Sum]
2A	Geotechnical Engineering Services	$ 32,460.00	[Lump Sum]
3A	Final Field Reviews & Confirm Program List	$ 10,590.00	[Lump Sum]
4A	Update Preservation Construction Drawings with Bid Phase	$ 30,730.00	[Lump Sum]
5A	Prepare Limited Construction Drawings for Rehabilitation Projects with Bid Phase	$ 59,805.00	[Lump Sum]
6A	Bid Phase - 2018 SPAM Remediation	$ 12,690.00	[Lump Sum]
7A	Repair Markings for Preservation Projects	$ 9,200.00	[Hourly]
8A	Construction Phase	$ 23,785.00	[Lump Sum]
9A	Reimbursable Project Expenses	$ 1,050.00	[Lump Sum]
	Total Task A (Basic Services)	**$ 188,770.00**	
	TASK B - LINDBERGH AVENUE RECONSTRUCTION		
	BASIC SERVICES		
1B	Project Management	$ 6,385.00	[Lump Sum]
2B	Data Review	$ 3,470.00	[Lump Sum]
3B	Survey Services	$ 8,090.00	[Lump Sum]
4B	Drainage Technical Memorandum Review	$ 8,960.00	[Lump Sum]
5B	90% Design	$ 70,120.00	[Lump Sum]
6B	Final Design	$ 17,655.00	[Lump Sum]
7B	Bid Phase	$ 8,795.00	[Lump Sum]
8B	Construction Phase	$ 17,220.00	[Lump Sum]
9B	Reimbursable Expenses	$ 550.00	[Lump Sum]
	SubTotal Task B (Basic Services)	$ 141,245.00	
	SUPPLEMENTAL SERVICES		
SS - 1B	Subsurface Utility Engineering	$ 11,510.00	[Lump Sum]
SS - 2B	TDLR	$ 3,445.00	[Lump Sum]
	SubTotal Task B (Supplemental Services)	$ 14,955.00	
	Total Task B (Basic + Supplemental Services)	**$ 156,200.00**	
	TOTAL COMPENSATIOIN (TASK A & B - AS NO. 1)	**$ 344,970.00**	

*Based on a [6] -month continuous construction period for 2020 preservation and rehabilitation projects and a [5] -month continuous construction period for Lindbergh Avenue street reconstruction.

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.

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

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

8. Other Modifications to Agreement and Exhibits:

[Scope associated with this Additional Service No. 1 fee proposal is included as an attachment to this task order form, dated April 7, 2021.]

9. Attachments: Engineer Additional Service No. 1 scope and fee proposal (April 7, 2021)

10. Other Documents Incorporated by Reference: None

11. 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 Additional Service No. 1 for Task Order 02 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): TBPE #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: Project Manager
Address: 11 Commercial Place, Schertz, TX 78154	Address: 601 NW Loop 410, 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

Kimley»Horn

April 7, 2021

John Nowak, PE
Project Manager
City of Schertz - Engineering
10 Commercial Place
Schertz, Texas 78154

RE: ***2020 Roadway Improvements (Preservation, Rehabilitation & Lindbergh Reconstruction Projects) – Additional Service No. 1 Fee Proposal***

Dear Mr. Nowak:

Pursuant to our conversations regarding the roadway improvements projects associated with the 2020 Street Preservation and Maintenance (SPAM) Program, Kimley-Horn is submitting this additional service fee proposal for professional services for the following tasks:

- TASK A – Preservation and Rehabilitation projects
    - Finalize design plans, bid out multiple construction contracts, and provide construction phase services for multiple street contracts
- TASK B – Lindbergh Avenue Reconstruction

PROJECT UNDERSTANDING

TASK A – PRESERVATION AND REHABILITATION PROJECTS

Per the City's direction on moving forward with the 2020 SPAM program, the previously identified chip seal projects will be changed to a slurry seal application and bid out as an individual construction contract. Ten (10) projects noted within Task A will removed from the chip/slurry seal application and be changed to a street rehabilitation application due to the poor condition of the street. Pavement bores will be obtained on each street by Kimley-Horn's geotechnical engineering sub-consultant (Terracon), and in return will prepare a report documenting results of their findings and recommendations on final street repair application. These rehabilitation projects will be bid out as a separate construction contract. Based on previous experience with street rehabilitation (reclamation) projects and the current condition of each of these streets, Kimley-Horn anticipates significant flatwork (concrete curb, sidewalks and driveways) will require replacement. Kimley-Horn has included effort in this additional service proposal to produce aerial schematic plan sheets to identify the proposed flatwork replacement.

Additionally, the City has requested Kimley-Horn develop a fog seal construction contract for projects associated with the 2018 SPAM program. Streets within the Estates at Wilson's Preserve subdivision will receive a slurry seal on top of the existing chip seal at a lower application rate than the 2020 projects and will be added to the 2020 slurry seal construction contract. The remaining streets from the 2018 SPAM program to be confirmed by the City will be bid out as a separate fog seal construction contract.

Each contract type (slurry, rehabilitation and fog) will be bid out as separate construction contracts utilizing the Request for Competitive Sealed Proposal (RFCSP) contract method, and Kimley-Horn will provide construction phase services based on an estimated 6-month construction schedule.

TASK B – LINDBERGH AVENUE RECONSTRUCTION

As previously coordinated with the City, the intent of the Lindbergh Avenue street reconstruction project is to reconstruct Lindbergh from Main Street to Curtiss Avenue, adding a new pavement section with curbs, sidewalks, driveways and drainage improvements. Drainage improvements will also extend along Exchange Avenue east of Lindbergh where they will tie to the existing underground storm sewer system west of Randolph Blvd.

A separate Consultant previously under contract with the City has prepared 70% construction drawings for Lindbergh from Main Street to Exchange Avenue and completed a preliminary drainage analysis study to identify and recommend proposed storm sewer improvements. It is the City's desire to utilize this information and documents previously produced by a different Consultant, who was not under contract with Kimley-Horn, to aide in preparing final design documents. Kimley-Horn shall be able to rely on the accuracy of said documents, as that is the basis for the Lindbergh task fee development. Kimley-Horn will review the preliminary drainage study completed by others and attempt to replicate results, and will coordinate with the City on final recommendations to the Lindbergh footprint.

SCOPE OF SERVICES

The following tasks outline the scope of services to be completed by Kimley-Horn for this Additional Service No. 1 request, and the assumptions made to develop the proposed fee:

TASK A – PRESERVATION AND REHABILITATION PROJECTS

Task 1A: Project Management

1. Project Management
2. Project kickoff/continuation meeting

Task 2A: Geotechnical Engineering Services

1. Geotechnical Engineering Services (Terracon)
2. Sub-contract management
3. Prepare pavement boring plan and coordinate drilling operations (including site visit with Geotech)
4. Review boring logs and draft engineering report
5. Coordinate emulsion application rate recommendations with City and Geotech

Task 3A: Final Field Reviews & Confirm Program List

1. Update repair schematics per final adjustments/City comments
2. Update individual street quantities and overall program OPCCs (Preservation), incorporate Mesa Oaks
3. Coordinate with City on final 2020 program list, revise to fit budget

Task 4A: Update Preservation Construction Drawings with Bid Phase

1. Update front end sheets
2. Update general notes sheets
3. Update quantity summary sheets and street map per neighborhood, including Mesa Oaks
4. Incorporate 2018 SPAM projects, including map of streets and slurry seal quantity per street
5. Incorporate City construction and TxDOT traffic control standards
6. Prepare slurry seal specification

7. Prepare micro-surfacing specification
8. Prepare supplemental conditions (including governing specs, special specs, supplemental specs, and special provisions)
9. Prepare table of contents and invitation to bidders document
10. Prepare bid schedule
11. Prepare Owner and Contractor Agreement
12. Assemble contract documents and specifications
13. Internal QC/QA
14. Submit draft plans and specs to City for review
15. Address City comments and submit final construction drawings and specifications
16. Prepare agenda and attend pre-bid meeting
17. Prepare pre-bid meeting notes
18. Prepare and issue addenda
19. Attend bid opening
20. Contractor qualification and bid evaluation
21. Prepare bid tabulation
22. Prepare contract award recommendation letter

Task 5A: Prepare Limited Construction Drawings for Rehabilitation Projects with Bid Phase

The following streets will be reviewed and considered for street rehabilitation (reclamation):

Street	Limits	Length (ft)	Number of Soil Borings	Number of Pavement Cores
Columbia	Country Club Blvd to Covers Cove	2,910	3	3
St. Andrews	Country Club Blvd to Pebble Beach	900	2	-
Dove Meadows	Borgfield to Silvertree Blvd	940	3	-
Mourning Dove	Dove Meadows to cul-de-sac	350	1	-
White Wing	Dove Meadows to cul-de-sac	360	1	-
Grey Feather	Dove Meadows to cul-de-sac	370	1	
Silvertree Blvd	Roy Richard Dr to cul-de-sac	1,200	2	-
Idlewood	Silvertree Blvd to cul-de-sac	340	1	-
Robin Hood Way	6923 Robin Hood Way to Sherlock Ln	2,400	3	3
Nottingshire	Sherlock Ln to Ware Seguin Rd	1,060	2	-

1. Fieldwork to obtain flatwork replacement measurements
2. Prepare cover and table of contents sheet
3. Prepare general notes sheets (City standard and special notes)
4. Prepare flatwork replacement aerial schematic sheets (10 streets, estimate 28 sheets)
5. Develop quantity summary with map of streets
6. Incorporate relevant construction standards
7. Prepare OPCC
8. Prepare supplemental conditions (including governing specs, special specs, supplemental specs, and special provisions)
9. Prepare table of contents and invitation to bidders document
10. Prepare bid schedule

11. Prepare Owner and Contractor Agreement
12. Assemble contract documents and specifications
13. Internal QC/QA
14. Submit draft plans and specs to City for review
15. Address City comments and submit final construction drawings and specifications
16. Prepare agenda and attend pre-bid meeting
17. Prepare pre-bid meeting notes
18. Prepare and issue addenda
19. Attend bid opening
20. Contractor qualification and bid evaluation
21. Prepare bid tabulation
22. Prepare contract award recommendation letter

Task 6A: Bid Phase – 2018 SPAM Remediation Projects

1. Fog seal quantities
2. Prepare fog seal project map
3. Prepare supplemental conditions (including governing specs, special specs, supplemental specs, and special provisions)
4. Prepare table of contents and invitation to bidders document
5. Prepare bid schedule
6. Prepare Owner and Contractor Agreement
7. Prepare OPCC
8. Assemble contract documents and specifications
9. Internal QC/QA
10. Submit draft plans and specs to City for review
11. Address City comments and submit final construction drawings and specifications
12. Prepare agenda and attend pre-bid meeting
13. Prepare pre-bid meeting notes
14. Prepare and issue addenda
15. Attend bid opening
16. Contractor qualification and bid evaluation
17. Prepare bid tabulation
18. Prepare contract award recommendation letter

Task 7A: Repair Markings for Preservation Projects

Upon completion of the construction drawings and immediately prior to project advertising, Kimley-Horn will field mark all surface and base repairs for 2020 streets associated with the slurry seal contract. 2018 SPAM projects are not included in this task as asphalt repairs have already been completed. Given the uncertainty of time to complete this task, Kimley-Horn proposes to complete this task on an hourly not to exceed basis and has budgeted 80 hours for an Engineer-In-Training (2). Actual hours and position will be billed to the City per Kimley-Horn's approved contract unit rates, not to exceed the authorized amount. In the event more than 80 hours is required to complete this task, Kimley-Horn will coordinate with the City to bill the excess hours through additional service funds available in the overall contract.

Task 8A: Construction Phase

Kimley-Horn estimates a total of six (6) months of construction combined for the fog seal, slurry seal and rehabilitation contracts, and the effort included in the construction phase is based off this timeline.

1. Attend pre-construction meeting for each contract (est. 3)
2. Material submittal review for each contract (est. 7 total)
3. Construction site visits and report (est. 2 site visits per month and 1 combined report per month)
4. Respond to contractor RFI (est. 5 total)
5. Review and respond to contractor change order proposal (est. 2 proposals total)
6. Review contractor monthly pay estimates and schedule (Slurry) (est. 5 months at 1 per month)
7. Review contractor monthly pay estimates and schedule (Rehab) (est. 6 months at 1 per month)
8. Review contractor monthly pay estimates and schedule (Fog) (est. 2 months at 1 per month)

Task 9A: Project Expenses

The following reimbursable expenses are requested for this project:

1. Mileage for site visits and meetings, design and construction (est. 25 trips)*
2. Field marking paint to mark surface and base repairs in street

*Mileage to be reimbursed based on the 2021 standard business mileage rate of 56 cents per mile.

TASK B – LINDBERGH AVENUE RECONSTRUCTION

Task 1B: Project Management

1. Monthly invoicing and reporting/updates, based on an estimated 8-month project schedule
2. Survey sub-consultant contract coordination
3. Ongoing coordination with internal team members and City staff
4. Initial site visit to review project parameters
5. Meetings, including project kick-off and development of meeting notes

Task 2B: Data Review

1. Review survey and design data prepared by others, and provided by City
2. Coordinate need for additional data from City to be provided by previous Consultant

Task 3B: Survey Services

1. Prepare full topographic survey with DTM (Reference Attachment 4 for Lindbergh full survey scope)
    1.1. Conduct site meeting with survey sub-consultant to confirm additional survey needs
    1.2. Obtain additional survey at Lindbergh/Exchance and Lindbergh/Curtiss. Confirm previous survey data, refresh control and compile new/existing survey into one file (sub-consultant task)
    1.3. Review survey deliverable to confirm features, coordinate comments with survey sub-consultant
    1.4. Develop new microstation surface file (.TIN format) to support roadway/drainage design
    1.5. Create project control sheet (sub-consultant task)

Task 4B: Drainage Technical Memorandum Review

Kimley-Horn will review drainage model and preliminary drainage study completed by prior Consultant in an attempt to replicate results and provide similar recommendations. The following sub-tasks will be completed by Kimley-Horn to review the preliminary drainage study prepared by others:

1. Review drainage areas
2. Review hydrologic parameters

3. Review hydraulic structures input into model
4. Run duplicate XPSWMM model to replicate results
5. Prepare technical memorandum (TM) to document results
6. Internal QA/QC

In the event different results are produced during Kimley-Horn's review of the drainage study completed by others, Kimley-Horn will immediately notify the City of discrepancies prior to proceeding with the 90% design task and coordinate any additional tasks that may be necessary to confirm drainage improvements.

Task 5B: 90% Design

At the request of the City, Kimley-Horn will utilize design data and documents developed by prior Consultant to the best of our ability. There is a possibility that additional roadway design is warranted along Lindbergh between Main Street and Exchange Avenue. Kimley-Horn will coordinate with City if the profile or street improvements identified in provided 70% construction drawings require significant adjustment. The following sub-tasks will be completed under the 90% design phase:

1. Design
    - 1.1. Internal design coordination
    - 1.2. Review, update and/or modify horizontal alignments (Lindbergh, Exchange, Curtiss)
    - 1.3. Update ADA improvements within additional project areas (Lindbergh between Exchange and Curtiss)
    - 1.4. Review roadway profiles and make minor adjustments as needed (Lindbergh – Exchange to Curtiss). It is assumed profile adjustments to Exchange are not required other than grading at Lindbergh intersection. Per coordination with City trench repair is planned for storm sewer improvements on Exchange.
    - 1.5. Roadway cross-sections along Lindbergh (estimate 20 cross sections)
    - 1.6. Update intersection grading plan at Lindbergh and Exchange
    - 1.7. Intersection grading plan at Lindbergh and Curtiss
    - 1.8. Striping and signage layout (add new on Lindbergh). The City requests Kimley-Horn review options for back in parking on Lindbergh between Main and Exchange
    - 1.9. Analyze existing storm sewer system
    - 1.10. Prepare horizontal storm sewer alignments
    - 1.11. Storm sewer design and profiles (Lindbergh and Exchange systems)
2. Plan production – general
    - 2.1. Update cover/index of sheets
    - 2.2. Update project layout to include additional project areas and improvements
    - 2.3. Update horizontal alignment data sheet
    - 2.4. Update quantity (roadway/drainage) and driveway summary sheet
    - 2.5. Incorporate City standard notes and develop supplemental general notes
3. Plan production – roadway
    - 3.1. Modify existing typical sections (update existing)
    - 3.2. Modify proposed typical sections (Lindbergh only) (update existing)
    - 3.3. Plan and profile sheets (update existing sheets)
    - 3.4. Plan and profile sheets (prepare new) (Lindbergh – 2, Curtiss – 1)
    - 3.5. Striping and signage plan sheets (update existing)
    - 3.6. Striping and signage plan sheet (new) (Lindbergh – 1)

3.7. Update Lindbergh at Exchange intersection layout/grading plan sheet
3.8. Develop Lindbergh at Curtiss intersection layout/grading plan sheet
3.9. Prepare proposed cross section sheets (Lindbergh – estimate 10 sheets)
3.10. Incorporate relevant roadway standards
3.11. Develop miscellaneous roadway details

4. Plan production – drainage
    4.1. Develop drainage area map sheet
    4.2. Hydraulic computations and sheet (Lindbergh system)
    4.3. Hydraulic computations and sheet (Exchange system)
    4.4. Storm sewer plan and profile sheets (Lindbergh system) (3 sheets)
    4.5. Storm sewer plan and profile sheets (Exchange system) (2 sheets)
    4.6. Incorporate relevant storm sewer standards
    4.7. Develop miscellaneous storm sewer details
5. Plan production – traffic control
    5.1. Update traffic control detour sheet to include revised project limits
6. Plan production – SW3P
    6.1. Prepare SW3P narrative and sheet
    6.2. Incorporate SW3P protection measures on roadway sheets
7. Prepare drainage TM to document design assumptions
8. Develop quantities
9. Prepare OPCC
10. Prepare list of governing and special specifications
11. Internal QA/QC
12. 90% submittal development and coordination
13. 90% review meeting with City

Task 6B: Final Design

At the conclusion of the 90% design phase and after the 90% design review meeting, Kimley-Horn will respond to and address City comments, develop bid documents, and submit signed and sealed construction drawings and specifications. This includes the following sub-tasks:

1. Address comments and finalize general sheets
2. Address comments and finalize roadway sheets
3. Address comments and finalize drainage sheets
4. Address comments and finalize traffic control/SW3P sheets
5. Final quantities & OPCC
6. Finalize drainage TM
7. Develop bid documents
    7.1. Coordinate with Purchasing Department for construction contract development
    7.2. Assemble contract documents and specifications
    7.3. Prepare table of contents and invitation to bidders documents
    7.4. Prepare bid schedule
    7.5. Prepare agreement between City and Contractor
    7.6. Prepare supplement conditions (including governing, special and supplemental specs, and special provisions)
8. Internal QA/QC

9. Address comments from Purchasing Department and submit final signed and sealed construction drawings and specifications

Task 7B: Bid Phase

1. Assist with project advertising
2. Attend pre-bid meeting with site visit
3. Prepare pre-bid meeting notes
4. Prepare and issue addenda (maximum 1 addenda)
5. Attend bid opening
6. Contractor qualification and bid evaluation
7. Prepare bid tabulation
8. Assist City with bid negotiations
9. Prepare construction contract award recommendation letter
10. Prepare conformed construction documents

Task 8B: Construction Phase

Kimley-Horn estimates a total of five (5) months of construction for Lindbergh Avenue reconstruction, and the effort included in the construction phase is based off this timeline.

1. Attend pre-construction conference
2. Material submittal review (maximum 10 submittals)
3. Review Contractor baseline schedule
4. Conduct monthly site visit
5. Respond to Contractor request for information (RFI) (maximum 3 RFI)
6. Change orders/change proposal review (maximum 2 total)
7. Contractor monthly payment application and schedule review
8. Attend final completion walk and issue punch list
9. Prepare record drawings (closeout services), including one (1) City review

Task 9B: Reimbursable Expenses

1. Mileage for site visits and meetings
    1.1. Assumes a total of 20 visits to site during design and construction, and 4 meetings at City during design and bid phase

*Mileage to be reimbursed based on the 2021 standard business mileage rate of 56 cents per mile.

SUPPLEMENTAL SERVICES

The following tasks outline supplemental services to be completed by Kimley-Horn for this project upon written authorization from the City:

TASK B – LINDBERGH AVENUE RECONSTRUCTION

Task SS-1B: Subsurface Utility Engineering (SUE)

This task is included given the potential impacts to underground utilities with the proposed storm sewer system. Consultant will attempt to design around existing utilities, but it may be necessary to obtain QL-A test holes to confirm horizontal and vertical location of existing utilities at proposed crossings. For the purposes of developing a fee for this task, a total of three (3) QL-A test holes have been included. The following sub-tasks are included for this task:

1. Coordinate and prepare sub-consultant contracts (SUE and survey)
2. Prepare SUE plan
3. Site meeting with SUE to confirm requested locations
4. Perform QL-A (up to 3 test holes)
5. Survey QL-A data (up to 3 test holes)
6. Internal QA/QC of QL-A and survey data

In the event additional SUE is warranted for this project Kimley-Horn will prepare and submit an additional services proposal to the City.

Task SS-2B: TDLR

This task is included to perform the necessary Texas Department of Licensing and Regulation (TDLR) plan review, registration and inspection of the project in the event the total pedestrian elements exceed $50,000. Kimley-Horn will contract with an approved Registered Accessibility Specialist (RAS) to complete the TDLR inspection. The following sub-tasks are inclusive of this task:

1. Coordinate and prepare sub-consultant contract
2. TDLR design coordination
3. TDLR registration, formwork and inspection
4. Post TDLR inspection coordination (violations and closeout documents)

ASSUMPTIONS AND EXCLUSIONS

The following items list assumptions made that serve as a basis of total fee development and services excluded from the basic scope of the project:

TASK A – PRESERVATION AND REHABILITATION PROJECTS

ASSUMPTIONS

- TxDOT permits will not be required for this project.
- Contractor will provide necessary SWPPP design drawings.
- Contractor will provide necessary detailed traffic control plans should they deviate from available TxDOT standards.
- Material testing and inspection services will be completed by the City
- A total project schedule of 10-months is anticipated, including a 6-month construction schedule

EXCLUSIONS

- Subconsultant services to include survey, environmental, SUE, are not anticipated for the basic scope of services, therefore effort for these tasks is excluded
- Completion of final base repair schematics will not be included in construction drawings. However, they can be provided to Contractor awarded the project, post bid.
- Roadway, utility or drainage design. It is assumed that any necessary pavement or concrete repairs will be coordinated with Schertz and the Contractor during construction. In the event substantial repairs are required to eliminate low spots in the road, or extensive structural pavement repairs are needed, Kimley-Horn will notify the City for further direction.
- Design milestones in addition to what is proposed for this task
- Review Contractor provided construction schedule
- Review Contractor provided traffic control plan

- Monthly project meetings during construction phase
- Attend substantial completion walk & issue punch list
- Attend final completion walk & issue Notice of Acceptability of Work
- Resident Project Representative (RPR) Services – Kimley-Horn can provide this service should the City request it
- Any other services not listed in the basic scope of services or project work plan

TASK B – LINDBERGH AVENUE RECONSTRUCTION

ASSUMPTIONS

- At the request of the City, Kimley-Horn will utilize existing design documents produced by others to the greatest extent feasible, including existing design file and plan sheets. Kimley-Horn will immediately notify the City if any discrepancies are noticed or encountered with the provided information
- City will provide full geotechnical report completed by others. Kimley-Horn will include pavement section produced by others on final design plans. Kimley-Horn does not accept any liability for geotechnical information provided by others.
- Through coordination with City, Kimley-Horn will not perform additional geotechnical sampling or testing
- Kimley-Horn will review existing conditions XPSWMM model produced by others to attempt to replicate results and recommendations. If in agreement, Kimley-Horn will utilize flow data and hydraulic parameters provided in preliminary drainage study to develop proposed storm drain design, as agreed upon by City. Storm drain design will be completed in generally acceptable software, and further two dimensional (2-D) modeling that includes a proposed surface will not be completed. It is the City's intent in the future to complete a master drainage plan for the Aviation Heights area inclusive of the Lindbergh project limits. Because a full 2-D model has not been completed and is not included in the base scope of this project, it is possible that future improvements to Lindbergh (roadway and storm drain) may be required to convey the full flow of this area.
- Kimley-Horn will prepare a technical memorandum that list design assumptions and any potential impacts of designing the storm drain system based on the existing surface, and how that compares to the City's design manual
- It is unknown whether proposed storm drain improvements will require relocation of existing utilities. Therefore, for development of this proposal, it is assumed utility relocation services will not be required.
- Coordination with TxDOT has already been completed by City and will not be required of Kimley-Horn
- A total of one (1) round of comments for 90% design phase is assumed
- A total project schedule of 9-months is anticipated, including a 5-month construction schedule

EXCLUSIONS

- Completion of a 2-D hydraulic model with proposed conditions surface
- Geotechnical engineering
- Utility relocation design
- Detailed traffic control plans, outside of the proposed detour route included in the basic scope of services

- Detailed drainage report
- Additional round of comments to what is specified
- Additional design milestones to what is proposed for this task
- Monthly project meetings during construction phase
- Any other services not listed in the basic scope of services or project work plan

Relating to construction phase services for both tasks, 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 of 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.

SCHEDULE

Upon approval by the City staff and Council, Kimley-Horn will prepare and submit a design schedule for both tasks with an emphasis on the City's desirable construction period. It is understood the City's desire that preservation projects associated with Task A be completed at an accelerated schedule. Kimley-Horn will coordinate with the City to determine an approximate bid date for preservation projects that is reflective of both the effort required to complete remaining tasks and the City's intent to expedite delivery. Design schedules will also be coordinated with the City for street rehabilitation projects identified in Task A and Task B – Lindbergh Street Reconstruction. Kimley-Horn is ready to immediately begin work on the scope included within this additional service proposal upon acceptance and approval from the City.

Construction phase services for the contracts proposed for this project is based on durations identified in the Assumptions section above. Per project scoping meeting with Schertz, daily coordination with the Contractor will be handled internally by Schertz staff, so the expected service Kimley-Horn will provide during the construction phase is limited to the scope outlined above. Should construction exceed the identified durations due to conditions beyond the control of Kimley-Horn, an additional service proposal will be submitted to the City for Kimley-Horn to continue providing construction phase services for the remainder of the project.

FEE AND BILLING

Kimley-Horn will perform the above outlined scope of services, including project expenses, for an amount not to exceed **$344,970**, and in accordance with the following fee summary table:

Task	Description of Service	Amount	Basis of Compensation
	TASK A - 2020 PRESERVATION & REHABILITATION PROJECTS		
	BASIC SERVICES		
1A	Project Management	$ 8,460.00	[Lump Sum]
2A	Geotechnical Engineering Services	$ 32,460.00	[Lump Sum]
3A	Final Field Reviews & Confirm Program List	$ 10,590.00	[Lump Sum]
4A	Update Preservation Construction Drawings with Bid Phase	$ 30,730.00	[Lump Sum]
5A	Prepare Limited Construction Drawings for Rehabilitation Projects with Bid Phase	$ 59,805.00	[Lump Sum]
6A	Bid Phase - 2018 SPAM Remediation	$ 12,690.00	[Lump Sum]
7A	Repair Markings for Preservation Projects	$ 9,200.00	[Hourly]
8A	Construction Phase	$ 23,785.00	[Lump Sum]
9A	Reimbursable Project Expenses	$ 1,050.00	[Lump Sum]
	Total Task A (Basic Services)	**$ 188,770.00**	
	TASK B - LINDBERGH AVENUE RECONSTRUCTION		
	BASIC SERVICES		
1B	Project Management	$ 6,385.00	[Lump Sum]
2B	Data Review	$ 3,470.00	[Lump Sum]
3B	Survey Services	$ 8,090.00	[Lump Sum]
4B	Drainage Technical Memorandum Review	$ 8,960.00	[Lump Sum]
5B	90% Design	$ 70,120.00	[Lump Sum]
6B	Final Design	$ 17,655.00	[Lump Sum]
7B	Bid Phase	$ 8,795.00	[Lump Sum]
8B	Construction Phase	$ 17,220.00	[Lump Sum]
9B	Reimbursable Expenses	$ 550.00	[Lump Sum]
	SubTotal Task B (Basic Services)	$ 141,245.00	
	SUPPLEMENTAL SERVICES		
SS - 1B	Subsurface Utility Engineering	$ 11,510.00	[Lump Sum]
SS - 2B	TDLR	$ 3,445.00	[Lump Sum]
	SubTotal Task B (Supplemental Services)	$ 14,955.00	
	Total Task B (Basic + Supplemental Services)	**$ 156,200.00**	
	TOTAL COMPENSATIOIN (TASK A & B - AS NO. 1)	**$ 344,970.00**	

Kimley-Horn will submit invoices to the City on a monthly basis for services performed. Each invoice will include a progress report and work completed for the corresponding month.

We appreciate the opportunity to be of service to the City and look forward to successfully completing these projects for you. 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 (TASK A – 2020 Preservation and Rehabilitation Projects)
2 – Project Work Plan (TASK B – Lindbergh Avenue Reconstruction)
3 – Task A: Geotechnical Engineering Fee Proposal (Terracon)
4 – Task B: Survey Fee Proposal (Sherwood Surveying)
5 – Task B: SUE Fee Proposal (Rios Group)
6 – Task B: Lindbergh Project Location Map

CITY OF SCHERTZ

ATTACHMENT 1 - TASK A PROJECT WORK PLAN

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**2020 Roadway Improvements On-Call Engineering Services, Task Order - 02 Additional Service No. 1**
	TASK A - Preservation & Rehabilitation Projects
Design Firm:	Kimley-Horn and Associates, Inc.
Date Proposal Submitted:	4/7/2021
CoS Project Manager:	John Nowak, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

	Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Civil Engineer	Staff Engineer II	Senior Design Technician	Administrative Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
	Contract Approved Rates	$ 225.00	$ 195.00	$ 145.00	$ 115.00	$ 115.00	$ 75.00				
	Task to be performed/Phase Description (including Sub-consultant work)							Total Hours			
	BASIC SERVICES										
1A	**Project Management**	**0**	**26**	**14**	**2**	**2**	**12**	**56**	**$ 8,460.00**	**$ -**	**$ 8,460.00**
1.1	Project management and monthly invoicing		24	12			12	48	$ 7,320.00		
1.2	Project kickoff/continuation meeting		2	2	2	2		8	$ 1,140.00		
2A	**Geotechnical Engineering Services**	**0**	**7**	**6**	**7**	**0**	**4**	**24**	**$ 3,340.00**	**$ 29,120.00**	**$ 32,460.00**
2.1	Geotechnical engineering services							0	$ -	$ 29,120.00	
2.2	Sub-contract management		2		4		4	10	$ 1,150.00		
2.3	Prepare pavement boring plan and coordinate drilling operations (including site visit)		2	4	3			9	$ 1,315.00		
2.4	Review boring logs and draft engineering report		2					2	$ 390.00		
2.5	Coordinate emulsion application rate recommendations with City and Geotech		1	2				3	$ 485.00		
3A	**Final Field Reviews & Confirm Program List**	**0**	**10**	**12**	**44**	**16**	**0**	**82**	**$ 10,590.00**	**$ -**	**$ 10,590.00**
3.1	Update repair schematics per final adjustments/City comments		4		12	16		32	$ 4,000.00		
3.2	Update individual street quantities and overall program OPCCs (Preservation), incorporate Mesa Oaks		2	12	24			38	$ 4,890.00		
3.3	Coordinate with City on final 2020 program list, revise to fit budget		4		8			12	$ 1,700.00		
4A	**Update Preservation Construction Drawings with Bid Phase**	**4**	**26**	**51**	**111**	**40**	**0**	**232**	**$ 30,730.00**	**$ -**	**$ 30,730.00**
4.1	Update front end sheets			1		4		5	$ 605.00		
4.2	Update general notes sheets		1	4		4		9	$ 1,235.00		
4.3	Update quantity summary sheets and street map per neighborhood, including Mesa Oaks		2	8	16	16		42	$ 5,230.00		
4.4	Incorporate 2018 SPAM projects, including map of streets and slurry seal quantity per street		2	4	16	16		38	$ 4,650.00		
4.5	Incorporate City construction and TxDOT traffic control standards			2	4			6	$ 750.00		
4.6	Prepare Slurry Seal specification		2	8	12			22	$ 2,930.00		
4.7	Prepare Microsurfacing specification		2	8	12			22	$ 2,930.00		
4.8	Prepare supplemental conditions (including governing specs, special specs, supplemental specs and special provisions)		2	4	4			10	$ 1,430.00		
4.9	Prepare table of contents and invitation to bidders document			1	3			4	$ 490.00		
4.10	Prepare bid schedule		1		3			4	$ 540.00		
4.11	Prepare Owner and Contractor Agreement			1	2			3	$ 375.00		
4.12	Assemble contract documents and specifications		1	2	8			11	$ 1,405.00		
4.13	Internal QC/QA	4						4	$ 900.00		
4.14	Submit draft plans and specs to City for review		1	2	2			5	$ 715.00		
4.15	Address City comments and submit final construction drawings and specifications		2	4	8			14	$ 1,890.00		
4.16	Prepare agenda and attend pre-bid meeting		3		4			7	$ 1,045.00		
4.17	Prepare pre-bid meeting notes		1		1			2	$ 310.00		
4.18	Prepare & issue addenda		1	2	6			9	$ 1,175.00		

CITY OF SCHERTZ

ATTACHMENT 1 - TASK A PROJECT WORK PLAN

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**2020 Roadway Improvements** **On-Call Engineering Services, Task Order - 02 Additional Service No. 1**
	TASK A - Preservation & Rehabilitation Projects
Design Firm:	Kimley-Horn and Associates, Inc.
Date Proposal Submitted:	4/7/2021
CoS Project Manager:	John Nowak, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

	Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Civil Engineer	Staff Engineer II	Senior Design Technician	Administrative Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
	Contract Approved Rates	$ 225.00	$ 195.00	$ 145.00	$ 115.00	$ 115.00	$ 75.00				
	Task to be performed/Phase Description (including Sub-consultant work)							Total Hours			
4.19	Attend bid opening		2					2	$ 390.00		
4.20	Contractor qualification and bid evaluation		1		3			4	$ 540.00		
4.21	Prepare bid tabulation		1		4			5	$ 655.00		
4.22	Prepare contract award recommendation letter		1		3			4	$ 540.00		
5A	**Prepare Limited Construction Drawings for Rehabilitation Projects with Bid Phase**	**2**	**44**	**94**	**301**	**22**	**0**	**463**	**$ 59,805.00**	**$ -**	**$ 59,805.00**
5.1	Field work to obtain flatwork replacement measurements (10 streets)		12	48	48	12		120	$ 16,200.00		
5.2	Prepare cover and table of contents sheet				4			4	$ 460.00		
5.3	Prepare general notes sheets (City standard and special notes)		1	2	4			7	$ 945.00		
5.4	Prepare flatwork replacement aerial schematic sheets (10 streets, est. 28 sheets)		10	20	160			190	$ 23,250.00		
5.5	Develop quantity summary with map of streets		2	4	24	8		38	$ 4,650.00		
5.6	Incorporate relevant construction standards			1	2	2		5	$ 605.00		
5.7	Prepare OPCC		1	2	4			7	$ 945.00		
5.8	Prepare supplemental conditions (including governing specs, special specs, supplemental specs and special provisions)		2	4	4			10	$ 1,430.00		
5.9	Prepare table of contents and invitation to bidders document			1	2			3	$ 375.00		
5.10	Prepare bid schedule			1	3			4	$ 490.00		
5.11	Prepare Owner and Contractor Agreement			1	1			2	$ 260.00		
5.12	Assemble contract documents and specifications		1	2	6			9	$ 1,175.00		
5.13	Internal QC/QA	2						2	$ 450.00		
5.14	Submit draft plans and specs to City for review		1	2	2			5	$ 715.00		
5.15	Address City comments and submit final construction drawings and specs		2	4	16			22	$ 2,810.00		
5.16	Prepare agenda and attend pre-bid meeting		3		4			7	$ 1,045.00		
5.17	Prepare pre-bid meeting notes		1		1			2	$ 310.00		
5.18	Prepare & issue addenda		2	2	6			10	$ 1,370.00		
5.19	Attend bid opening		2					2	$ 390.00		
5.20	Contractor qualification and bid evaluation		2		4			6	$ 850.00		
5.21	Prepare bid tabulation		1		3			4	$ 540.00		
5.22	Prepare contract award recommendation letter		1		3			4	$ 540.00		
6A	**Bid Phase - 2018 SPAM Remediation**	**2**	**14**	**18**	**52**	**8**	**0**	**94**	**$ 12,690.00**	**$ -**	**$ 12,690.00**
6.1	Fog seal quantities		2	4	12			18	$ 2,350.00		
6.2	Prepare fog seal project map				2	8		10	$ 1,150.00		
6.3	Prepare supplemental conditions (including governing specs, special specs, supplemental specs and special provisions)		1	2	4			7	$ 945.00		
6.4	Prepare table of contents and invitation to bidders document				2			2	$ 230.00		
6.5	Prepare bid schedule		1		3			4	$ 540.00		
6.6	Prepare Owner and Contractor Agreement			1	2			3	$ 375.00		
6.7	Prepare OPCC		1	2	2			5	$ 715.00		
6.8	Assemble contract documents and specifications		1	1	6			8	$ 1,030.00		

CITY OF SCHERTZ

ATTACHMENT 1 - TASK A PROJECT WORK PLAN

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**2020 Roadway Improvements On-Call Engineering Services, Task Order - 02 Additional Service No. 1**
	TASK A - Preservation & Rehabilitation Projects
Design Firm:	Kimley-Horn and Associates, Inc.
Date Proposal Submitted:	4/7/2021
CoS Project Manager:	John Nowak, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

	Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Civil Engineer	Staff Engineer II	Senior Design Technician	Administrative Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
	Contract Approved Rates	$ 225.00	$ 195.00	$ 145.00	$ 115.00	$ 115.00	$ 75.00				
	Task to be performed/Phase Description (including Sub-consultant work)							Total Hours			
6.9	Internal QC/QA	2						2	$ 450.00		
6.10	Submit draft specs to City for review		1	1	1			3	$ 455.00		
6.11	Address City comments and submit final construction drawings and specs		1	2	2			5	$ 715.00		
6.12	Prepare agenda and attend pre-bid meeting		3		4			7	$ 1,045.00		
6.13	Prepare pre-bid meeting notes		1		1			2	$ 310.00		
6.14	Prepare & issue addenda		1	1	4			6	$ 800.00		
6.15	Attend bid opening			2				2	$ 290.00		
6.16	Contractor qualification and bid evaluation			1	3			4	$ 490.00		
6.17	Prepare bid tabulation			1	2			3	$ 375.00		
6.18	Prepare contract award recommendation letter		1		2			3	$ 425.00		
7A	**Repair Markings for Preservation Projects**	**0**	**0**	**0**	**80**	**0**	**0**	**80**	**$ 9,200.00**	**$ -**	**$ 9,200.00**
7.1	Repair markings for Preservation projects				80			80	$ 9,200.00		
8A	**Construction Phase**	**0**	**36**	**49**	**84**	**0**	**0**	**169**	**$ 23,785.00**	**$ -**	**$ 23,785.00**
8.1	Attend pre-construction meetings (Est. 3)		9		9			18	$ 2,790.00		
8.2	Material submittal review (Est. 7)		3	4	10			17	$ 2,315.00		
8.3	Construction site visits and report (Est. 6 months twice monthly, 1 report per month)		12	24	36			72	$ 9,960.00		
8.4	Respond to contractor RFI (Est. 5)		4	8	12			24	$ 3,320.00		
8.5	Review and respond to contractor change order proposal (Est. 2 proposal)		2		4			6	$ 850.00		
8.6	Review contractor monthly pay estiamtes and schedule (Slurry) (Est. 5 months at 1 per month)		2	5	5			12	$ 1,690.00		
8.7	Review contractor monthly pay estiamtes and schedule (Rehab) (Est. 6 months at 1 per month		3	6	6			15	$ 2,145.00		
8.8	Review contractor monthly pay estiamtes and schedule (2018 SPAM) (Est. 2 months at 1 per month)		1	2	2			5	$ 715.00		
9A	**Reimbursable Project Expenses**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$ 1,050.00**	**$ -**	**$ 1,050.00**
9.1	Mileage for site visits and meetings								$ 750.00	$ -	
9.2	Field marking paint for base repair patches								$ 300.00	$ -	
	Total Hours (Basic Services):	8	163	244	681	88	16	1200			
	Total Fee (Basic Services):								**$ 159,650.00**	**$ 29,120.00**	**$ 188,770.00**

CITY OF SCHERTZ

ATTACHMENT 2 - TASK B PROJECT WORK PLAN

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**2020 Roadway Improvements** **On-Call Engineering Services, Task Order - 02** **Additional Services No. 1** **TASK B - Lindbergh Avenue Reconstruction**
Design Firm:	Kimley-Horn & Associates
Date Proposal Submitted:	4/7/2021
CoS Project Manager:	John Nowak, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

			Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Civil Engineer	Staff Engineer II	Senior Design Technician	Administrative/Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
			Contract Approved Rates	$ 225.00	$ 195.00	$ 145.00	$ 115.00	$ 115.00	$ 75.00				
			Task to be performed/Phase Description (including Sub-consultant work)							Total			
			BASIC SERVICES										
1B			**Project Management**	**0**	**24**	**0**	**7**	**0**	**12**	**43**	**$ 6,385.00**	**$ -**	**$ 6,385.00**
	1.1		Monthly invoicing & reporting/updates		10				10	20	$ 2,700.00		
	1.2		Survey sub-consultant contract coordination		2				2	4	$ 540.00		
	1.3		Ongoing internal and City coordination		6					6	$ 1,170.00		
	1.4		Initial project site visit		3		3			6	$ 930.00		
	1.5		Meetings							0	$ -		
		1.5.1	Project kick-off meeting (City)		2		2			4	$ 620.00		
		1.5.2	Prepare meeting notes		1		2			3	$ 425.00		
2B			**Data Review**	**0**	**6**	**0**	**4**	**16**	**0**	**26**	**$ 3,470.00**	**$ -**	**$ 3,470.00**
	2.1		Review data provided by City		4		4	12		20	$ 2,620.00		
	2.2		Coordinate Additional Data Retrieval from prior Consultant		2			4		6	$ 850.00		
3B			**Survey Services**	**0**	**3**	**5**	**6**	**6**	**0**	**20**	**$ 2,690.00**	**$ 5,400.00**	**$ 8,090.00**
	3.1		Full Topographic Survey							0	$ -		
		3.1.1	Site meeting with Survey		2					2	$ 390.00		
		3.1.2	Obtain additional survey at Lindbergh/Exchange and Lindbergh/Curtiss. Confirm previous survey data, refresh control, & compile new & existing survey							0	$ -	$ 4,900.00	
		3.1.3	Field review of survey deliverable, coordinate comments		1	4		6		11	$ 1,465.00		
		3.1.4	Develop new Microstation surface file (.TIN)			1	4			5	$ 605.00		
		3.1.5	Create project control sheet				2			2	$ 230.00	$ 500.00	
4B			**Drainage Technical Memorandum Review**	**0**	**9**	**14**	**45**	**0**	**0**	**68**	**$ 8,960.00**	**$ -**	**$ 8,960.00**
	4.1		Review Drainage Areas			2	8			10	$ 1,210.00		
	4.2		Review Hydrologic Parameters		1	1	5			7	$ 915.00		
	4.3		Review hydraulic structures input into the model		1	1	8			10	$ 1,260.00		
	4.4		Run duplicate XPSWMM model to replicate results		1	2	8			11	$ 1,405.00		
	4.5		Tech Memo describing findings		2	4	16			22	$ 2,810.00		
	4.6		QA/QC		4	4				8	$ 1,360.00		
5B			**90% Design**	**8**	**45**	**95**	**236**	**162**	**0**	**546**	**$ 70,120.00**	**$ -**	**$ 70,120.00**
	5.1		Design							0	$ -		
		5.1.1	Internal design coordination		4	4	4	4		16	$ 2,280.00		
		5.1.2	Horizontal Alignments (Lindbergh/Exchange/Curtiss)			1	6			7	$ 835.00		
		5.1.3	Update ADA improvements within additional project areas			2	8			10	$ 1,210.00		
		5.1.4	Roadway profiles (Lindbergh, Exchange & Curtiss)		2	4	16			22	$ 2,810.00		
		5.1.5	Roadway cross-sections (Lindbergh - estimated 20 sections)		2	4	20			26	$ 3,270.00		
		5.1.6	Redo intersection grading plan (Lindbergh/Exchange)		2	4	10			16	$ 2,120.00		
		5.1.7	Intersection grading plan (Lindbergh/Curtiss)		1	2	6			9	$ 1,175.00		
		5.1.8	Striping & signage layout (add new on Lindbergh, revise parking)		2	4	8			14	$ 1,890.00		
		5.1.9	Analyze existing storm sewer system		1	4	16			21	$ 2,615.00		
		5.1.10	Prepare horizontal storm sewer alignments		1	2	8			11	$ 1,405.00		
		5.1.11	Storm sewer design & profiles (Lindbergh & Exchange systems)		2	8	32			42	$ 5,230.00		
										0	$ -		

CITY OF SCHERTZ

ATTACHMENT 2 - TASK B PROJECT WORK PLAN

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**2020 Roadway Improvements** **On-Call Engineering Services, Task Order - 02** **Additional Services No. 1** **TASK B - Lindbergh Avenue Reconstruction**
Design Firm:	Kimley-Horn & Associates
Date Proposal Submitted:	4/7/2021
CoS Project Manager:	John Nowak, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

			Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Civil Engineer	Staff Engineer II	Senior Design Technician	Administrative/Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
			Contract Approved Rates	$ 225.00	$ 195.00	$ 145.00	$ 115.00	$ 115.00	$ 75.00				
			Task to be performed/Phase Description (including Sub-consultant work)							Total			
	5.2		Plan Production - General							0	$ -		
		5.2.1	Update cover/index sheet					2		2	$ 230.00		
		5.2.2	Update project layout			1		6		7	$ 835.00		
		5.2.3	Update horizontal alignment data sheet				2			2	$ 230.00		
		5.2.4	Update quantity (roadway/drainage) and driveway summary sheet				1	4		5	$ 575.00		
		5.2.5	Incorporate Client standard notes & develop supplemental general notes		1	4		4		9	$ 1,235.00		
										0	$ -		
	5.3		Plan Production - Roadway							0	$ -		
		5.3.1	Existing typical sections (update existing)				2			2	$ 230.00		
		5.3.2	Proposed typical sections (update existing)				3			3	$ 345.00		
		5.3.3	Plan & Profile sheets (update existing)			2		12		14	$ 1,670.00		
		5.3.4	Plan & Profile sheets (New - Lindbergh - 2, Curtiss - 1)		2	6		30		38	$ 4,710.00		
		5.3.5	Striping & signage plan sheets (update existing)		1	3		8		12	$ 1,550.00		
		5.3.6	Striping & signage plan sheets (New - Lindbergh -1)			1		4		5	$ 605.00		
		5.3.7	Update Lindbergh at Exchange intersection layout/grading plan sheet			1	4			5	$ 605.00		
		5.3.8	Develop Lindbergh at Curtiss intersection layout/grading plan sheet		1	1	4	6		12	$ 1,490.00		
		5.3.9	Prepare proposed cross section sheets (Lindbergh - estimated 10 sheets)			1		8		9	$ 1,065.00		
		5.3.10	Incorporate relevant roadway standards			1	4			5	$ 605.00		
		5.3.11	Develop miscellaneous roadway details		1	2	4			7	$ 945.00		
										0	$ -		
	5.4		Plan Production - Drainage							0	$ -		
		5.4.1	Develop drainage area map sheet			1	8			9	$ 1,065.00		
		5.4.2	Hydraulic computations & sheet (Lindbergh system)			1	6			7	$ 835.00		
		5.4.3	Hydraulic computations & sheet (Exchange system)			1	6			7	$ 835.00		
		5.4.4	Storm sewer plan & profile sheets (Lindbergh system) (3 sheets)		3	6		30		39	$ 4,905.00		
		5.4.5	Storm sewer plan & profile sheets (Exchange system) (2 sheets)		2	4		20		26	$ 3,270.00		
		5.4.6	Incorporate relevant storm sewer standards			2	4			6	$ 750.00		
		5.4.7	Develop miscellaneous storm sewer details		1	2	8	4		15	$ 1,865.00		
										0	$ -		
	5.5		Plan Production - Traffic Control							0	$ -		
		5.5.1	Update traffic control detour sheet to include revised project limits			1	8			9	$ 1,065.00		
										0	$ -		
	5.6		Plan Production - SW3P							0	$ -		
		5.6.1	Prepare SW3P Narrative & sheet			2		4		6	$ 750.00		
		5.6.2	Incorporate SW3P protection measures on Roadway sheets			1		4		5	$ 605.00		
										0	$ -		
	5.7		Prepare Drainage TM		1	2	10			13	$ 1,635.00		
	5.8		Develop Quantities		1	2	8			11	$ 1,405.00		
	5.9		Prepare OPCC		1		6			7	$ 885.00		
	5.10		Prepare list of governing and special specifications		1	4				5	$ 775.00		
	5.11		Internal QA/QC	8	8	4	8	8		36	$ 5,780.00		
	5.12		90% submittal		2		4	4		10	$ 1,310.00		
	5.13		90% City review meeting		2		2			4	$ 620.00		
6B			**Final Design**	**4**	**15**	**24**	**54**	**36**	**0**	**133**	**$ 17,655.00**	**$ -**	**$ 17,655.00**
	6.1		Address comments and finalize general sheets		1	2		4		7	$ 945.00		
	6.2		Address comments and finalize roadway sheets		2	2	6	16		26	$ 3,210.00		
	6.3		Address comments and finalize drainage sheets		2	2	4	12		20	$ 2,520.00		

CITY OF SCHERTZ

ATTACHMENT 2 - TASK B PROJECT WORK PLAN

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**2020 Roadway Improvements** **On-Call Engineering Services, Task Order - 02** **Additional Services No. 1** **TASK B - Lindbergh Avenue Reconstruction**
Design Firm:	Kimley-Horn & Associates
Date Proposal Submitted:	4/7/2021
CoS Project Manager:	John Nowak, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

			Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Civil Engineer	Staff Engineer II	Senior Design Technician	Administrative/Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
			Contract Approved Rates	$ 225.00	$ 195.00	$ 145.00	$ 115.00	$ 115.00	$ 75.00				
			Task to be performed/Phase Description (including Sub-consultant work)							Total			
	6.4		Address comments and finalize traffic control/SW3P sheets		1	2		4		7	$ 945.00		
	6.5		Final quantities & OPCC		1		6			7	$ 885.00		
	6.6		Finalize Drainage TM		1	1	4			6	$ 800.00		
										0	$ -		
	6.7		Develop bid documents							0	$ -		
		6.7.1	Coordinate with Purchasing Department for construction contract development		2	2				4	$ 680.00		
		6.7.2	Assemble contract documents & specifications		1	4	8			13	$ 1,695.00		
		6.7.3	Prepare table of contents and invitation to bidders documents			1	4			5	$ 605.00		
		6.7.4	Prepare bid schedule			1	6			7	$ 835.00		
		6.7.5	Prepare agreement between City & Contractor			1	2			3	$ 375.00		
		6.7.6	Prepare Supplement Conditions (includes governing, special & supplemental specs, special provisions)		1	2	6			9	$ 1,175.00		
										0	$ -		
	6.8		Internal QA/QC	4	2					6	$ 1,290.00		
	6.9		Address comments from Purchasing Department & finalize/submit construction drawings & specifications package		1	4	8			13	$ 1,695.00		
7B			**Bid Phase**	**0**	**20**	**6**	**35**	**0**	**0**	**61**	**$ 8,795.00**	**$ -**	**$ 8,795.00**
	7.1		Assist with project advertising		2					2	$ 390.00		
	7.2		Attend pre-bid meeting with site visit		4		4			8	$ 1,240.00		
	7.3		Prepare pre-bid meeting notes		2		2			4	$ 620.00		
	7.4		Prepare & issue addenda (Max 1 addenda)		2	2	4			8	$ 1,140.00		
	7.5		Attend bid opening		2					2	$ 390.00		
	7.6		Contractor qualification & bid evalulation		2		4			6	$ 850.00		
	7.7		Prepare bid tabulation		1		6			7	$ 885.00		
	7.8		Assist with bid negotiations		2					2	$ 390.00		
	7.9		Prepare construction contract award recommendation letter		1		3			4	$ 540.00		
	7.10		Prepare conformed construction documents		2	4	12			18	$ 2,350.00		
8B			**Construction Phase**	**0**	**27**	**19**	**56**	**24**	**0**	**126**	**$ 17,220.00**	**$ -**	**$ 17,220.00**
	8.1		Attend pre-construction conference		2		2			4	$ 620.00		
	8.2		Material submittal review (maximum 10 submittals)		5	5	10			20	$ 2,850.00		
	8.3		Review Contractor baseline schedule			2				2	$ 290.00		
	8.4		Monthly site visit (estimate 5-month construction duration)		5	5	10			20	$ 2,850.00		
	8.5		Respond to Contractor RFI (maximum 3 RFI)		3	3	6			12	$ 1,710.00		
	8.6		Change orders/change proposal review (maximum 2 total)		2		4			6	$ 850.00		
	8.7		Contractor monthly payment application and schedule review (estimate 5-month construction schedule)		5		10			15	$ 2,125.00		
	8.8		Attend final completion walk and issue punch list		3		6			9	$ 1,275.00		
	8.9		Prepare record drawings		2	4	8	24		38	$ 4,650.00		
9B			**Reimbursable Expenses**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**$ 550.00**	**$ -**	**$ 550.00**
	9.1		Mileage for Site Visits and Meetings							0	$ 550.00		
			Total Hours (Basic Services):	12	149	163	443	244	12	1023			

CITY OF SCHERTZ

ATTACHMENT 2 - TASK B PROJECT WORK PLAN

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**2020 Roadway Improvements** **On-Call Engineering Services, Task Order - 02** **Additional Services No. 1** **TASK B - Lindbergh Avenue Reconstruction**
Design Firm:	Kimley-Horn & Associates
Date Proposal Submitted:	4/7/2021
CoS Project Manager:	John Nowak, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

	Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Civil Engineer	Staff Engineer II	Senior Design Technician	Administrative/Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
	Contract Approved Rates	$ 225.00	$ 195.00	$ 145.00	$ 115.00	$ 115.00	$ 75.00				
	Task to be performed/Phase Description (including Sub-consultant work)							Total			
	Total Fee (Basic Services):								**$ 135,845.00**	**$ 5,400.00**	**$ 141,245.00**

CITY OF SCHERTZ

ATTACHMENT 2 - TASK B PROJECT WORK PLAN

Fee/Price Proposal Breakdown for Professional Services

Project Name:	**2020 Roadway Improvements** **On-Call Engineering Services, Task Order - 02** **Additional Services No. 1** **TASK B - Lindbergh Avenue Reconstruction**
Design Firm:	Kimley-Horn & Associates
Date Proposal Submitted:	4/7/2021
CoS Project Manager:	John Nowak, PE
Kimley-Horn Project Manager:	Stephen Aniol, PE

			Position/Personnel Title	QA/QC Manager	Sr. Project Manager	Civil Engineer	Staff Engineer II	Senior Design Technician	Administrative/Clerical		Consultant Fee Total	Sub-Consultant Fee Total	Fee Total
			Contract Approved Rates	$ 225.00	$ 195.00	$ 145.00	$ 115.00	$ 115.00	$ 75.00				
			Task to be performed/Phase Description (including Sub-consultant work)							Total			
			SUPPLEMENTAL SERVICES										
SS - 1B			**Subsurface Utility Engineering**	**0**	**3**	**6**	**10**	**0**	**4**	**24**	**$ 3,080.00**	**$ 8,430.00**	**$ 11,510.00**
	1.1		Coordinate & prepare sub-consultant contracts		3				4	7	$ 885.00	$ -	
	1.2		Prepare SUE plan			2	6			8	$ 980.00	$ -	
	1.3		Site meeting with SUE			2				2	$ 290.00	$ -	
	1.4		QL-A (Up to 3 test holes)							0	$ -	$ 7,680.00	
	1.5		QL-A survey (up to 3 test holes)							0	$ -	$ 750.00	
	1.6		QA/QC QL-A & survey data			2	4			7	$ 925.00	$ -	
SS - 2B			**TDLR**	**0**	**4**	**7**	**0**	**0**	**2**	**13**	**$ 1,945.00**	**$ 1,500.00**	**$ 3,445.00**
	2.1		Coordinate & prepare sub-consultant contract		2				2	4	$ 540.00	$ -	
	2.2		TDLR design coordination		1	2				3	$ 485.00	$ -	
	2.3		TDLR inspection walk			3				3	$ 435.00	$ -	
	2.4		TDLR review, registration & inspection							0	$ -	$ 1,500.00	
	2.5		Post TDLR coordination (violations/closeout)		1	2				3	$ 485.00	$ -	
			Total Hours (Supplemental Services):	0	7	13	10	0	6	37			
			Total Fee (Supplemental Services):								**$ 5,025.00**	**$ 9,930.00**	**$ 14,955.00**
			TOTAL FEE (Basic + Supplemental Services):								**$ 140,870.00**	**$ 15,330.00**	**$ 156,200.00**

March 15, 2021

ATTACHMENT 3 - TASK A Geotech

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: Proposal for Geotechnical Engineering Services
Schertz 2020 Roadway Improvements
Various City Streets
Schertz, Texas
Terracon Proposal Number: P90215067

Dear Mr. Aniol:

Based on an email request dated March 9, 2021, Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to provide geotechnical 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 for various city streets improvements.

Site Location

The City Roadway improvement will be for the following city streets:

Street	Limits	Length (ft)
Columbia	Country Club Blvd to Covers Cove	2,910
St. Andrews	Country Club Blvd to Pebble Beach	900
Dove Meadows	Borgfield to Silvertree Blvd	940
Mourning Dove	Dove Meadows to cul-de-sac	350
White Wing	Dove Meadows to cul-de-sac	360
Grey Feather	Dove Meadows to cul-de-sac	370
Silvertree Blvd	Roy Richard Dr to cul-de-sac	1,200

Street	Limits	Length (ft)
Idlewood	Silvertree Blvd to cul-de-sac	340
Robin Hood Way	6923 Robin Hood Way to Sherlock Ln	2,400
Nottingshire	Sherlock Ln to Ware Seguin Rd	1,060

B. SCOPE OF 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:

Street	Length (ft)	Number of Soil Borings	Depth of Borings (feet)	Pavement Cores
Columbia	2,910	4	10	4
St. Andrews	900	2	10	---
Dove Meadows	940	3	10	---
Mourning Dove	350	1	10	---
White Wing	360	1	10	---
Grey Feather	370	1	10	---
Silvertree Blvd	1,200	2	10	---
Idlewood	340	1	10	---
Robin Hood Way	2,400	3	10	3
Nottingshire	1,060	2	10	---
	Total	**20**	**200**	**7**

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 City permit to allow work city street. Terracon will provide traffic control, likely to consist of signage only. We understand, we will be provided a City point of contact to obtain 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. 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.
- Existing pavement thickness.
- 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 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 issues after 1 week from 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. 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	$29,120

A breakdown of the fees 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.

D. 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.

ATTACHMENT 3 - TASK A Geotech

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 – P90215067

Attachment: Boring Location Plans
Fee Breakdown

BORING LOCATION PLAN

Schertz 2020 Roadway Improvements ■ Schertz, Texas

March 15, 2021 ■ Terracon Proposal No. P90215067

ATTACHMENT 3 - TASK A Geotech

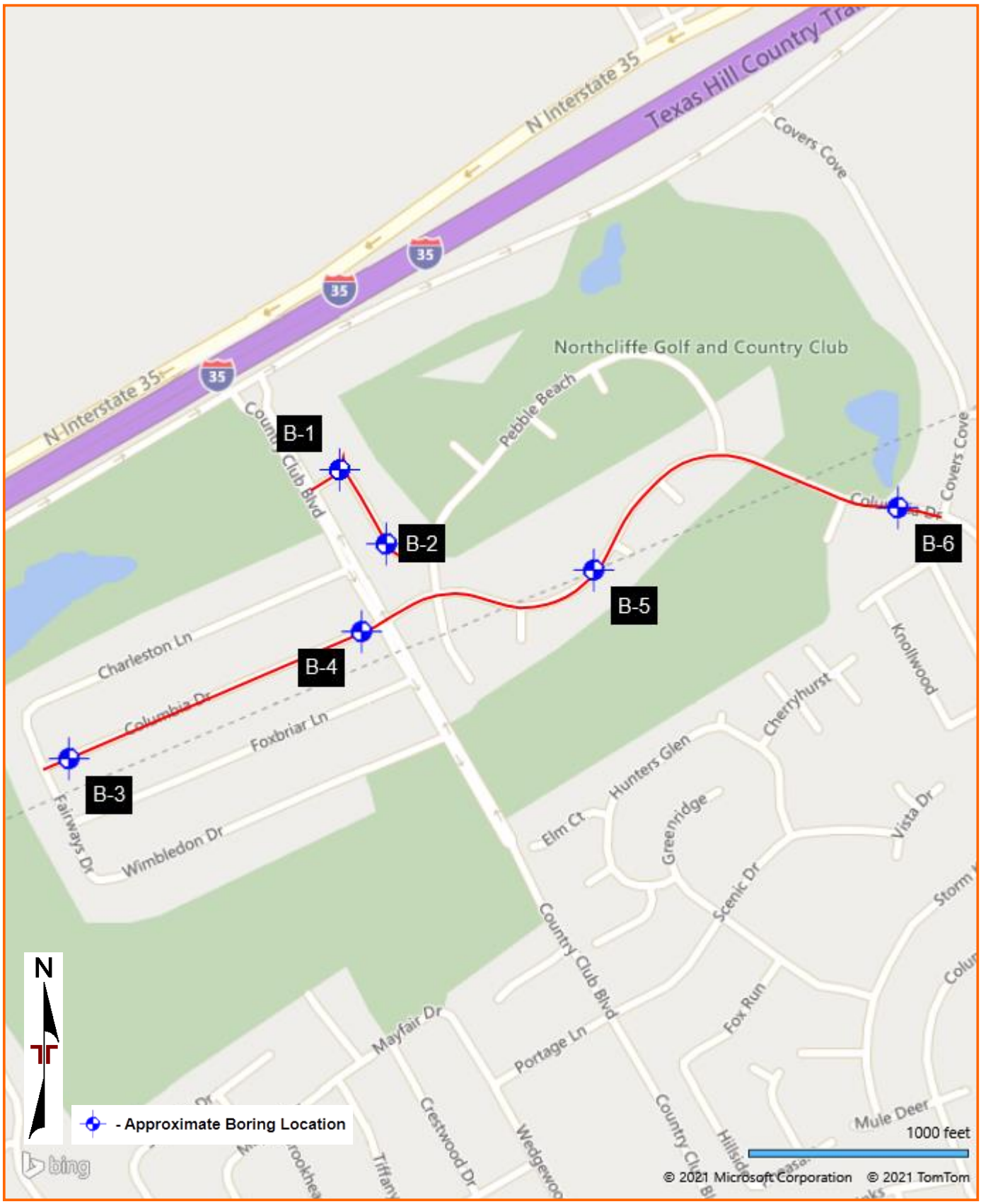


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

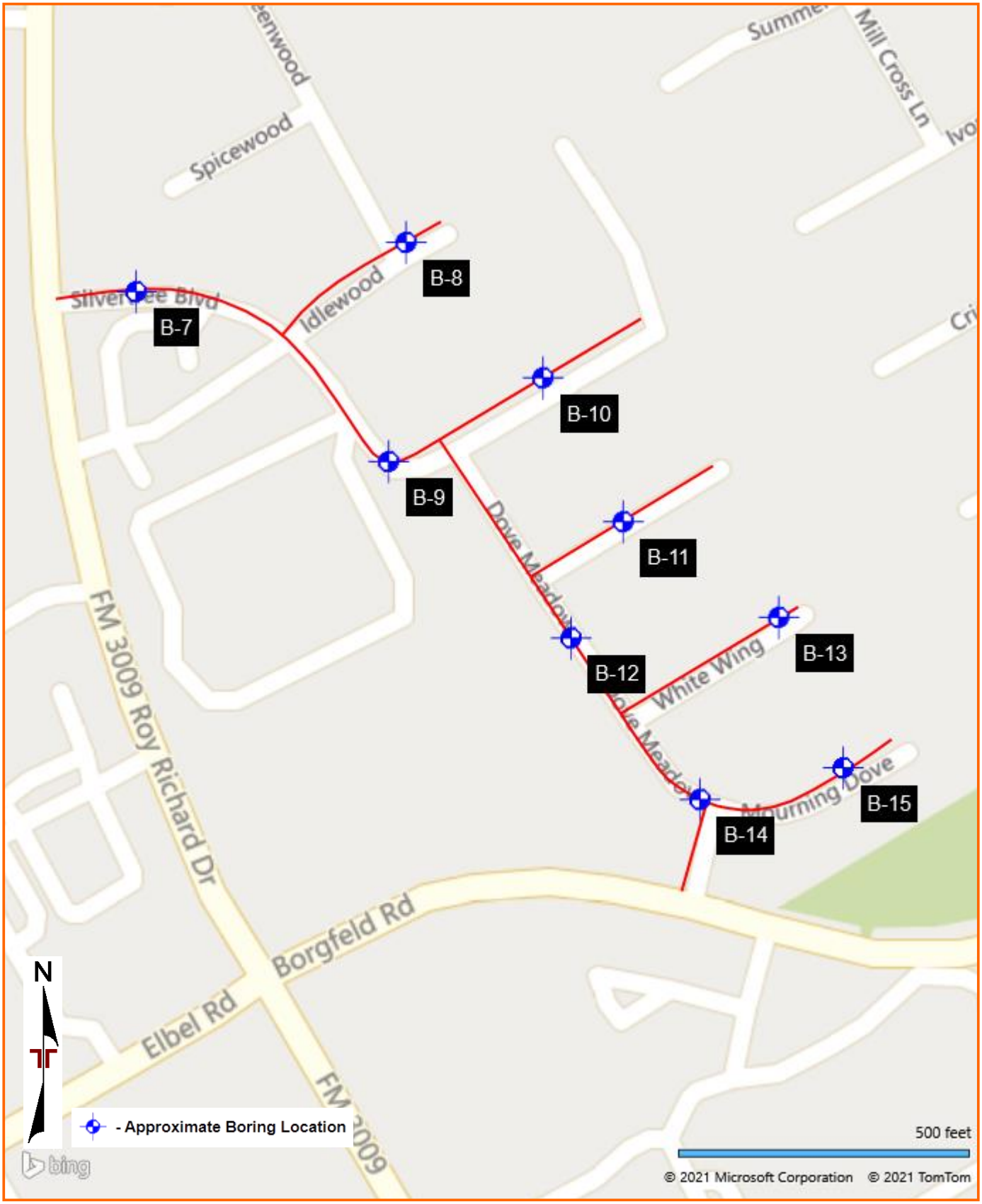
AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

BORING LOCATION PLAN

Schertz 2020 Roadway Improvements ■ Schertz, Texas

March 15, 2021 ■ Terracon Proposal No. P90215067

ATTACHMENT 3 - TASK A Geotech



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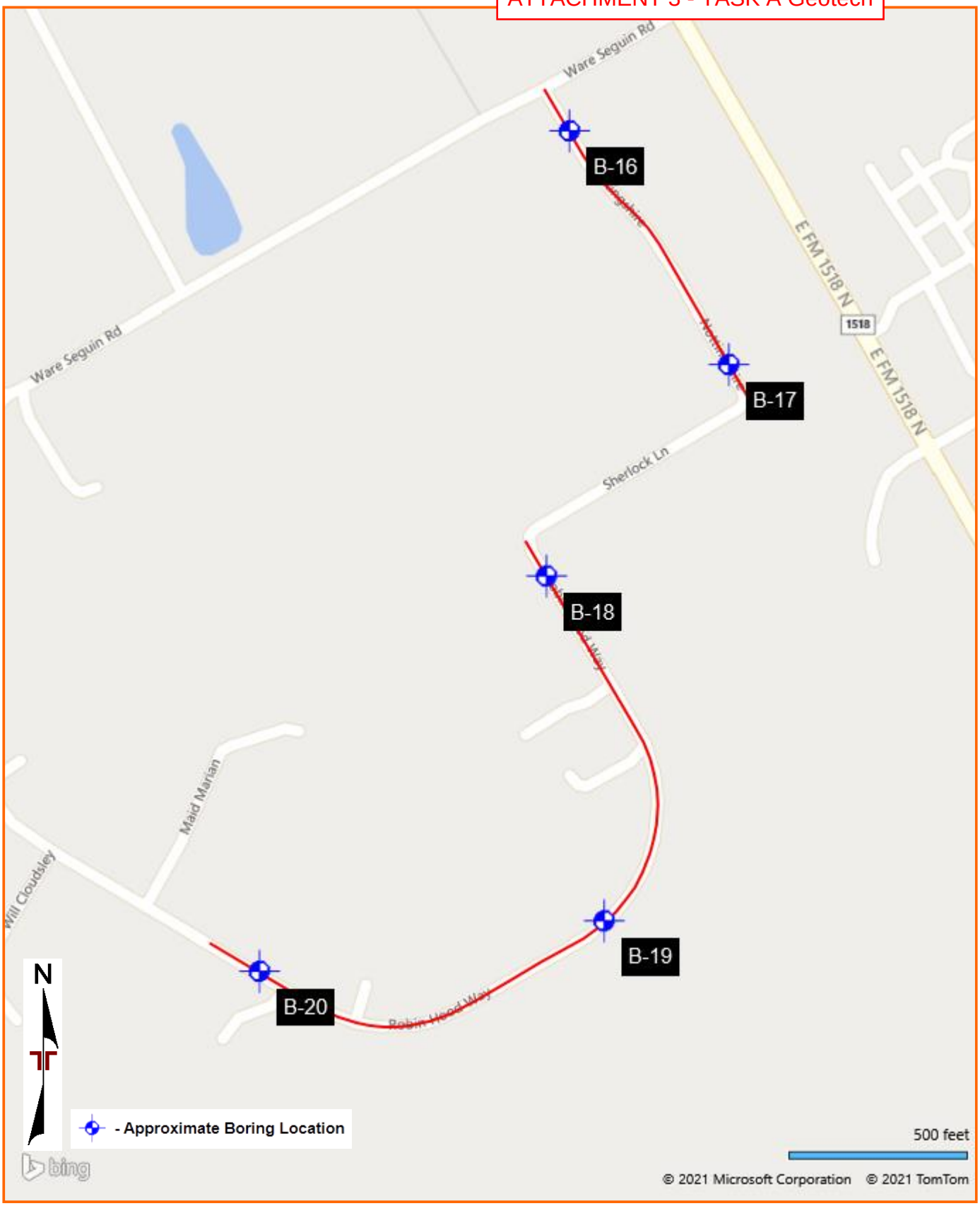
AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

BORING LOCATION PLAN

Schertz 2020 Roadway Improvements ■ Schertz, Texas
March 15, 2021 ■ Terracon Project No. P90215067

ATTACHMENT 3 - TASK A Geotech



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AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

ATTACHMENT 3 - TASK A Geotech

Terracon

Fee Breakdown for Geotechnical Study
Schertz 2020 Roadway Improvements
Schertz, Texas
Proposal No. P90215067

Geotechnical Borings	Quantity	Unit	Rate	Subtotal
City Permit & Traffic Control	3	each	$1,500.00	$4,500.00
Drill Rig and Crew Mob/Demob	3	each	$350.00	$1,050.00
Drilling and Sampling - Soil	200	ft	$17.00	$3,400.00
Senior Technician (Drilling, Coring & Utility Coordination)	40	hour	$75.00	$3,000.00
Vehicle Charge	4	each	$100.00	$400.00
				$12,350.00

Laboratory Testing	Quantity	Unit	Rate	Subtotal
Water Content	80	each	$10.00	$800.00
Liquid and Plastic Limits (3 points)	40	each	$95.00	$3,800.00
Sieve Analysis (No. 200)	15	each	$50.00	$750.00
Pocket Penetrometer	40	each	$5.00	$200.00
Soluble Sulfates (TEX-145-E)	15	each	$30.00	$450.00
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
				$8,130.00

Professional Services	Quantity	Unit	Rate	Subtotal
Project Principal	12	hour	$200.00	$2,400.00
Project Manager	30	hour	$150.00	$4,500.00
Staff Engineer	13	hour	$120.00	$1,560.00
Clerical	3	hour	$60.00	$180.00
				$8,640.00

Total Estimated Fee **$29,120.00**

ATTACHMENT 4 - Task B Survey

SHERWOOD SURVEYING & S.U.E.
UTILITIES | RESIDENTIAL | COMMERCIAL | INDUSTRIAL

6477 FM 311 I PO BOX 992
SPRING BRANCH, TX 78070
830.228.5788 P I 830.885.2170 F
WWW.MSENGR.COM I TBPLS #10044200

July 13, 2020

Stephen J. Aniol, P.E.
Kimley-Horn
601 NW Loop 410
Suite 350
San Antonio, Texas 78216

Submitted electronically via email to stephen.aniol@himley-horn.com

Subject: Fee Proposal for Surveying Services Related to the Lindbergh Survey project, City of Schertz, Texas.

Dear Mr. Aniol:

Thank you for allowing Sherwood Surveying, LLC (Sherwood) the opportunity to make a proposal for the above referenced project. Based on the scope discussed and provided in email as shown exhibit, Sherwood will provide the following scope of services outlined below.

Scope of Services:
Sherwood will perform all requested survey services as shown and requested on the scope of work attached below and survey limits shown on KMZ file provided by client.

Deliverables:
Sherwood Surveying will provide the following deliverables to client:

1. ASCII file with all point numbers and descriptions, X,Y,& Z, P-code format
2. DGN file with a full description of all control and benchmark information.
3. Microstation 2D and 3D files **(Sherwood will merge existing files with new data)**
4. One complete TIN file and TIN.dgn file **(Sherwood will work with KHA to complete TIN file.)**
5. Code lists
6. Field notes and sketches
7. Utility record drawings/as-builts research shall also be submitted when electronic files are delivered
8. Project control sheet with pertinent benchmark and control will be signed and sealed by the RPLS and prepared for submittal, and will be included in the final construction drawings prepared by Kimley-Horn
9. Supplement item – CAD file with up to 3 QL-A test holes with associated QL-B markings adjacent to test hole locations
10. Electronic files delivered that do not follow Kimley-Horn CADD standards will NOT be accepted.

Pricing
Sherwood will provide the above described scope of work for a fee of:

1. **Survey = $4,900.00**
2. **Project Control Sheet = $500.00**
3. **SUE Data Collection = $750.00**

Invoicing will be mailed to your attention at the completion of the project.

Availability
Sherwood currently has sufficient man-power available and can immediately begin work on this project within 7-10 business days if awarded.

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.

Invoicing
Invoicing will be mailed at the completion of the defined scope of work as instructed.

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 the final page and return.

Sincerely,

Rico Laijas
Survey Department Manager

_____ _____
Approved: Date

Name (print):_____

Title: _____
Subject: Fee Proposal for Surveying Services Related to the Lindbergh Survey project, City of Schertz, Texas.

ATTACHMENT 4 - Task B Survey

Lindbergh Avenue Reconstruction (Between Main Street and Curtiss)
City of Schertz
Survey Scope

Project Description:
Street reconstruction with drainage improvements along Lindbergh Avenue between Main Street and Curtiss Avenue, and along Exchange Ave from Lindbergh Avenue to Randolph Blvd. Provide complete topo survey and DTM within project limits from ROW to ROW.

- Lindbergh – Main Street to Curtiss Avnue
  - Total Length ~ +/- 850 LF
    - Includes Main Street Intersection and 100' north of Lindbergh/Curtiss intersection
- Exchange – Lindbergh Ave to Randolph Blvd
  - Total Length ~ +/- 850 LF
    - Includes 100' west of Lindbergh/Exchange intersection and up to Randolph/Exchange intersection
- Curtiss – 100 LF each direction of Lindbergh intersection
- Main Street – 50 LF each direction of Lindbergh intersection

Existing Survey Files:
City of Schertz (City) provided survey files for project area to Kimley-Horn from previous project Consultant, via email to on June 8, 2020, in which Sherwood Surveying obtained the survey data and produced the deliverables. City desires to utilize the existing survey files for this project to the most feasible extent possible.

Survey Scope:
Sherwood should review existing survey files provided by the the City, and originally produced by Sherwood, and confirm the limits noted above and scope items noted below are included in final survey deliverable.

1. All surveying shall be performed in English Units – US Survey feet, NAD 83 South Central Texas. All control will be assumed.
2. Cross sections at 50-foot intervals, including along Lindbergh, Curtiss and Exchange
   A. ROW to ROW including centerline, edge of pavement, top of curb, face/back of sidewalk (if present)
      1. Sherwood to confirm existing elevations requested to be used by the City is accurate
3. Each intersection shall be grid format
4. Pick up curbing, flatwork, wheelchair ramps, driveway cuts, roadway pavement limits, striping, signage, etc.
5. Locate and pick up all drainage features, ditches and flowlines within project boundary, including all pipe sizes and flow direction
   A. Pick up all drainage inlets and pipes at Randolph/Exchange intersection, including pipe sizes and flow direction

6. Locate and pick up noticeable sags/crests that do not follow the normal terrain.
7. Locate and pick up all trees in the right-of-way and describe size and type (3" diameter and above). Surveyor is responsible for accurately identifying trees.
8. Pick up any visible monumentation, apparent right-of-way and property pins to show ROW on files. Notify Project Manager if unable to locate property pins
9. Locate and pick up all irrigation fixtures
10. Provide a minimum of 2 control points along Lindbergh and 1 control point along Exchange, outside of the construction footprint whereas to not be removed during construction
    A. Sherwood can use existing control set but shall confirm accuracy and reset if damaged.
11. Call "One Call", pick up utility locates, and pick up visible utility appurtenances. Review and include utilities from record drawings and contact Project Manager if additional data is needed to clearly define existing utilities. Manhole lids that are bolted down must be opened by surveyor, utilizing necessary tools required. If manholes are tack welded surveyor should contact Project Manager.
12. Provide property owner description for each parcel within the project boundary
13. Provide DTM and surface file (.tin) that includes necessary break lines to produce accurate surface
14. Prepare DGN files ensuring thorough quality control and quality assurance.
15. See survey KMZ for project boundary

The survey data shall be prepared and provided in MicroStation version v8i. The entire survey shall be continuous and contained in one file using standard CADD drafting procedures and practices. Surveyor shall collect all ground features ensuring 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 and monuments are to be located. All fences, buildings, parking lots, sidewalks and any obvious features shall be located and identified.

DGN files must contain a minimum of two control points 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. Prior to commencing, the surveyor must obtain the proper seed file, which contains the correct working units and global origin. The seed file can be obtained from the TxDOT web site or by contacting the Project Manager at Kimley-Horn.

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 a DTM triangle model representing the actual terrain including all spot shots, break lines, and voids, the DTM triangle model must be on a discreet level and suitable for export to Geopak TIN. Utility manholes, valve boxes and appurtenances, and trees shall be not be used as part of the

required cross section, and shall not be included in the final DTM, as these items are known to provide false interpretations of existing surface conditions. If this point is nearest to a 50-foot cross section, an additional point shall be obtained outside of the utility or tree.

Level structure on all electronic files developed for Kimley-Horn must follow Kimley-Horn CADD standards, to be provided to surveyor prior to data collection, so that elements of distinctive types reside on a specific level and can be manipulated individually. Level 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 line styles, including the size of the utility. Power poles shall be drawn in a level of their own as well as any drainage infrastructure, traffic signal, and illumination.

Text on DGN 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. Level naming shall be consistent with what it represents, and text must be placed parallel to the roadway it corresponds to.

Final Deliverables

The surveyor shall provide the following deliverable items:

- ASCII file with all point numbers and descriptions, X,Y,& Z, P-code format
- DGN file with a full description of all control and benchmark information.
- Microstation 2D and 3D files
- One complete TIN file and TIN.dgn file
- Code lists
- Field notes and sketches
- Utility record drawings/as-builts research shall also be submitted when electronic files are delivered
- Project control sheet with pertinent benchmark and control will be signed and sealed by the RPLS and prepared for submittal, and will be included in the final construction drawings prepared by Kimley-Horn
- Supplement item – CAD file with up to 3 QL-A test holes with associated QL-B markings adjacent to test hole locations
- **Electronic files delivered that do not follow Kimley-Horn CADD standards will NOT be accepted.**

Sherwood Fee:

- Survey –
- Project Control Sheet –
- SUE Data Collection –
    - Supplement Task

ATTACHMENT 5 - Task B SUE

THE RIOS GROUP

July 13, 2020

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 - Lindbergh Street Reconstruction

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 July 9, 2020.

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.

ATTACHMENT 5 - Task B SUE

The scope of this proposal is to provide up to **three (3)** QL "A" test holes all located within the limits of the City of Schertz – Lindbergh Street Reconstruction. 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. Test hole locations will be selected by the client and provided to TRG prior to mobilization. It is assumed that all test holes will fall within the limits as shown on Exhibit B outlined in light blue. TRG also assumed **no** test holes will be selected within the TxDOT ROW and no TXDOT permits / coordination will be required.

*The survey of QL "B" and QL"A" SUE information is **not** included in this scope of work. It is assumed that the Client will provide TRG with the necessary survey control information.*

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,

ATTACHMENT 5 - Task B SUE

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 will 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 work can be completed in thirteen (13) working days, broken down as follows:

- Layout test holes – 1 day
- QL“A” field work – 2 days (after permit approval)
- QL“A” deliverable preparation – 10 days (after receipt of survey data)

ATTACHMENT 5 - Task B SUE

Estimated Fee

The total estimated cost to complete the work described herein is **Seven Thousand Six Hundred Eighty Dollars and NO/100 ($7,680.00)**. An itemized breakdown of cost is provided in Exhibit A. Please note that these pricings are based on an assumption of quantities, and that only actual quantities will be invoiced – up to the total Contract amount.

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

ATTACHMENT 5 - Task B SUE

THE RIOS GROUP

Estimate for Subsurface Utility Engineering

Lindbergh Project Boundary

Schertz, Tx

EXHIBIT A

Direct Expenses		*Rate*	*Assumed Quantity*	*Unit of Measure*		*Sub-Total*
ROW Permits	$	270.00	1	EA	$	270.00
Traffic Control (Standard)*	$	350.00	2	DAY	$	700.00
Deliverable Preparation	$	750.00	1	LS	$	750.00
Flowable Backfill*	$	270.00	3	EA	$	810.00
Sub-Total					**$**	**2,530.00**
*Depends on TH Locations						
Test Hole Layout		*Rate*	*Assumed Quantity*	*Unit of Measure*		*Sub-Total*
Test Hole Layout Crew	$	2,500.00	0.5	DAY	$	1,250.00
Sub-Total					**$**	**1,250.00**
QL"A" SUE Test Holes						
Unit Rate - Depth		*Rate*	*Assumed Quantity*	*Unit Of Measure*		*Sub-Total*
0 - 4 feet	$	850.00	2	EA	$	1,700.00
4 - 8 feet	$	1,150.00	1	EA	$	1,150.00
8 - 12 feet	$	1,450.00	0	EA	$	-
12 - 18 feet	$	2,300.00	0	EA	$	-
Pavement Coring*	$	350.00	3	EA	$	1,050.00
Test Hole Total			3			
Sub-Total					**$**	**3,900.00**
Total Estimated Cost					**$**	**7,680.00**


ATTACHMENT 6 - Task B Lindbergh Project Location Map
Curtiss Ave
Randolph Blvd.
Exchange Ave
Lindbergh Ave
Beacon
Exchange Ave
Lindberg Ave
Main St
1518
Randolph Ave
Curtiss Ave
Lee
78
Lee St
Mill St
Wuest St
Church St