

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS AGREEMENT is made and entered into by and between Fort Bend County, (hereinafter “County”), a body corporate and politic under the laws of the State of Texas, and Gradient Group, LLC, (hereinafter “Consultant”), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, County desires that Consultant provide professional engineering services for improvements to Evergreen, Segment 1 under Project No. 20122x under the Fort Bend County Mobility Program (hereinafter “Services”) pursuant to SOQ 14-025; and

WHEREAS, County has determined Consultant is the most highly qualified provider of the desired Services on the basis of demonstrated competence and qualifications, and County and Consultant have negotiated to reach a fair and reasonable amount of compensation for the provision of such Services, as required under Chapter 2254 of the Texas Government Code; and

WHEREAS, Consultant represents that it is qualified and desires to perform such services.

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

AGREEMENT

Section 1. Scope of Services

Consultant shall render the professional engineering services as described in Consultant’s Scope of Services dated September 9, 2021, attached hereto as Exhibit A, and incorporated herein for all purposes.

Section 2. Personnel

2.1 Consultant represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for the timely performance of the Scope of Services required under this Agreement and that Consultant shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Scope of Services when and as required and without delays.

2.2 All employees of Consultant shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Consultant who, in the opinion of County, is incompetent or by his conduct becomes detrimental to the project shall, upon request of County, immediately be removed from association with the project.

Section 3. Compensation and Payment

3.1 The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is five hundred forty-nine thousand one hundred nine dollars and 46/100 (\$549,109.46) as set forth in Exhibit A. In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without a written agreement executed by the parties.

3.2 All performance of the Scope of Services by Consultant including any changes in the Scope of Services and revision of work satisfactorily performed will be performed only when approved in advance and authorized by County.

3.3 County will pay Consultant based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Consultant shall submit to County staff person designated by the County Engineer, one (1) electronic (pdf) copy of the invoice showing the amounts due for services performed in a form acceptable to County. County shall review such invoices and approve them within 30 calendar days with such modifications as are consistent with this Agreement and forward same to the Auditor for processing. County shall pay each such approved invoice within thirty (30) calendar days. County reserves the right to withhold payment pending verification of satisfactory work performed.

Section 4. Limit of Appropriation

4.1 Consultant clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of five hundred forty-nine thousand one hundred nine dollars and 46/100 (\$549,109.46) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Consultant does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Consultant may become entitled to and the total maximum sum that County may become liable to pay to Consultant shall not under any conditions, circumstances, or interpretations thereof exceed five hundred forty-nine thousand one hundred nine dollars and 46/100 (\$549,109.46).

Section 5. Time of Performance

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than December 31, 2025. Consultant shall complete the tasks described in the Scope of Services, within this time or within such additional time as may be extended by the County.

Section 6. Modifications and Waivers

6.1 The parties may not amend or waive this Agreement, except by a written agreement executed by both parties.

6.2 No failure or delay in exercising any right or remedy or requiring the satisfaction of any condition under this Agreement, and no course of dealing between the parties, operates as a waiver or estoppel of any right, remedy, or condition.

6.3 The rights and remedies of the parties set forth in this Agreement are not exclusive of, but are cumulative to, any rights or remedies now or subsequently existing at law, in equity, or by statute.

Section 7. Termination

7.1 Termination for Convenience – County may terminate this Agreement at any time upon forty-eight (48) hours written notice.

7.2 Termination for Default

7.2.1 County may terminate the whole or any part of this Agreement for cause in the following circumstances:

7.2.1.1 If Consultant fails to perform services within the time specified in the Scope of Services or any extension thereof granted by the County in writing;

7.2.1.2 If Consultant materially breaches any of the covenants or terms and conditions set forth in this Agreement or fails to perform any of the other provisions of this Agreement or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and in any of these circumstances does not cure such breach or failure to County’s reasonable satisfaction within a period of ten (10) calendar days after receipt of notice from County specifying such breach or failure.

7.2.2 If, after termination, it is determined for any reason whatsoever that Consultant was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County in accordance with Section 7.1 above.

7.3 Upon termination of this Agreement, County shall compensate Consultant in accordance with Section 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County. Consultant’s final invoice for said services will be presented to and paid by County in the same manner set forth in Section 3 above.

7.4 If County terminates this Agreement as provided in this Section, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to Consultant.

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Consultant as a part of its work under this Agreement, shall become the property of County upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time of payment under Section 3 for work performed. Consultant shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

Consultant will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Consultant for the purpose of verifying the amount of work performed under the Scope of Services. County's right to inspect survives the termination of this Agreement for a period of four years.

Section 10. Insurance

10.1 Prior to commencement of the Services, Consultant shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Consultant shall provide certified copies of insurance endorsements and/or policies if requested by County. Consultant shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Consultant shall obtain such insurance written on an Occurrence form (or a Claims Made form for Professional Liability insurance) from such companies having Best's rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

10.1.1 Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed.

10.1.2 Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.

10.1.3 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.

10.1.4 Business Automobile Liability insurance with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.

10.1.5 Professional Liability insurance may be made on a Claims Made form with limits not less than \$1,000,000.

10.2 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of Consultant shall contain a waiver of subrogation in favor of County and members of Commissioners Court.

10.3 If required coverage is written on a claims-made basis, Consultant warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time that work under the Agreement is completed.

Section 11. Indemnity

CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS COUNTY AGAINST LOSSES, LIABILITIES, CLAIMS, AND CAUSES OF ACTION, INCLUDING THE REIMBURSEMENT OF COUNTY'S REASONABLE ATTORNEYS FEES IN PROPORTION TO CONTRACTOR'S LIABILITY, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, INTENTIONAL TORT, ERROR, OR OMISSION OF CONTRACTOR OR ANY OF CONTRACTOR'S AGENTS, SERVANTS OR EMPLOYEES.

Section 12. Confidential and Proprietary Information

12.1 Consultant acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Consultant or its employees or agents from County in the performance of this Agreement shall be deemed to be confidential information of County ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Consultant shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Consultant) publicly known or is contained in a publicly available document; (b) is rightfully in Consultant's possession without the obligation of nondisclosure prior to the time of its disclosure under this Agreement; or (c) is independently developed by employees or agents of Consultant who can be shown to have had no access to the Confidential Information.

12.2 Consultant agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Consultant uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Consultant shall use its best efforts to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Consultant shall advise County

immediately in the event Consultant learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Consultant will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Consultant against any such person. Consultant agrees that, except as directed by County, Consultant will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Consultant will promptly turn over to County all documents, papers, and other matter in Consultant's possession which embody Confidential Information.

12.3 Consultant acknowledges that a breach of this Section, including disclosure of any Confidential Information, or disclosure of other information that, at law or in equity, ought to remain confidential, will give rise to irreparable injury to County that is inadequately compensable in damages. Accordingly, County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Consultant acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interest of County and are reasonable in scope and content.

12.4 Consultant in providing all services hereunder agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.

12.5 Consultant expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 *et seq.*, as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by Consultant shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed.

Section 13. Independent Consultant

13.1 In the performance of work or services hereunder, Consultant shall be deemed an independent contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of contractor or, where permitted, of its subcontractors.

13.2 Consultant and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.

Section 14. Notices

14.1 Each party giving any notice or making any request, demand, or other communication (each, a “Notice”) pursuant to this Agreement shall do so in writing and shall use one of the following methods of delivery, each of which, for purposes of this Agreement, is a writing: personal delivery, registered or certified mail (in each case, return receipt requested and postage prepaid), or nationally recognized overnight courier (with all fees prepaid).

14.2 Each party giving a Notice shall address the Notice to the receiving party at the address listed below or to another address designated by a party in a Notice pursuant to this Section:

County: Fort Bend County Engineering Department
Attn: County Engineer
301 Jackson Street
Richmond, Texas 77469

With a copy to: Fort Bend County
Attn: County Judge
401 Jackson Street, 1st Floor
Richmond, Texas 77469

Consultant: Gradient Group, LLC
2107 CityWest Boulevard, Suite 450
Houston, Texas 77042

14.3 A Notice is effective only if the party giving or making the Notice has complied with subsections 14.1 and 14.2 and if the addressee has received the Notice. A Notice is deemed received as follows:

14.3.1 If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.

14.3.2 If the addressee rejects or otherwise refuses to accept the Notice, or if the Notice cannot be delivered because of a change in address for which no Notice was given, then upon the rejection, refusal, or inability to deliver.

Section 15. Compliance with Laws

Consultant shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker’s Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required by County, Consultant shall furnish County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

Section 16. Standard of Care

Consultant represents shall perform the Services to be provided under this Agreement with the professional skill and care ordinarily provided by competent engineers practicing under the same or similar circumstances and professional license. Further, Consultant shall perform the Services as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer.

Section 17. Assignment

17.1 Neither party may assign any of its rights under this Agreement, except with the prior written consent of the other party. That party shall not unreasonably withhold its consent. All assignments of rights are prohibited under this subsection, whether they are voluntarily or involuntarily, by merger, consolidation, dissolution, operation of law, or any other manner.

17.2 Neither party may delegate any performance under this Agreement.

17.3 Any purported assignment of rights or delegation of performance in violation of this Section is void.

Section 18. Applicable Law

The laws of the State of Texas govern all disputes arising out of or relating to this Agreement. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Agreement and waive the right to sue or be sued elsewhere. Nothing in the Agreement shall be construed to waive the County's sovereign immunity.

Section 19. Successors and Assigns

County and Consultant bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

Section 20. Third Party Beneficiaries

This Agreement does not confer any enforceable rights or remedies upon any person other than the parties.

Section 21. Severability

If any provision of this Agreement is determined to be invalid, illegal, or unenforceable, the remaining provisions remain in full force, if the essential terms and conditions of this Agreement for each party remain valid, binding, and enforceable.

Section 22. Publicity

Contact with citizens of Fort Bend County, media outlets, or governmental agencies shall be the sole responsibility of County. Under no circumstances whatsoever, shall Consultant release any material or information developed or received in the performance of the Services hereunder without the express written permission of County, except where required to do so by law.

Section 23. Captions

The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of this Agreement.

Section 24. Conflict

In the event there is a conflict between this Agreement and the attached exhibits, this Agreement controls.

Section 25. Certain State Law Requirements for Contracts

25.1 Agreement to Not Boycott Israel Chapter 2271 Texas Government Code: By signature below, Consultant verifies that if Consultant employs ten (10) or more full-time employees and this Agreement has a value of \$100,000 or more, Consultant does not boycott Israel and will not boycott Israel during the term of this Agreement.

25.2 Texas Government Code Section 2251.152 Acknowledgment: By signature below, Consultant represents pursuant to Section 2252.152 of the Texas Government Code, that Consultant is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2253.153.

Section 26. Human Trafficking

BY ACCEPTANCE OF AGREEMENT, CONSULTANT ACKNOWLEDGES THAT THE COUNTY IS OPPOSED TO HUMAN TRAFFICKING AND THAT NO COUNTY FUNDS WILL BE USED IN SUPPORT OF SERVICES OR ACTIVITIES THAT VIOLATE HUMAN TRAFFICKING LAWS.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the date signed by the last party hereto.

FORT BEND COUNTY

GRADIENT GROUP, LLC

KP George, County Judge



Authorized Agent – Signature

Date

Stephanie Anderson, PE

Authorized Agent – Printed Name

ATTEST:

President

Title

Laura Richard, County Clerk

20 September 2021

Date

APPROVED:



J. Stacy Slawinski, P.E., County Engineer

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$ _____ to accomplish and pay the obligation of Fort Bend County under this contract.

Robert Ed Sturdivant, County Auditor

EXHIBIT A



September 9, 2021

Mr. Kevin Mineo, PE
Senior Project Manager
Binkley & Barfield, Inc.
1710 Seamist Drive
Sent Via Email: kmineo@binkleybarfield.com

RE: Evergreen Street Proposal

Dear Mr. Mineo:

Gradient Group, LLC is pleased to have the opportunity to submit the attached proposal to Fort Bend County for the above referenced project. The following items are included:

1. Exhibit A – Scope of Service
2. Exhibit B – Schedule
3. Exhibit C – Surveyor Scope of Services
4. Exhibit D – Geotechnical Scope of Services

Gradient Group, LLC is pleased to provide engineering services to Fort Bend County for this project.

Sincerely,
GRADIENT GROUP, LLC

A handwritten signature in black ink that reads "Stephanie Anderson".

Stephanie Anderson, PE, ENV SP
President

Gradient Group, LLC
2107 CityWest Blvd, Suite 450
Houston, TX 77042
832.779.5700



GRADIENT GROUP, LLC
2107 CityWest
Suite 450
Houston, Texas 77042

EXHIBIT A – Scope of Services

Evergreen Street – Segment 1

Fort Bend County

Project Overview

Gradient Group respectfully submits this proposal for the referenced project to include the professional engineering, surveying, geotechnical, and traffic services for the preparation of plans, specifications, and construction documents for the roadway widening construction of the existing Evergreen Street to a 36-foot wide (2–12-foot lanes with 2–6-foot shoulders) asphalt 2 lane road with an 80-foot ROW with roadside ditches. Evergreen Street is an existing 2 lane asphalt roadway with roadside ditches. The project is located within City of Houston ETJ but will be designed to the Fort Bend County design criteria.

Limits

Evergreen Street, Segment 1 is approximately 4,836 linear feet, starting at the intersection of California St and ending 100-feet west of the Mustang Bayou bridge. The project is anticipated to require additional ROW for the proposed improvements.

Alignment

The Engineer is to consider an 80-foot ROW for the geometric design of the roadway. The final roadway alignment design will be approved by Fort Bend County and Stakeholders.

Professional Services

The overall scope of the project is to provide engineering services necessary for the improvements as described above. Any additional items will be included under option/additional as listed below. The existing right-of-way (ROW) varies with a variable ROW from approximately 40 to 55 feet. Land acquisition for ROW, including visibility triangles, will need to be determined during the Study Phase. Boundary surveying to define the tracts for acquisition is included in the scope of this project. A project team (Gradient Team) which consist of Gradient Group, LLC as the prime consultant and 2 subconsultants, has been formed to perform the required engineering services. Gradient is responsible for general management of the project and coordinating with the subconsultants. Gradient will review subconsultants work and be satisfied with its quality before submitting it to FBC for review. Gradient will also ensure that the subconsultants adhere to the schedule.

The project scope of work includes a study, design, and bid phase engineering services to develop construction documents for the proposed roadway widening. The design will be performed in accordance with FBC criteria and according to the Guidelines and Specification list provided at the project kick off meeting which was held June 30, 2021. This scope of services does not include the work required for the environmental services as we understand this effort will be engaged by FBC.

The following are the anticipated basic services and optional additional services that will be required for this project.

Basic Services

1.P Pre-Design (Study) Phase

The Pre-Design Phase will include collection of the backup documents, findings, and recommendations for the design phase. It will include and address geotechnical investigation, signal warrant analysis, paving and drainage. This information will be submitted in a study report. The study report will be submitted for review prior to, and finalized, after the client presentation.

The study report will include the following:

Exhibits/Attachments:

1. Aerial Exhibit

Provide an exhibit that shows the project limits and surrounding features. Identify notable features of interest, including drainage channels, floodplains, pipelines, roadways, future roadway alignments shown on the City of Houston's (or other municipality's) Major Thoroughfare Plan, latest available aerial photographs, and developments.

2. Schematic Layout of Roadway and Detention

Provide a plan view layout with sufficient detail to ensure that the final design can be constructed without any major issues. Include the location of the proposed storm open ditch system and detention facilities. The plan sheet shall be at a scale of 1" = 40' on 11"x17" sheets. Include a Cover Sheet with a Vicinity Map with the project limits. The Study Report will include the pavement marking concept and a KMZ so that traffic movements can be considered and reviewed during the study phase. Provide the proposed typical sections on the schematic. Typical Sections shall be drawn at 1"=20' horizontal and 1"=2' vertical scale on 11"x17" sheets. Identify the location of soil borings.

3. Cost Estimates

Provide a preliminary construction cost estimate for the final recommendation provided in the Study Report.

4. Utility Tables

The Consultant shall provide a table with all identified utilities along with the contact information. The table shall include ID number for the potential conflicts, stations at the left right-of-way, the centerline, and Right right-of-way, the owner of the utility, contact name, address, phone number, email address and any notes such as no conflict, potential conflict and/or relocation resolution.

The consultant shall coordinate with utility companies that have existing facilities in or adjacent to the project limits. The coordination shall include:

- a. Identify utilities that will potentially require relocation. Major utilities are defined pipelines, concrete incased conduits, or other utilities of this nature. Overhead power lines, small gas service lines and other lines of this nature are not identified as major conflicts but will be identified in the utility table.
- b. Identify any utilities that are within dedicated easements that will be within the proposed right-of-way. These are utilities identified and potential conflicts and will need to be designed around when possible.

5. Sight Distance Evaluation

The consultant shall investigate sight distance restrictions and general operating conditions of all existing and proposed intersections within the project limits. Prepared exhibits which include the ROW and parcel lines, proposed layout of paving, features on private property that affect the sight distance and square footage of takings that would be required.

Approaches to be completed include:

- a. Proposed Evergreen Street & California Street north, east, south approach at intersection.
- b. Proposed Evergreen Street & Illinois Street Drive north, east, west approach at intersection.
- c. Proposed Evergreen Street & Front Street north, east, west approach at intersection.
- d. Proposed Evergreen Street & Main Street north, east, west approach at intersection.
- e. Proposed Evergreen Street & S. Post Oak Blvd Drive north, east, west, south approach at intersection.

The study phase shall include one client presentation meeting prepared by the consultant.

At the Preliminary Engineering Report (PER) meeting, the Consultant shall present the status of the project and go over key items from the draft PER to include, but not limited to, ROW, Alignment, Utilities, Parcels, Site triangles, Construction cost. Consultant shall provide preliminary plan sheets and exhibits to supports discussions to solicit input from Fort Bend County on decision items.

Any issues identified during the Consultant's work effort to get to this project stage that require decisions from Fort Bend County should be presented at this meeting for confirmation prior to finalizing the PER such that approval can be granted upon report submittal.

Below is the outline of the process anticipated for this project.

1. Topo will be verified at a topo verification walk (to be completed by Gradient & Surveyor) and final submittal will be completed and sent electronically.
2. Existing ROW maps will be submitted electronically for FBC to review, comments will be given, and final maps will be submitted electronically.
3. Geotech Report will be submitted electronically, comments will be given, and the final report will be submitted electronically.
4. Traffic Control Plan review.
5. Submit DRAFT Pre-Design Study Phase Report electronically.
6. Client Presentation via PowerPoint summing up all work and decision made in Pre-Design Study Phase. A brief overview of what will be expected in depth during the Design Phase.
7. Submit FINAL Pre-Design Study Phase Report electronically.
8. ALL Submittals will include one hard copy, if requested.

As a result of the study, a Study Report will be generated. The Study Report shall serve as a summary document that incorporates necessary recommendations from the supporting investigative reports, results from the working meetings with FBC, as well as approvals and final recommendations from the project team's efforts. The document will serve as the outline and framework for the design phase, addressing the major design issues and concerns that affect the roadway drainage design and supporting infrastructure.

1.D Drainage

The drainage effort for this project is based on the understanding of the roadway improvements as described above. Under existing conditions, the roadway storm drainage is conveyed in roadside ditches. Culverts will need to be constructed at roadway intersections and existing driveways with a design to maintain the existing drainage flow. Based on the current effective Federal Emergency Management Agency Insurance Rate Map panel 48157C0315L, dated April 2, 2014, the project area is located mostly in Unshaded Zone X flood hazard area and partially in Shaded Zone X and Zone AE.

Data Collection & Review

This task includes data collection and review to obtain a full understanding of project constraints and opportunities. Topographic survey will be reviewed to establish baseline drainage conditions in the project area to understand the areas which drain to and within the project limits. LiDAR data will be reviewed for areas adjacent to the ROW.

Preliminary Drainage Options

Gradient will perform an analysis to define the existing drainage areas and patterns along the project limits. Fort Bend County Interim Atlas 14 drainage criteria will be utilized for the calculation of stormwater

runoff calculations. The peak flow rates will be calculated for the 2-year, 10-year, 100-year. We will identify roadside ditch sizing in consideration of the increase to peak flows due to the increase in impervious cover and provide preliminary detention volume required based on Atlas 14 rainfall and make recommendations for pond locations/configurations (maximum of 3).

Gradient will analyze the available outfall depth at the existing Mustang Bayou. Based on the anticipated grades and vertical constraints, it will be determined if any stream improvements are required to accommodate gravity outfall for the project. Opportunities for modifying the receiving bayou will be explored based on the ability of the flowlines downstream to accommodate modifications.

Stormwater detention and conveyance facilities will be preliminarily sized and located using the approximate storage volumes and outfall depth and capacities. Preliminary calculations will be for flow from the road right-of-way and will not include analysis of the impact of off-site flows being conveyed by the roadside ditch. Off-site sheet flow analysis will be prepared as part of the drainage impact analysis

Gradient will prepare Exhibits of each option illustrating the proposed drainage features/elements. Cost estimates will be computed for each option and the options will be presented to the client. Upon receiving direction from the client, a detailed hydrologic and hydraulic analysis of the agreed upon drainage plan will be analyzed.

Drainage Impact Analysis

Drainage Impact Study will then be performed for the project using the chosen drainage option. The Drainage Impact Study will determine the impacts associated with the proposed roadway improvements and chosen drainage option, and will present the existing site conditions, drainage patterns and existing drainage infrastructure; proposed project impacts, proposed drainage feature, and mitigation measures. The findings will be summarized and provided in a signed and sealed study report.

1. Once an overall drainage option is selected, Gradient will prepare the final calculations and hydrologic/hydraulic models reflecting the proposed project features. The features will represent the anticipated final design considerations.
2. Hydrologic and hydraulic modeling will be prepared to verify the sizing of the roadside ditch and detention pond. Off-site flows will be included in the routing to determine if the ditch sizing determined from the preliminary drainage efforts is appropriately sized to collect and convey off site flows draining to the roadway. Roadside ditch will be resized as needed to contain contributing flows
3. Flows will be routed through the detention pond and outfall to verify sizing.
4. Gradient will prepare a drainage report detailing “no adverse impact” for the proposed improvements. This drainage report will utilize current Fort Bend County criteria to establish pre- and post-project improvement conditions and identify how potential impacts are addressed. The appropriate exhibits and tables will be prepared to clarify the report assumptions and findings.
5. Perform an analysis to define existing drainage areas and drainage patterns along the roadway and evaluate changes to the existing conditions as a result of the proposed roadway alignments. Evaluate sheet flow drainage patterns along the roadway corridor to define runoff flows from within

150 feet of the ROW versus runoff defined by the existing drainage areas based on LiDAR topography and FBC drainage criteria.

6. Exclusions: For the portion of the project limits located in the floodplain, it is assumed that the project will not result in the placement of fill in the floodplain or regulatory floodway. Floodplain conveyance analysis is therefore not anticipated and has been excluded. If later found necessary or required for approvals, it will be handled as Additional Services.

Gradient will coordinate approval of the drainage report with FBC and FBC Drainage District.

1.G Geotechnical Investigation

Scope attached from Terracon Associates.

- A. Roadway Geotechnical Report (11 Bores @ 15')

1.S Survey

Scope attached from LandTech Surveying.

- A. Roadway Control Survey
- B. Roadway Topographic Surveying and Mapping
- C. Proposed ROW Surveying and Mapping

1.P Study Phase Project Management

Gradient will provide General Project Management Services throughout the Study Phase, including:

1. Monthly progress reports and billings oversight.
2. Progress meetings other than those listed in Section E – Study Phase Meetings.
3. Special tasks or information requests from the FBC Project Manager or other FBC senior staff.
4. Sub-Consultant Management/Coordination.
5. Review and comment on third party development applications as they relate to the project.

DESIGN PHASE

2.P Design Phase

The Design Phase will begin after the acceptance of the PER and will address comments from the client presentation if required. The Design Phase will use the alignment and layout conceptual design developed during the Study Phase and will further develop the geometric plan and profile designs and other final design details to bring the design drawings to a bid ready level of detail. The design submittal will include the electronic submittal of 11"x 17" construction ready plans which will include plan and profiles, traffic control plans, signing and pavement markings, cross sections, SWPPP, and a final cost estimate. The Design Phase will include coordination with utility companies and FBC Utility Department to provide them with the necessary information to obtain their approvals. Gradient will provide FBC with available documentation, Utility Conflict Table (UCT), encroachment table (if needed) and assist with the coordination with utility companies. There will be three submittals (70%, 95% and 100%). Additional submittals may be required under this contract, should plans not get approved by the governing agencies (FBC) during the first two submittals.

We have assumed the roadway will be designed based on the project description as defined above.

1. Roadway Design

- a. Prepare existing typical section of Evergreen Street.
- b. Prepare proposed typical sections that show lane configuration and pavement structure. Typical sections should include roadside ditches.
- c. Prepare project site map and horizontal alignment data sheets for Evergreen Street and intersecting streets, including benchmarks (1" = 100' printed half-size).
- d. Plans will be printed plotted to half size (11"x17") with scale bar and north arrow
- e. Prepare intersection layout and grading sheets to include top of pavement elevations of the following intersecting streets (1" = 20'):
 - Evergreen & California
 - Evergreen & Illinois
 - Evergreen & Front
 - Evergreen & Main
 - Evergreen & S. Post Oak
- f. Prepare roadway plan and profile sheets for Evergreen Street (1" = 40' H, 1" = 4' V printed half-size) showing horizontal and vertical geometric designs, which will be based on the approved schematic. Refine the horizontal and vertical alignments as needed for the detailed PS&E phase design.
- g. Prepare a table showing the quantities, station, radii, width, and grade for driveway reconstruction. Identify locations and limits for temporary construction easements.
- h. Identify and modify as necessary standard roadway detail sheets for conformance with FBC Engineering Department standard details.
- i. Show existing ROW with bearings and distances on plan and profile sheets for reference to ensure all proposed improvements are fully located within ROW.

2. Storm Sewer Design

- a. Prepare overall drainage watershed map and calculations for the drainage area divides. All calculations and drainage area will be in conformance with the approved Hydrology/Hydraulic Study included as part of the project scope.
- b. Prepare detailed drainage area maps necessary to perform the design of storm sewer system.
- c. Prepare detailed hydraulic calculations necessary to perform the design of the storm sewer system.
- d. Design cross drainage structure(s) for 50 year and check for 100-year storm. Design storm sewer/ditch systems for 2-year storm.
- e. Include storm sewer plan and profile data on roadway plan and profile sheets, which will include plan and profile information for storm sewers, manholes, inlets, and existing utilities.
- f. Include intersection storm sewer plan and profile data on intersection plan and profile sheets, which will include plan and profile information for roadside storm sewer ditches, manholes, inlets, and existing utilities.
- g. Prepare outfall typical sections (1" = 20').
- h. Prepare outfall plan and profile sheet (1" = 20' Full Size; 1" = 40' for half size) for storm drain.
- i. Identify and modify as necessary standard drainage details sheets.
- j. Survey beyond ROW, as needed to determine high/low points for drainage.

3. Signing and Pavement Markings

- a. Prepare proposed layouts showing signs and pavement markings (1" = 100' – double bank printed half-size). Design of permanent signing and markings will be in accordance with FBC standards and the latest version of Texas Manual of Uniform Traffic Control Devices (MUTCD) for Streets and Highways.
- b. Identify and modify as necessary standard and modified pavement marking detail sheets.

4. Traffic Control

- a. Prepare advanced warning sign layout (1" = 400').
- b. Prepare sequence of construction with general traffic control plan layout.
- c. Prepare construction sequencing and traffic control plan layouts for each phase/step (1" = 100').
- d. Prepare detour layout sheet to detour through traffic around construction.
- e. Identify and modify as necessary standard construction and barricade detail sheets.

5. Storm Water Pollution Prevention Plans (SW3P)

- a. Develop SW3P Narrative.
- b. Prepare SW3P plans (1" =100' double bank) showing temporary control measures during each phase of construction. SW3P controls may include but are not limited to:
 - Temporary Sediment Fence

- Rock Berms
- Construction Entrance/Exit
- Inlet Protection Barriers

6. Miscellaneous Roadway

- a. Prepare Title Sheet for project per FBC standard details.
- b. Prepare Index Sheet. Index Sheet will include a listing of the required standards.
- c. Prepare General Notes sheet and include notes applicable for grading, paving, drainage, and utilities.
- d. Prepare Clearing & Grubbing sheets.
- e. Earthwork Cross-Sections (1" = 40' H, 1" = 4' V) showing existing and proposed roadway sections will be prepared every 100' for the proposed roadway. The cross-sections will be generated from vertical topographic information.
- f. Compute and tabulate construction quantities and prepare estimate. Estimates will be prepared and submitted with each review submittal at first submittal and final submittal.
- g. Provide for the preparation of a geotechnical analysis report of the proposed roadway and bridges.

7. Utility Coordination

- a. Represented existing utilities in plan and profile.
- b. Updated utility contact and conflict table.
- c. Attend one utility coordination meetings.
- d. Update utilities in conflict with plans at each submittal.

8. Deliverables (70/95/100%)

- a. The project design guidelines will follow Fort Bend County's Engineering Design Manual, and will include but not limited to: Plans, including 1) title sheet; 2) index of sheets; 3) typical sections; 4) plan & profile sheets with proposed roadway baselines, storm sewer system, existing utilities, topographic information, existing structures, and pavement to be removed; 5) intersection grading layouts; 7) drainage area maps; 8) SW3P plans; 9) traffic control drawings, 10) standard drawings & details; and 11) cross sections as needed will also be developed.
- b. Support exhibits/interim submittals (if needed).
- c. Specifications and Special Provisions.
- d. Cost estimate and Bid sheet.

9. Project Management

Gradient will provide General Project Management Services throughout the Design Phase, including:

- a. Monthly progress reports.
- b. Progress meetings other than those listed in Section G – Design Phase Meetings.
- c. Obtain necessary agency approvals.

10. QA/QC

Gradient will provide quality assurance and quality control throughout the process and will include:

- a. Routine checking of PS&E documents by the Project Manager.
- b. Close collaboration between the task leader and Project Manager to ensure all County procedures for the project are met.
- c. Regular internal review of project.
- d. Maintain documentation of the QA/QC process.

2.G Geotechnical Investigation

Scope attached from Terracon Associates.

- A. Detention Pond Geotechnical Report (1 Pond @ 1.36 acres)

2.S Surveying

Scope attached from LandTech Surveying.

- A. Detention Pond - Topographic Survey and Mapping (1 Pond @ 1.36 acres)
- B. Detention Pond – proposed ROW Surveying & Mapping (1 Pond @ 1.36 acres)

Bid and Construction Phase Services

3.P Bid and Construction Phase Services

Bid Phase Services

Upon completion of final design, Gradient will prepare a single project manual consisting of administrative documents, bid form, signed and seal specifications table of contents and applicable specifics for the design documents.

1. Attend pre-bid meeting.
2. Prepare responses to bidders' questions.
3. Prepare addendum as needed.
4. Evaluate bids and provide tabulations and recommendation for award.

Optional Additional Services

The scope provided below are items that will be determined during the study phase if they will be required.

1.1T Traffic

Traffic Signal Warrant Analysis will include the intersections at Evergreen Street & California Street and Evergreen Street & S. Post Oak Blvd.

The Client shall provide the following information requested by the Consultant during the project, if available:

- a. Any traffic data conducted along the project corridor. If needed traffic data will be supplement with field data collection
- b. Fort Bend County Traffic Signal Design Standards and Specifications (via Fort Bend County website).

The Consultant shall be entitled to rely on the completeness and accuracy of all information provided by the Client in the completion of their services for this project.

The consultant will be responsible for collecting 24-Hour Turning Movement Counts data collection at the following intersections.

- a. Evergreen Street & California Street
- b. Evergreen Street & S. Post Oak Blvd

The basic scope of services for the traffic signal warrant analysis for the Evergreen Street intersection at California Street and S. Post Oak Blvd is as follows:

- a. Three field visits to the site, one during the AM Peak Hour, one during the off-peak hours, and one during the PM Peak Hour to assess existing traffic conditions.
- b. Conduct traffic signal warrant analysis for the proposed intersection of Evergreen Street and California.
- c. Conduct traffic signal warrant analysis for the proposed intersection of Evergreen Street and S. Post Oak Blvd.
- d. Conduct radius analysis to determine proper radius for large truck traffic at the proposed intersection of Evergreen Street and S. Post Oak Blvd.
- e. Preparation of technical memorandum report, including schematic graphics (suitable for Fort Bend County review).

1.1S Survey – Proposed Acquisition Parcel Survey (44 Parcels Total; Includes 2 for Detention Pond)

- a. *Scope attached from LandTech Surveying.*

3.1S Survey – Pre-Construction ROW Staking

- b. *Scope attached from LandTech Surveying.*



Evergreen Widening Segment 1

Project Number 20122x (GG# P2021-031)

Project Manager: Stephanie Anderson, PE

9/9/2021

BASIC SERVICES		\$	380,819.26
PHASE 1	Preliminary Engineering Report	\$	192,978.69
	1P - Pre-Design Study	\$	54,138.20
	1D - Drainage	\$	42,180.40
	1G - Geotechnical	\$	15,700.00
	1S - Survey	\$	80,960.09
Phase 2	Engineering Design Services	\$	187,840.57
	2P - Design Plans	\$	175,861.60
	2G - Detention Geotechnical	\$	8,500.00
	2S - Detention Survey	\$	3,478.97
Phase 3	Bid & Construction Phase Services	\$	-
	3P - Bid Services	\$	-
OPTIONAL ADDITIONAL SERVICES		\$	168,290.20
PHASE 1	Preliminary Engineering Report	\$	158,519.40
	1.1T - Traffic	\$	11,500.00
	Proposed Acquisition Parcel Surveys (Includes 2 Parcels for 1 Pond @ 1.36 Acres)	\$	147,019.40
Phase 2	Engineering Design Services	\$	-
Phase 3	Bid & Construction Phase Services	\$	9,770.80
	Pre Construction ROW Staking	\$	9,770.80
TOTAL PROJECT COST		\$	549,109.46

PRODUCTION MANHOUR LEVEL OF EFFORT - PHASE 1 PRELIMINARY ENGINEERING

Project: **Evergreen Widening Segment 1**
 Project #: 20122x (GG# P202-1-031)
 Date: 7/16/2021
 Revised: 9/10/2021



Project Manager: Stephanie Anderson, PE

SHEET NO.	DESCRIPTION	QA/QC Manager	Sr. Project Manager	Roadway Engineer	Drainage Engineer	Traffic Engineer	Engineer-In-Training	Senior CADD Designer	CADD Designer	Administrative	TOTAL HOURS	COST
		\$374.00	\$323.00	\$272.00	\$272.00	\$272.00	\$153.00	\$159.80	\$108.80	\$102.00		

BASIC SERVICES - PHASE 1 PRELIMINARY ENGINEERING REPORT

IP - Pre-Design Study	Bi-Weekly 30 Minute Progress Meetings (3 Months)	Preliminary Conference & Coordination Meeting	Aerial Exhibits- Existing Conditions Summary	Schematic Plan Sheets Layout of Roadway and Detention - Proposed Conditions Evaluation	Identify Existing Utilities	Utility Conflict Table	Utility and ROW Coordination Meeting	Evergreen Street & California Street - Sight Triangle Evaluation (3 Approaches)	Evergreen Street & Illinois Street - Sight Triangle Evaluation (3 Approaches)	Evergreen Street & Front Street - Sight Triangle Evaluation (3 Approaches)	Evergreen Street & Main Street - Sight Triangle Evaluation (3 Approaches)	Evergreen Street & South Post Oak Blvd - Sight Triangle Evaluation (4 Approaches)	Draft PER Report (30% Design Plans)	Final PER Report (30% Design Plans)	IP - Pre-Design Study Total
	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	3.0	2.0	2.0	4.0	8.0	8.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	6.0	5.0	1.615.00	28.0	93.0	14,048.80	3,706.00	18.0	17.0	7.0	11.0	11.0	11.0	11.0	11.0
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	1,785.00	1,615.00	4,467.60	14,048.80	3,706.00	3,546.20	1,302.20	1,802.00	1,802.00	1,802.00	1,802.00	1,802.00	1,802.00	1,802.00	1,802.00
	54,158.20														

ID - Drainage	Collect & Review Drainage Data	Develop Drainage Alternatives	Perform Drainage Impact Analysis	Drainage Report	ID - Drainage Total
	1.0	1.0	1.0	2.0	1.0
	8.0	8.0	8.0	8.0	8.0
	\$	\$	\$	\$	\$
	2,091.00	13,130.80	13,130.80	13,827.80	42,180.40

IG - Geotechnical	Geotechnical Roadway Report (11 - 15 Bays)	IG - Geotechnical Total
	1.0	1.0
	15,700.00	15,700.00

IS - Survey	Control Surveying	Topographic Surveying and Mapping	Proposed ROW Surveying & Mapping	IS - Survey Total
	1.0	1.0	1.0	1.0
	11,921.25	43,612.20	25,426.64	80,960.09

BASIC SERVICES - PHASE 1 PRELIMINARY ENGINEERING REPORT COST

OPTIONAL / ADDITIONAL SERVICES - PHASE 1 PRELIMINARY ENGINEERING REPORT

LIT - Traffic	24 Hour Traffic Data Collection - Turning Movement Counts	Evergreen Street & California Street - Traffic Signal Warrant Analysis	Evergreen Street & South Post Oak Blvd - Traffic Signal Warrant Analysis	LIT - Traffic Total
	2.0	1.0	1.0	2.0
	Locations @ \$	Intersection @ \$	Intersection @ \$	per location
	1,250.00	4,500.00	4,500.00	per intersection
	\$	\$	\$	\$
	2,500.00	4,500.00	4,500.00	11,500.00

IS - Survey	Proposed Acquisition Parcel Surveys (Includes 2 Parcels for 1 Pond @ 1.36 Acres)	IS - Survey Total
	44.0	44.0
	Parcels @ \$	Parcels @ \$
	3,341.35	3,341.35
	\$	\$
	147,019.40	147,019.40

OPTIONAL / ADDITIONAL SERVICES - PHASE 1 PRELIMINARY ENGINEERING REPORT COST

TOTAL - PHASE 1 PRELIMINARY ENGINEERING REPORT COST	\$	351,498.09
--	-----------	-------------------

Proposed ROW Surveying & Mapping (Including 1 Pond @ 1.36 Acres)											\$	
2S - Survey Total											\$	1,022.04
											\$	3,478.97
BASIC SERVICES - PHASE 2 ENGINEERING DESIGN PHASE											\$	187,840.57
OPTIONAL / ADDITIONAL SERVICES - PHASE 2 DESIGN PHASE												
OPTIONAL / ADDITIONAL SERVICES - PHASE 2 DESIGN PHASE											\$	-
TOTAL - PHASE 2 DESIGN PHASE											\$	187,840.57

July 7, 2021



Gradient Group
2500 Citywest Boulevard
Houston, Texas 77042

Attn: Ms. Stephanie Anderson, P.E., ENV SP

Re: Cost Estimate for Geotechnical Engineering Services
Evergreen Street Reconstruction Segment 1
Fort Bend County, Texas
Terracon Document No. P92215323

Dear Ms. Anderson:


Terracon Consultants, Inc. (Terracon) understands that we have been selected based on qualifications to provide geotechnical services for the above referenced project. This document outlines our understanding of the scope of services to be performed by Terracon for this project and provides an estimate of the cost of our services. The following are exhibits to the attached Agreement for Services.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule
Exhibit D	Site Location
Exhibit E	Anticipated Exploration Plan

Our base fee to perform the Scope of Services described in this cost estimate is **\$14,300** for Option 1 and **\$15,700** for Option 2. See **Exhibit C** for more details of our fees and consideration of additional services.

Your authorization for Terracon to proceed in accordance with this cost estimate can be issued by signing and returning a copy of the attached Agreement for Services to our office. If you have any questions, please do not hesitate to contact us.

Sincerely,
Terracon Consultants, Inc.
(Texas Firm Registration No.: F-3272)


Rebecca L. Cummins, P.E.
Project Engineer


FOR: Patrick M. Beecher, P.E.
Geotechnical Services Manager

Terracon Consultants, Inc. 11555 Clay Road, Suite 100 Houston, Texas 77043
P (713) 690 8989 F (713) 690 8787 terracon.com

AGREEMENT FOR SERVICES

This AGREEMENT is between Gradient Group ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the Evergreen Street Reconstruction Segment 1 project ("Project"), as described in Consultant's Proposal dated 07/07/2021 ("Proposal"), including but not limited to the Project Information section, unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

1. **Scope of Services.** The scope of Consultant's services is described in the Proposal, including but not limited to the Scope of Services section ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. When Consultant subcontracts to other individuals or companies, then consultant will collect from Client on the Subcontractors' behalf. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
2. **Acceptance/ Termination.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party. Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the Project.
3. **Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
4. **Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Proposal, including but not limited to the Compensation section, unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Fee schedules are valid for the calendar year in which they are issued. Fees do not include sales tax. Client will pay applicable sales tax as required by law. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment. It is the responsibility of Client to determine whether federal, state, or local prevailing wage requirements apply and to notify Consultant if prevailing wages apply. If it is later determined that prevailing wages apply, and Consultant was not previously notified by Client, Client agrees to pay the prevailing wage from that point forward, as well as a retroactive payment adjustment to bring previously paid amounts in line with prevailing wages. Client also agrees to defend, indemnify, and hold harmless Consultant from any alleged violations made by any governmental agency regulating prevailing wage activity for failing to pay prevailing wages, including the payment of any fines or penalties.
5. **Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties other than those who have executed Consultant's reliance agreement, subject to the prior approval of Consultant and Client.
6. **LIMITATION OF LIABILITY. CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE ASSOCIATED RISKS. TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF \$50,000 OR CONSULTANT'S FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT. PRIOR TO ACCEPTANCE OF THIS AGREEMENT AND UPON WRITTEN REQUEST FROM CLIENT, CONSULTANT MAY NEGOTIATE A HIGHER LIMITATION FOR ADDITIONAL CONSIDERATION IN THE FORM OF A SURCHARGE TO BE ADDED TO THE AMOUNT STATED IN THE COMPENSATION SECTION OF THE PROPOSAL. THIS LIMITATION SHALL APPLY REGARDLESS OF AVAILABLE PROFESSIONAL LIABILITY INSURANCE COVERAGE, CAUSE(S), OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.**
7. **Indemnity/Statute of Limitations.** Consultant and Client shall indemnify and hold harmless the other and their respective employees from and against legal liability for claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are legally determined to be caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are legally determined to be caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles. Neither party shall have a duty to defend the other party, and no duty to defend is hereby created by this indemnity provision and such duty is explicitly waived under this Agreement. Causes of action arising out of Consultant's Services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of Services on the project.
8. **Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. **EXCEPT FOR THE STANDARD OF CARE PREVIOUSLY STATED, CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
9. **Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance (\$1,000,000); (ii) commercial general liability insurance (\$2,000,000 occ / \$4,000,000 agg); (iii) automobile liability insurance (\$2,000,000 B.I. and P.D. combined single

limit); and (iv) professional liability insurance (\$1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

- 10. CONSEQUENTIAL DAMAGES. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE; LOSS OF USE OR OPPORTUNITY; LOSS OF GOOD WILL; COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES; COST OF CAPITAL; OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.**
- 11. Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies at law. This Agreement shall be governed by and construed according to Kansas law.
- 12. Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
- 13. Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client shall cause all tests and inspections of the site, materials, and Services performed by Consultant to be timely and properly scheduled in order for the Services to be performed in accordance with the plans, specifications, contract documents, and Consultant's recommendations. No claims for loss or damage or injury shall be brought against Consultant by Client or any third party unless all tests and inspections have been so performed and Consultant's recommendations have been followed. Unless otherwise stated in the Proposal, Client assumes sole responsibility for determining whether the quantity and the nature of Services ordered by Client is adequate and sufficient for Client's intended purpose. Client is responsible (even if delegated to contractor) for requesting services, and notifying and scheduling Consultant so Consultant can perform these Services. Consultant is not responsible for damages caused by Services not performed due to a failure to request or schedule Consultant's Services. Consultant shall not be responsible for the quality and completeness of Client's contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve Client's contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by Client's contractor or its subcontractors and is not responsible for their means and methods. The extension of unit prices with quantities to establish a total estimated cost does not guarantee a maximum cost to complete the Services. The quantities, when given, are estimates based on contract documents and schedules made available at the time of the Proposal. Since schedule, performance, production, and charges are directed and/or controlled by others, any quantity extensions must be considered as estimated and not a guarantee of maximum cost.
- 14. Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of the testing procedures (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Materials unless specifically provided in the Services, and that Client is responsible for directing such disposition. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site and Consultant shall not be responsible for any claims, losses, or damages allegedly arising out of Consultant's performance of Services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
- 15. Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
- 16. Utilities.** Unless otherwise stated in the Proposal, Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
- 17. Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client, Client's contractors, subcontractors, or other parties present at the site. In addition, Consultant retains the right to stop work without penalty at any time Consultant believes it is in the best interests of Consultant's employees or subcontractors to do so in order to reduce the risk of exposure to the coronavirus. Client agrees it will respond quickly to all requests for information made by Consultant related to Consultant's pre-task planning and risk assessment processes. Client acknowledges its responsibility for notifying Consultant of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with the coronavirus.

Consultant:	<u>Terracon Consultants, Inc.</u>	Client:	<u>Gradient Group</u>
By:	 Date: <u>7/7/2021</u>	By:	_____ Date: _____
Name/Title:	<u>Rebecca L. Cummins, P.E. / Project Engineer</u>	Name/Title:	_____
Address:	<u>11555 Clay Rd, Ste 100 Houston, TX 77043-1239</u>	Address:	_____
Phone:	<u>(713) 690-8989</u> Fax: <u>(713) 690-8787</u>	Phone:	_____ Fax: _____
Email:	<u>rcummins@terracon.com</u>	Email:	_____

EXHIBIT A - PROJECT UNDERSTANDING

Our Scope of Services is based on our understanding of the project as described by Gradient Group. We have not visited the project site to confirm the information provided. Aspects of the project, undefined or assumed, are highlighted as shown below. We request the design team verify all information prior to our initiation of field exploration activities.

Site Location

Item	Description
Project location	The project site is located along Evergreen Street that extends approximately 4,900 feet from California Street to about 100 feet west of Mustang Bayou in Fort Bend County, Texas.
Existing improvements	Based on available aerial photographs, we understand that Evergreen Street is a two-lane asphaltic concrete roadway with shallow bar ditches on either side. Various overhead power lines are located adjacent to the roadway.
Existing topography	Relatively level.
Site access	We expect the site and exploration locations are accessible with our truck-mounted drilling equipment during the hours of 9 am and 3 pm utilizing traffic control services.

Planned Construction

Item	Description
Project description	<p>We understand the segment of Evergreen Street between California Street and Mustang Bayou is planned to be widened to a three-lane road to create two 12-foot lanes and two 6-foot shoulders with bar ditches on either side of the roadway. We understand that utilities along the roadway may be relocated as part of the road reconstruction and is included in our scope as an alternative option (Option 2.)</p> <p>In addition, we understand a detention pond is planned near the roadway alignment. The location of the pond is unknown at the time of this cost estimate and will be determined by the County. We request the location be provided to us prior to the start of our field program. The detention pond is included in our scope as an additional item.</p>

Cost Estimate for Geotechnical Engineering Services

Evergreen Street Reconstruction Segment 1 ■ Fort Bend County, Texas

July 7, 2021 ■ Terracon Document No. P92215323



Item	Description
Proposed improvements	<p>We understand the following improvements are planned to be designed and constructed in accordance with Fort Bend County standards:</p> <ul style="list-style-type: none">■ Asphaltic concrete pavements are planned along Evergreen Street. We request the proposed pavement section be provided to us.■ We assume the proposed utilities that may be relocated as part of this project are planned to have maximum embedment depths of 10 feet and are to be constructed using open-cut construction methods.■ We assume the detention pond footprint will be a maximum of 5 acres in size and that the depth will be no greater than 10 feet. Once the location of the pond is determined by the County, we request the location be provided to us. We request the opportunity to review and revise the number and depth of the borings based on the actual size of the detention pond, once available.
Anticipated traffic loads (assumed)	Local roadways with residential traffic consisting of passenger vehicles, delivery and garbage trucks, and school buses.

EXHIBIT B - SCOPE OF SERVICES

Our proposed Scope of Services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

Based on information provided by Gradient Group, we understand two options are being considered:

- Option 1 – pavements along Evergreen Street
- Option 2 – pavements and utilities along Evergreen Street

The field exploration program for both options is planned to consist of the following:

Planned Location	Number of Borings	Planned Boring Depth ¹ (feet)
Evergreen Street alignment (Option 1)	11	10
Evergreen Street alignment (Option 2)	11	15

1. Below grade at the time of our field program.

In addition, we understand the detention pond has been requested to be included as an additional item. The field exploration for the detention pond is planned to consist of the following:

Planned Location	Number of Borings	Planned Boring Depth ¹ (feet)
Detention pond ²	5	15

1. Below grade at the time of our field program.

2. Location to be determined by the County prior to our field exploration. We request the opportunity to review and revise the number and depth of the borings based on the actual size of the detention pond, once available.

Boring Layout and Elevations: We will use handheld GPS equipment to locate borings with an estimated horizontal accuracy of +/-25 feet. Field measurements from existing site features may be utilized. If available, approximate elevations will be obtained by interpolation from a site specific, surveyed topographic map.

Subsurface Exploration Procedures: We will advance the soil borings along Evergreen Street with a truck-mounted drill rig and the detention pond borings with an ATV mounted drill rig using solid stem continuous flight augers. Samples will be obtained continuously in the upper 12 feet of each boring and at intervals of 5 feet thereafter. Soil sampling is performed using open-tube

Cost Estimate for Geotechnical Engineering Services

Evergreen Street Reconstruction Segment 1 ■ Fort Bend County, Texas

July 7, 2021 ■ Terracon Document No. P92215323



and/or split-barrel sampling procedures. The split-barrel samplers are driven in accordance with the standard penetration test (SPT). The samples will be placed in appropriate containers, taken to our soil laboratory for testing, and classified by a Geotechnical Engineer. In addition, we will observe and record groundwater levels during drilling and sampling.

Our exploration team will prepare field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials observed during drilling, and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the Geotechnical Engineer's interpretation, and include modifications based on observations and laboratory tests.

Property Disturbance: We will backfill borings with auger cuttings upon completion and patch the pavements with an asphaltic concrete patch where applicable. Our services do not include repair of the site beyond backfilling our boreholes and cold patching existing pavements. Excess auger cuttings will be dispersed in the general vicinity of the borehole or in nearby grassy areas. Because backfill material often settles below the surface after a period, we recommend boreholes to be periodically checked and backfilled, if necessary. We can provide this service, or grout the boreholes for additional fees, at your request.

Site Access: Terracon must be granted access by Fort Bend County. By acceptance of this cost estimate, without information to the contrary, we consider this as authorization to access the area of the proposed road alignment for conducting field exploration in accordance with the Scope of Services.

Traffic Control: Based on our observations of the area of improvements, we anticipate that traffic control services will be required for our field program along the existing roadway. Traffic control is planned to consist of cones, signs, and a police officer for lane closures in accordance with the Texas Manual on Uniform Traffic Control Devices (Texas MUTCD). The cost associated with traffic control is included in our base fee.

Clearing of Pathways: We understand that the detention pond location is unknown at the time of this cost estimate, and that the site chosen by the County may not be accessible to our drilling equipment and that bulldozer clearing may be needed. The cost to provide this service is included as an additional item in our cost estimate. The tree/shrub debris would only be moved away from the cleared pathways but not moved from the site.

Safety

Terracon is not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our Scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. If additional safety requirements, training, etc. are required to access this site to perform our services, Terracon

Cost Estimate for Geotechnical Engineering Services

Evergreen Street Reconstruction Segment 1 ■ Fort Bend County, Texas

July 7, 2021 ■ Terracon Document No. P92215323



should be notified to so that we may adjust our Scope of Services and estimated fees, if necessary. Our Scope of Services does not include environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require borings (and possibly excavations) into the subsurface, therefore Terracon will comply with Texas 811, a free utility locating service, to help locate public utilities within dedicated public easements. We will consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we will consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any third parties, including Client's contractors, subcontractors, or other parties present at the site. In addition, Consultant retains the right to stop work without penalty at any time Consultant believes it is in the best interests of Consultant's employees or subcontractors to do so in order to reduce the risk of exposure to COVID-19. Client agrees it will respond quickly to all requests for information made by Consultant related to Consultant's pre-task planning and risk assessment processes. Client acknowledges its responsibility for notifying Consultant of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with COVID-19.

Laboratory Testing

The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil strata. The anticipated laboratory testing may include the following:

- Moisture content
- Dry unit weight
- Atterberg Limits
- Percent finer than No. 200 sieve
- Unconfined compressive strength

Our laboratory testing program includes examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Engineering and Project Delivery

Results of our field and laboratory programs will be evaluated by a professional engineer. The engineer will develop a geotechnical site characterization, perform the engineering calculations

Cost Estimate for Geotechnical Engineering Services

Evergreen Street Reconstruction Segment 1 ■ Fort Bend County, Texas

July 7, 2021 ■ Terracon Document No. P92215323



necessary to evaluate foundation alternatives, and develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our **GeoReport**[®] system. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration
- Geotechnical Engineering – Recommendations and geotechnical engineering report

When utilized, our collaboration portal documents communication, eliminating the need for long email threads. This collaborative effort allows prompt evaluation and discussion of options related to the design and associated benefits and risks of each option. With the ability to inform all parties as the work progresses, decisions and consensus can be reached faster. In some cases, only minimal uploads and collaboration will be required, because options for design and construction are limited or unnecessary. This is typically the case for uncomplicated projects with no anomalies found at the site.

When services are complete, we upload a printable version of our completed geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil classification
- Groundwater levels observed during drilling and sampling
- Site and boring location plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Subgrade preparation/earthwork recommendations
- Recommendations for excavations and temporary groundwater control
- Detention pond construction considerations
- Slope protection and erosion control
- Pavement design guidelines

Cost Estimate for Geotechnical Engineering Services

Evergreen Street Reconstruction Segment 1 ■ Fort Bend County, Texas

July 7, 2021 ■ Terracon Document No. P92215323



If utilities are planned to be relocated as part of the proposed improvements (Option 2), we will also provide utility construction considerations and recommendations for bedding and backfill in accordance with Fort Bend County standards.

EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE

Compensation

Based upon our understanding of the site, the project as summarized in **Exhibit A**, and our planned Scope of Services outlined in **Exhibit B**, our base fee for both Option 1 and Option 2 are shown in the following table:

Task	Lump Sum Fee
Option 1: Subsurface Exploration, Traffic Control (2 days), Laboratory Testing, Geotechnical Consulting and Reporting	\$14,300
Option 2: Subsurface Exploration, Traffic Control (2 days), Laboratory Testing, Geotechnical Consulting and Reporting	\$15,700

Additional services that are not included in the base fee are provided below:

Task	Lump Sum Fee
Subsurface Exploration, Laboratory Testing, Geotechnical Consulting and Reporting for the Detention Pond ¹	\$5,200
Clearing of Pathways (1 day) ²	\$3,300

1. This cost assumes that our scope associated with roadway and detention pond will be completed concurrently, and that one geotechnical engineering report will be submitted. As stated previously, we request the opportunity to review and revise our scope based on the actual size and depth of the detention pond, if needed.
2. If the detention pond site is heavily wooded at the time of our field program.

Our Scope of Services does not include services associated with survey of boring locations, special equipment for wet/soft ground conditions, or repair of/damage to the existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our Scope of Services.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this cost estimate. If conditions are encountered that require Scope of Services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental proposal stating the modified Scope of Services as well as its effect on our fee will be prepared. We will not proceed without your authorization.

Cost Estimate for Geotechnical Engineering Services

Evergreen Street Reconstruction Segment 1 ■ Fort Bend County, Texas

July 7, 2021 ■ Terracon Document No. P92215323



Project Schedule

We developed a schedule to complete the Scope of Services based upon our existing availability and understanding of your project schedule. However, this does not account for delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

GeoReport® Delivery	Posting Schedule ^{1, 2}
Project Planning	5 working days from notice to proceed
Field Work Mobilization	10 working days from notice to proceed
Site Characterization	15 working days from completion of field program
Geotechnical Engineering Report	25 working days from completion of field program

1. Upon receipt of your notice to proceed we will activate the schedule component of our **GeoReport®** website with specific, anticipated calendar days for the three delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.
2. We will maintain a current calendar of activities within our **GeoReport®** website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.

EXHIBIT D – SITE LOCATION

Evergreen Street Reconstruction Segment 1 ■ Fort Bend County, Texas
July 7, 2021 ■ Terracon Document No. P92215323

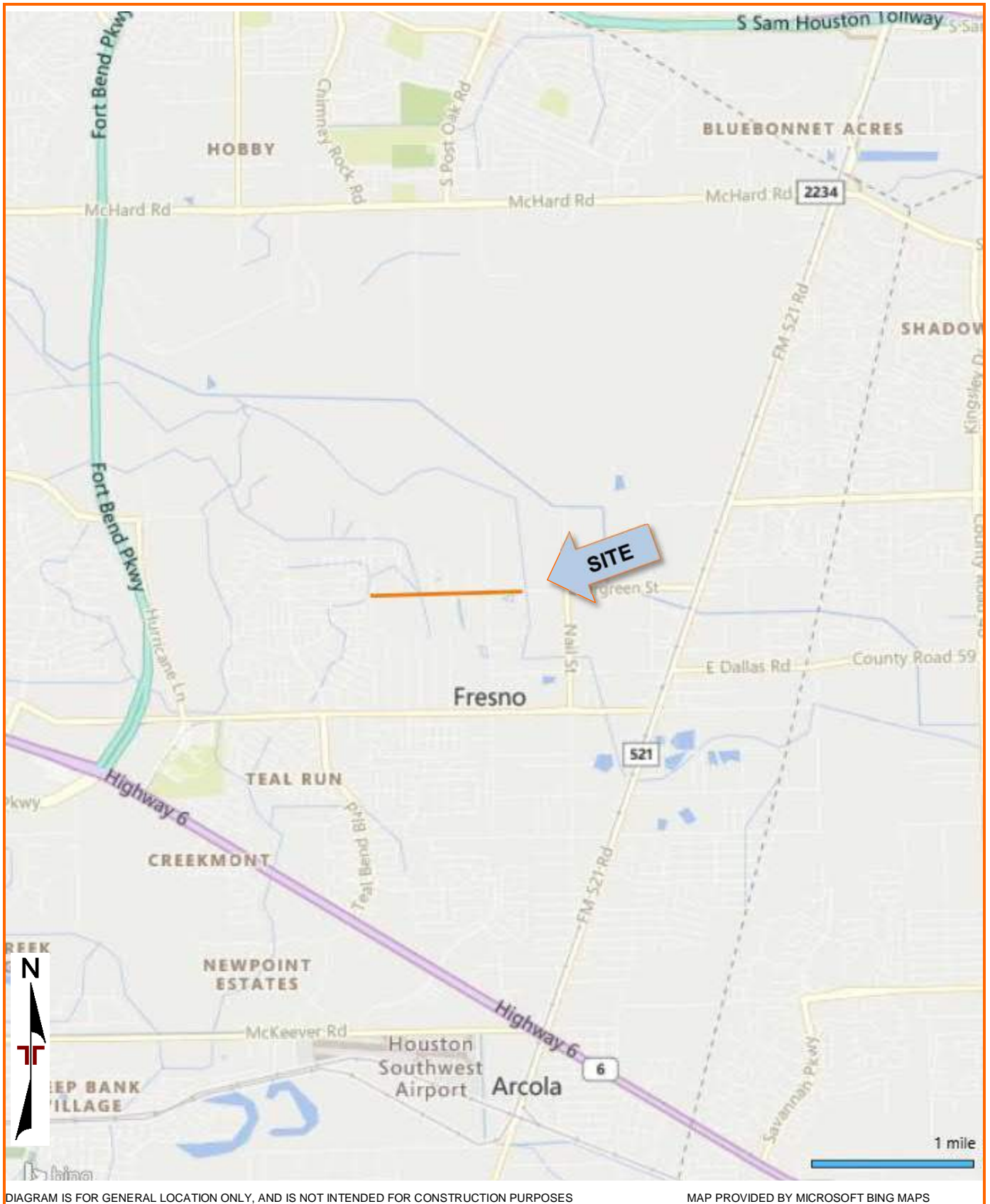


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

EXHIBIT E – ANTICIPATED EXPLORATION PLAN

Evergreen Street Reconstruction Segment 1 ■ Fort Bend County, Texas
July 7, 2021 ■ Terracon Document No. P92215323

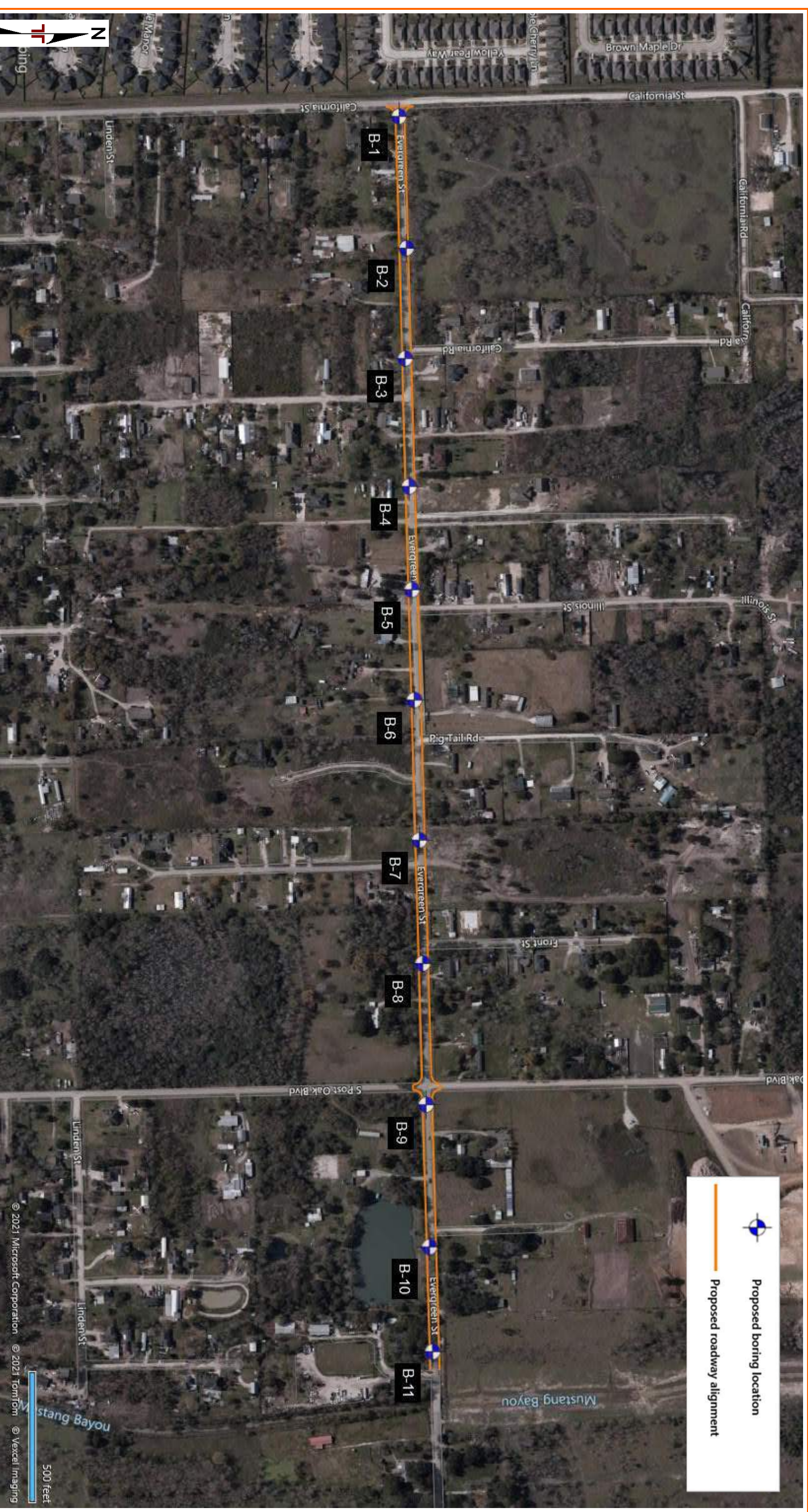


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

© 2021 Microsoft Corporation © 2021 TomTom © Vexcel Imaging

500 Feet

September 9, 2021

Ms. Stephanie Anderson, PE, ENV SP
GRADIENT
2500 City West Boulevard, Suite 300
Houston, Texas 77042

RE: Proposal to Provide Professional Surveying Services – Fort Bend County Pct. 1
201XX - Evergreen Segment 1 (West) from California Street to 100 Feet West of Mustang Bayou
Topographic and Right-of-Way Surveying

Dear Ms. Anderson:

It is my pleasure to submit the following proposal to provide professional surveying services for the above referenced project. The route is along Evergreen Street from California Street to 100 feet west of Mustang Bayou (4,836 linear feet). Intersecting roads will also be surveyed in both directions as follows:

California Street	100' N & S of Proposed Pavement	200	I.f.
Illinois Street	100' N of Proposed Pavement	100	I.f.
Front Street	100' N of Proposed Pavement	100	I.f.
S Post Oak Blvd.	100' N & S of Proposed Pavement	200	I.f.
Total		600	I.f.

The Surveying Services will be performed in accordance with Chapters 6 and 7 of the August 2020 Draft version of the Fort Bend County Engineering Department Engineering Design Manual (Design Manual):

1. Perform Control Surveys and Prepare Signed and Sealed Survey Control Maps:
 - 1.1. Project Control will be established in compliance with the Design Manual. Prior to use, the project horizontal and vertical datum will be approved by the Project Design Consultant. Control points will be spaced at a maximum of 1,000 feet through the project limits.
 - 1.2. Stake the project baseline alignment in field at all PCs, PTs, PIs, and 1,000-foot stations. The baseline alignment will be provided to Landtech by GRADIENT.
 - 1.3. Prepare a signed and sealed survey control map consisting of:
 - 1.3.1. Cover/index sheet showing the project datum statement, approximate existing right of way (ROW) lines, the baseline alignment including monumentation, alignment bearings and distances and curve data, side street construction centerlines, project control point locations, and coordinate tables for alignment monumentation and control points.
 - 1.3.2. Control monument detail sheet showing ties to planimetric features and monument details.

2. Perform Topographic Surveys and prepare CAD file deliverables:
 - 2.1. Prepare Right of Entry (ROE) letters and mail to landowners along route to request permission to enter private properties for surveying purposes. Track responses to coordinate field survey efforts on private properties. Properties without ROE will not be surveyed. Approximately 44 properties adjoin the project route within the survey limits, including the detention pond.
 - 2.2. Collect Topographic Survey data within the project limits along Evergreen Street and along intersecting roadways. Cross sections will be collected along the route every 100 feet and will extend 20 feet beyond existing and proposed ROW. Survey visible surface features. Surveys within intersecting roadways will be confined to public right of way. In wooded areas we will survey the tree line; individual trees will not be picked up. Deliverables will consist of plan view CAD file in AutoCAD DWG or Microstation DGN format and Digital Terrain Model with 1-ft contours.
 - 2.3. Survey visible surface utilities. Texas811 (One Call) will be contacted to request marking of underground utilities, and survey said markings. Identify all visible underground structures, such as inlets, manholes, and junction boxes, with size, depth, and type. Mapping of underground utilities between visible underground structures is not included. However, underground utility locations marked in the field by Texas811 will be shown according to said markings without any other field verification. Perform initial utility research of public and privately owned utilities in order to obtain copies of record drawings.
 - 2.4. Determine ownership of properties along the roadway within the project limits including proposed detention. Survey front property corners for right of way (ROW) location. Adjoining property ownership information and existing ROW lines will be shown in the CAD file deliverable.
 - 2.5. Survey approximately 15 Geotechnical Borings after they are drilled.
 - 2.6. Perform Detention Pond Surveys. Collect Topographic Survey data in a 300' x 280' site comprising FBC Appraisal District account numbers R78003, R128071, R78002, and R78001. Collect data on a 50-foot grid and at all breaklines. Survey visible surface features and utilities. In wooded areas we will survey the tree line; individual trees will not be surveyed. Deliverables will consist of plan view CAD file in AutoCAD DWG or Microstation DGN format and Digital Terrain Model with 1-ft contours.
3. Perform proposed ROW surveys and prepare Proposed ROW Map and parcel document deliverables. Deliverables will conform to Texas Society of Professional Surveyors Category 1B, Condition II standards and will be signed and sealed by a Texas Registered Professional Land Surveyor.
 - 3.1. Prepare Proposed ROW Map showing existing and proposed ROW and proposed acquisition parcels. Assume 44 parcels, including FBC Appraisal District tracts R78003 and R128071 for detention and R78003 for road right-of-way and detention.
 - 3.2. Prepare KMZ file showing existing ROW with ownership information, proposed takings with parcel numbers, and a preliminary roadway layout. The preliminary roadway layout will be provided to Landtech by GRADIENT.
 - 3.3. Prepare parcel map and metes and bounds description for each proposed ROW and detention parcel to be acquired for the project. Includes field survey of back corners of parent tracts of proposed acquisition parcels, and field staking of acquisition parcel corners along the proposed ROW at angle points, PCs, PTs, and intersecting property lines.

4. Optional Additional Services - Stake ROW lines every 100 feet, at angle points, and at the beginning and end of curves.

Fees for the services described above are as follows (see attached spreadsheet 'EvergreenSeg1_2021-07-30.pdf' for breakdown of tasks, hours, and rates):

1. Control Surveying (Lump Sum)	=	\$ 11,921.25
2. Topographic Surveying and Mapping (Lump Sum)	=	\$ 46,069.13
3.1./3.2. Proposed ROW Surveying & Mapping (Lump Sum)	=	\$ 26,448.68
3.3. Proposed Acquisition Parcels (Lump Sum Per Parcel)		
44 Parcels x \$3,341.35	=	\$147,019.40
4. Optional Additional Services – ROW Staking	=	<u>\$ 9,770.80</u>
Total Estimated Fee Tasks 1-4 based on estimated 44 Parcels	=	\$241,229.26

The anticipated schedule to complete this work will be as follows:

- Tasks 1 and 2 will be submitted 11-12 weeks after written receipt of Notice to Proceed.
- Task 3 preliminary deliverable will be submitted 4-5 weeks after authorization and receipt of final Proposed Right of Way file and alignment from Gradient.
- Task 4 will be performed once during the design phase of the project. We will require minimum advance notification 1 week prior to start of each mobilization for this task.

Thank you for the opportunity to submit this proposal. We look forward to working with you.

Sincerely,

Landtech, Inc.



Dennis Chalaire, R.P.L.S.
Vice President

EvergreenSeg1_2021-09-09.docx

Attachments: Spreadsheet 'EvergreenSeg1_2021-09-09.pdf'
Survey Limits.pdf
Evergreen Prelim Detention Layout.pdf

LANDTECH, INC.
 PROPOSAL FOR TOPOGRAPHIC, RIGHT-OF-WAY, AND CONSTRUCTION SURVEYING SERVICES
 CLIENT: GRADIENT
 PROJECT: Evergreen Street from California Street to 100 Feet West of Mustang Bayou - Fort Bend County
 DATE: 9/9/2021

LENGTH (ft):	Evergreen Street	4,850
	California Street	200
	Illinois Street	100
	Front Street	100
	S Post Oak Boulevard	200
	Total =	5,450 ft

Notes:
 1. Surveys will be performed per Chapters 6 and 7 of the Fort Bend County Mobility Bond Design Manual
 2. Please refer to Letter of Proposal of same date for detailed scope of work.

DIRECT EXPENSES		Project Manager	Project Surveyor	Survey Tech	CADD Tech	Abstractor	Admin/ Clerical	2-Person Crew	3-Person Crew	TOTAL HR PER TASK	TOTAL FEE PER TASK
TASKS	DESCRIPTION	\$204.00	\$148.11	\$105.41	\$103.00	\$75.93	\$68.23	\$150.00	\$180.00		
1. CONTROL SURVEYS											
1.1.	Project Control will be established in compliance with Design Manual and tied in to existing control in the vicinity of the project if available. If existing control is not available, the project will be tied to an NGS monument. Use of existing control and project horizontal and vertical datum is subject to approval by the Project Design Consultant. Control points will be spaced at a maximum of 1,000 feet through the project limits.	2	4	9				24		39	\$5,549.13
1.2.	Stake the project baseline alignment in field at all PCs, PTs, Pls, and 1,000-foot stations. The baseline alignment will be provided to Landtech by Gradient.		2	4				12		18	\$2,517.86
1.3.	Prepare a signed and sealed survey control map		2	4	20					26	\$2,777.86
SUBTOTAL HOURS		2	8	17	20	0	0	36	0	83	
REIMBURSABLE EXPENSES											
	GPS Receiver	4	days	x	\$225.00	=		\$900.00			
	Mileage	315	miles	x	\$0.560	=		\$176.40			
										SubTotal Reimbursable Expenses	\$1,076.40
										SUBTOTAL LUMP SUM FEE TASK 1	\$11,921.25
2. TOPOGRAPHIC SURVEYING AND MAPPING											
2.1.	Prepare Right of Entry Letters and mail them to affected property owners (est. 44 including detention). Track responses.		2	6		16	4			28	\$2,416.48
2.2.	Collect Topographic Survey data within the project limits along Evergreen and along intersecting roadways 100 feet beyond proposed improvements. Cross sections will be collected along the route every 100 feet and will extend 20 feet beyond existing and proposed ROW. Survey visible surface features. Surveys within intersecting roadways will be confined to public right of way. In wooded areas we will survey the tree line; individual trees will not be picked up. Deliverables will consist of plan view CAD file in DWG or DGN format and Digital Terrain Model with 1-ft contours.	3	4	16	56			56		135	\$17,059.00
2.3.	Survey visible surface utilities. Texas811 (One Call) will be contacted to request marking of underground utilities, and survey said markings. Identify all visible underground structures, such as inlets, manholes, and junction boxes, with size, depth, and type. Mapping of underground utilities between visible underground structures is not included. However, underground utility locations marked in the field by Texas811 will be shown according to said markings without any other field verification. Perform initial utility research of public and privately owned utilities in order to obtain copies of record drawings.		1	8	12			16		37	\$4,627.39
2.4.	Perform Property Title Abstracting for preliminary ownership determination. Survey front property corners for right of way (ROW) location. Adjoining property ownership information and existing ROW lines will be shown in the CAD file deliverable.	2	16	28	30	32		24		132	\$14,849.00
2.5.	Survey 15 Geotechnical Borings after drilling.		1	2	2			8		13	\$1,764.93
2.6.	Perform Detention Pond Surveys. Collect Topographic Survey data in a 300' x 280' site comprising FBC Appraisal District account numbers R78003, R128071, R78002, and R78001. Collect data on a 50-foot grid and at all breaklines. Survey visible surface features and utilities. In wooded areas we will survey the tree line; individual trees will not be surveyed.		1	2	8			8		19	\$2,382.93
SUBTOTAL HOURS		5	25	62	108	48	4	112		364	
REIMBURSABLE EXPENSES											
	GPS Receiver	7	days	x	\$225.00	=		\$1,575.00			
	Mileage	980	miles	x	\$0.560	=		\$548.80			
	Certified Letter Return Receipt	44	letters	x	\$7.40	=		\$325.60			
	Deed Copies	210	pages	x	\$2.00	=		\$420.00			
	Plat Copies	20	sheets	x	\$5.00	=		\$100.00			
										SubTotal Reimbursable Expenses	\$2,969.40
										SUBTOTAL LUMP SUM FEE TASK 2	\$46,069.13
3. PROPOSED RIGHT-OF-WAY SURVEYS											
3.1.	Prepare Proposed ROW Map showing existing and proposed ROW and proposed acquisition parcels. Assume 44 parcels, including FBC Appraisal District tracts R78003 and R128071 for detention and R78003 for road right-of-way and detention.	8	38	50	104					200	\$23,242.68
3.2.	Prepare KMZ file showing existing ROW with ownership information, proposed takings with parcel numbers, and a preliminary roadway layout. The preliminary roadway layout will be provided to Landtech by Gradient.		4	16	9					29	\$3,206.00
										SUBTOTAL LUMP SUM FEE TASKS 3.1. & 3.2.	\$26,448.68

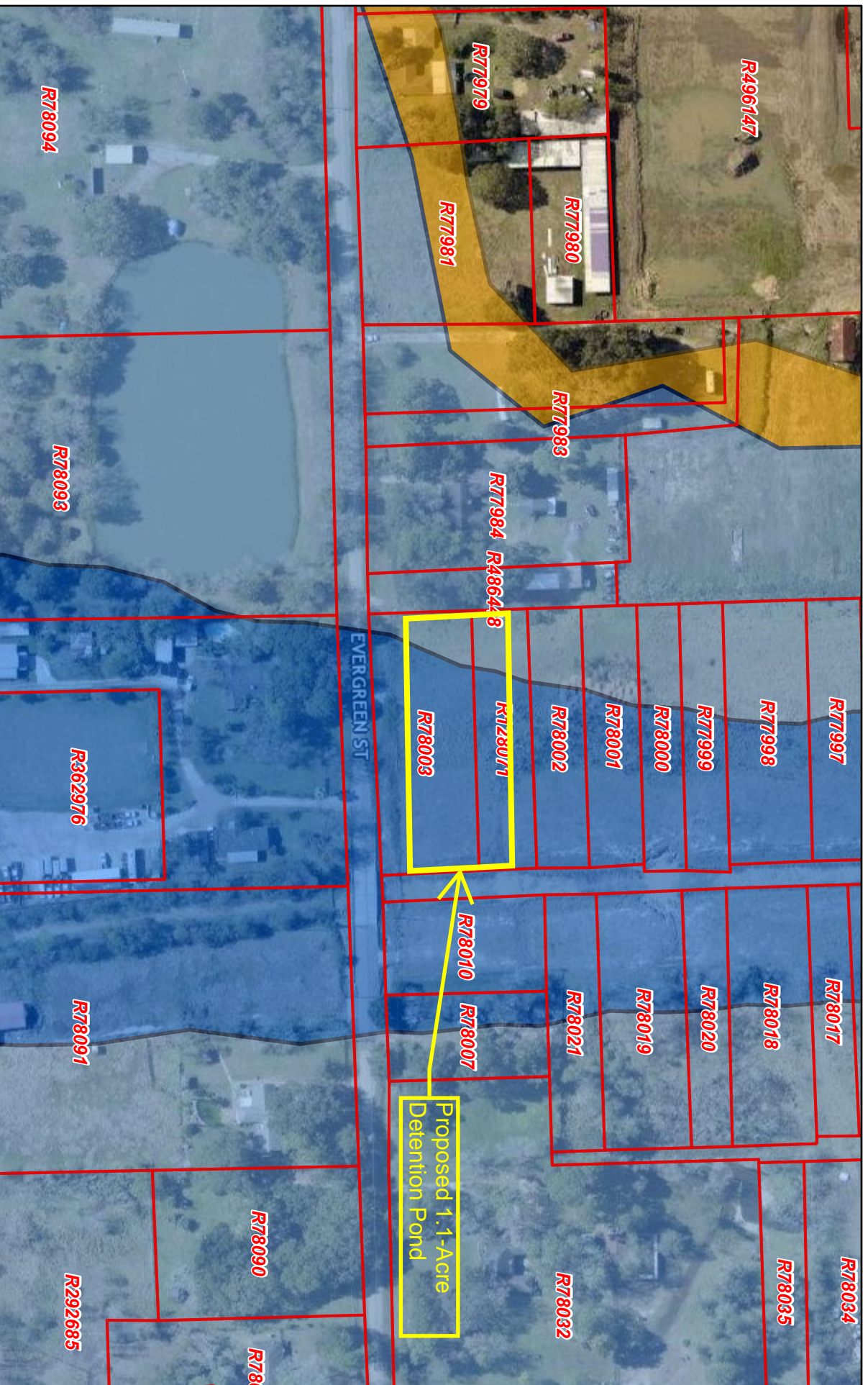
EVERGREEN ST.
FROM CALIFORNIA ST. TO 100 FEET W OF MUSTANG BAYOU
SURVEY LIMITS



Mustang Bayou



Fort Bend CAD Web Map

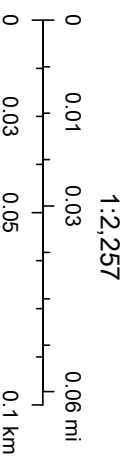


7/28/2021, 10:02:06 AM

- Parcels
- Abstracts
- Subdivisions
- Flood Hazard Area
- AE - The base floodplain where base flood elevations are provided.
- AE Floodway - Regulatory Floodway

X - 0.2% Annual Chance Flood Hazard.

X - Area of Minimal Flood Hazard



© OpenStreetMap (and) contributors, CC-BY-SA, FBC GIS

Fort Bend County Appraisal District, BIS Consulting - www.bisconsulting.com
 Disclaimer: This product is for informational purposes only and has not been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of boundaries.