

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 “Contractor”), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, County desires that Contractor provide professional engineering services for improvements to Reading Road Intersections under 2020 Mobility Bond Project No. 20109 (hereinafter “Services”) pursuant to SOQ 14-025; and

WHEREAS, County has determined Contractor is the most highly qualified provider of the desired Services on the basis of demonstrated competence and qualifications, and County and Contractor 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, Contractor 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

Contractor shall render the professional engineering services as described in Contractor’s proposal dated July 14, 2021, attached hereto as Exhibit A, and incorporated herein for all purposes.

Section 2. Personnel

2.1 Contractor 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 Contractor 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 Contractor shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Contractor 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 Contractor's fees shall be calculated at the rates set forth in the attached Exhibit A. The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is two hundred seventy-nine thousand seven hundred ninety-one dollars and 60/100 (\$279,791.60) 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 Contractor 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 Contractor based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Contractor 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 Contractor 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 two hundred seventy-nine thousand seven hundred ninety-one dollars and 60/100 (\$279,791.60) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor shall not under any conditions, circumstances, or interpretations thereof exceed two hundred seventy-nine thousand seven hundred ninety-one dollars and 60/100 (\$279,791.60).

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. Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor 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. Contractor'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 Contractor.

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Contractor 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. Contractor shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

Contractor will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Contractor 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, Contractor 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. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor 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. Contractor 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 Contractor 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, Contractor 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 Contractor 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 Contractor 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 Contractor 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 Contractor) publicly known or is contained in a publicly available document; (b) is rightfully in Contractor'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 Contractor who can be shown to have had no access to the Confidential Information.

12.2 Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor 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. Contractor 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, Contractor shall advise County

immediately in the event Contractor 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 Contractor will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Contractor against any such person. Contractor agrees that, except as directed by County, Contractor 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, Contractor will promptly turn over to County all documents, papers, and other matter in Contractor's possession which embody Confidential Information.

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

12.5 Contractor 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 Contractor

13.1 In the performance of work or services hereunder, Contractor 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 Contractor 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

Contractor: 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

Contractor 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, Contractor shall furnish County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

Section 16. Standard of Care

Contractor 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, Contractor 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 Contractor 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 Contractor 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, Contractor verifies that if Contractor employs ten (10) or more full-time employees and this Agreement has a value of \$100,000 or more, Contractor 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, Contractor represents pursuant to Section 2252.152 of the Texas Government Code, that Contractor 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, CONTRACTOR 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
Authorized Agent – Printed Name

ATTEST:

President
Title

Laura Richard, County Clerk

06 August 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

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EXHIBIT A



July 14, 2021

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

RE: Reading Road 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

Reading Road

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 construction of three roundabouts with associated roadway transition from a boulevard to 2 lane road on the West side of the project. Reading Road is an existing 28-foot width asphalt roadway with roadside ditches and a 70-foot ROW. The project is located within City of Rosenberg ETJ but will be designed to the Fort Bend County design criteria.

Limits

The Reading Road project will consist of adding roundabouts at Reading & Misty Meadows, Reading & Rustling Oaks Drive, Bridlewood Road & Rustling Oaks Drive with an associated transition west of Bridlewood Drive. The project may require additional ROW for the proposed improvements. The proposed roundabouts will accommodate the storm sewer drainage within the existing roadside ditches in a storm sewer system.

Alignment

The Engineer is to consider a 65-foot and 100-foot roundabout geometric design. The final roundabout 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 roadway and drainage improvements for and related to the addition of three roundabouts as described above. Any additional items will be included under option/additional as listed below. The existing right-of-way (ROW) varies around 70-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 three roundabouts and associated roadway transition. 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, roundabout capacity analysis at the 3 intersections, 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 trunk storm sewer and detention facilities. The schematic layout 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 schematic should include the pavement marking concept 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 Reading & Misty Meadows north, east, west, south approach to roundabout (four UVEs).
- b. Proposed Reading & Rustling Oaks Drive north, east, west, south approach to roundabout (four UVEs).
- c. Proposed Bridlewood Road & Rustling Oaks Drive north, east, west, south approach to roundabout (four UVEs).

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 schematics 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.

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.S Surveying

Scope attached from Weisser Surveying

1.G Geotechnical Investigation

Scope attached from GET Geotech Engineering & Testing

1.D Drainage

The drainage effort for this project is based on the understanding of the proposed roundabout additions. Under existing conditions, the roadway storm sewer is conveyed in roadside ditches. Culverts will need to be constructed with the addition of the 3 roundabouts with a design to maintain the existing drainage flow. Based on the current effective Federal Emergency Management Agency Insurance Rate Map panel 48157C0265L, dated April 2, 2014, the project area is located in Unshaded Zone X flood hazard area.

- Identify drainage areas and calculate Rational method peak flows contributing to flows drained by the roadside ditch
- Prepare Small Watershed calculations to determine detention volume requirements
- Determine if any improvements to the roadside ditch are required to:
 - 1) Ensure no reduction to existing volume from the ditch being filled and
 - 2) Provide detention volume if required

Hydraulic modeling will not be prepared to determine pre and post project HGLs along the ditch. This scope does not include analysis of peak flow conditions downstream or at the ultimate outfall of the roadside ditch system

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 Reading Road.
- b. Prepare proposed typical sections of Reading & Misty Meadows, Reading & Rustling Oaks Drive, Bridlewood Road & Rustling Oaks Drive that show lane configuration and pavement structure. Typical sections should include sidewalks.
- c. Prepare project site map and horizontal alignment data sheets for Reading Road and intersecting streets, including benchmarks (1" = 100' printed half-size).
- d. Prepare intersection layout and grading sheets to include top of pavement elevations of the following intersecting streets (1" = 20' printed half-size):
 - Reading & Misty Meadows

- Reading & Rustling Oaks Drive
- Bridlewood Road & Rustling Oaks Drive
- e. Prepare a table showing the quantities, station, radii, width, and grade for driveway reconstruction. Identify locations and limits for temporary construction easements.
- f. Identify and modify as necessary standard roadway detail sheets for conformance with FBC Engineering Department standard details.
- g. 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 storm sewers, manholes, inlets, and existing utilities.
- g. Prepare outfall typical sections (1" = 20').
- h. Prepare outfall plan and profile sheet (1" = 40') 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. Design Phase Meetings

- a. Traffic Control Meeting.
- b. 1st Submittal Review.
- c. 2nd Submittal Review.

9. Deliverables (1st and final submittal)

- 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.

10. 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.

11. 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.

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.

Construction Phase Services

Gradient will attend the pre-construction meeting with FBC, FBC PM, Construction Manager and General Contractor. Gradient will review contractor submittals and will respond to Request for Information as needed during the construction process. Field visits and progress meetings are not included as part of this scope of services unless request by FBC and will be provided as an additional service. Upon construction completion Gradient will participate in the substantial completion walk through with FBC.

After project completion, Gradient will prepare close out documents to include record drawings based on contractor as-built markups. Gradient will provide the record drawings in accordance with FBC Engineering Design Manual.

Optional Additional Services

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

1. Surveying - Proposed ROW Maps
2. Surveying - SUE
3. Surveying -- ROW Staking
4. Surveying -- Pre Construction ROW Staking



Reading Road Roundabouts Design

Project Number 20109 (GG# P2021-032)

Project Manager: Stephanie Anderson, PE

7/15/2021

BASIC SERVICES		\$ 255,281.60
PHASE 1	Preliminary Engineering Report	\$ 100,046.60
	1P - Pre-Design Study	\$ 38,297.60
	1G - Geotechnical	\$ 24,104.00
	1S - Survey	\$ 37,645.00
Phase 2	Engineering Design Services	\$ 125,069.00
	2P - Design Plans	\$ 125,069.00
Phase 3	Bid & Construction Phase Services	\$ 30,166.00
	3P - Bid Services	\$ 10,166.00
	3P - Construction Services	\$ 20,000.00
OPTIONAL ADDITIONAL SERVICES		\$ 24,510.00
PHASE 1	Preliminary Engineering Report	\$ 13,750.00
	Parcel Surveys (Cat 1A, Cond. II)	\$ 10,000.00
	Subsurface Utility Engineering	\$ 3,750.00
Phase 3	Bid & Construction Phase Services	\$ 10,760.00
	Project Control for Construction	\$ 5,380.00
	Pre Construction ROW Staking	\$ 5,380.00
TOTAL PROJECT COST		\$ 279,791.60

PRODUCTION MANHOURLY LEVEL OF EFFORT - PHASE 1 PRELIMINARY ENGINEERING

Project: Reading Road Roundabouts Design
 Project #: Project Number 20109 (GG# P2021-032)
 Date: 7/9/2021
 Revised: 7/15/2021



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 / SHEET	COST	
BASIC SERVICES - PHASE 1 PRELIMINARY ENGINEERING REPORT														
IP - Pre-Design Study														
	Monthly Progress Meetings (3 Months)			2.0	2.0						4.0	\$ 396.67	\$ 1,190.00	
	Preliminary Conference & Coordination Meeting			4.0	2.0						6.0	\$ 1,836.00	\$ 1,836.00	
	Aerial Exhibit - Existing Conditions Summary			2.0	2.0	2.0	2.0	4.0	4.0	16.0	32.0	\$ 5,270.00	\$ 5,270.00	
	Schematic Layout of Roadway and Detention - Proposed Conditions Evaluation	1.0		2.0	2.0	2.0	2.0	4.0	4.0	16.0	33.0	\$ 5,644.00	\$ 5,644.00	
	Cost Estimate			2.0	2.0			4.0		16.0	24.0	\$ 3,542.80	\$ 3,542.80	
	Utility Conflict Table			2.0	2.0			4.0			8.0	\$ 1,802.00	\$ 1,802.00	
	Sight Triangle Evaluation (12 Approaches)			2.0	2.0			4.0			8.0	\$ 1,802.00	\$ 1,802.00	
	Draft PER Report (30% Design Plans)			4.0	2.0	2.0	2.0	4.0	4.0	24.0	16.0	58.0	\$ 8,418.40	\$ 8,418.40
	Final PER Report (30% Design Plans)	1.0		4.0	2.0	2.0	2.0	4.0	4.0	24.0	16.0	59.0	\$ 8,792.40	\$ 8,792.40
IP - Pre-Design Study Total												\$	38,297.60	
IG - Geotechnical														
	Geotechnical Roadway Report												\$ 24,104.00	
IG - Geotechnical Total												\$	24,104.00	
IS - Survey														
	Existing Right of Way Mapping (Cat. 1B; Cond. II)												\$ 17,695.00	
	Topographic Surveying for Reading Road, Bridlewood Drive and Rustling Oaks Drive (Cat 6; Con II)												\$ 19,950.00	
IS - Survey Total												\$	37,645.00	
BASIC SERVICES - PHASE 1 PRELIMINARY ENGINEERING REPORT COST												\$	100,046.60	
OPTIONAL / ADDITIONAL SERVICES - PHASE 1 PRELIMINARY ENGINEERING REPORT														
I.IS - Survey														
	Parcel Surveys (Cat 1A, Cond. II)		4	Parcels	\$ 2,500.00	per Parcel for a 65' Roundabout							\$ 10,000.00	
	Subsurface Utility Engineering												\$ 3,750.00	
I.IS - Survey Total												\$	13,750.00	
OPTIONAL / ADDITIONAL SERVICES - PHASE 1 PRELIMINARY ENGINEERING REPORT COST												\$	13,750.00	
TOTAL - PHASE 1 PRELIMINARY PRELIMINARY ENGINEERING REPORT COST												\$	113,796.60	

PRODUCTION MANHOOR LEVEL OF EFFORT - PHASE 2 ENGINEERING DESIGN

Project: Rea Reading Road Roundabouts Design
 Project #: Project Number 20109 (GG# P2021-032)
 Date: 7/9/2021
 Revised: 7/15/2021



Project Manager: Stephanie Anderson, PE

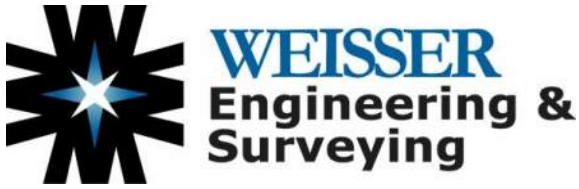
SHEET NO.	DESCRIPTION	Sr. Project Manager	Roadway Engineer	Drainage Engineer	Traffic Engineer	Engineer -In-Training	Senior CADD Designer	CADD Designer	Administrative	TOTAL HOURS	COST / SHEET	COST
		\$323.00	\$272.00	\$272.00	\$272.00	\$153.00	\$159.80	\$108.80	\$102.00			
BASIC SERVICES - PHASE 2 ENGINEERING DESIGN PHASE												
2P - Design Plans												
COVER SHEET												
Sheets - 1	Cover Sheet	1.0				2.0	1.0	2.0		6.0	\$ 1,006.40	\$ 1,006.40
Sheets - 1	Drawing Index Sheet	2.0				2.0	1.0	4.0		9.0	\$ 1,547.00	\$ 1,547.00
Sheets - 1	General Notes	1.0				2.0	1.0	2.0		6.0	\$ 1,006.40	\$ 1,006.40
EXISTING CONDITIONS & DEMOLITION PLAN												
Sheets - 5	Existing Condition And Demolition Plan	5.0	5.0	5.0		10.0	5.0	10.0		40.0	\$ 1,550.40	\$ 7,752.00
LAYOUT & STORM SEWER												
Sheets - 1	Project Layout	1.0	1.0	1.0		2.0	1.0	2.0		8.0	\$ 1,550.40	\$ 1,550.40
Sheets - 2	Drainage Area Map - Proposed	2.0	2.0	2.0		4.0	2.0	8.0		20.0	\$ 1,768.00	\$ 3,536.00
Sheets - 1	Drainage Calculations	1.0	1.0	1.0		2.0	1.0	4.0		10.0	\$ 1,768.00	\$ 1,768.00
Sheets - 1	Storm Sewer Overall	1.0	1.0	1.0		2.0	1.0	4.0		10.0	\$ 1,768.00	\$ 1,768.00
TYPICAL SECTIONS												
Sheets - 1	Typical Sections - Existing	1.0	1.0	1.0		2.0	1.0	2.0		8.0	\$ 1,550.40	\$ 1,550.40
Sheets - 1	Typical Section - Proposed	2.0	2.0	1.0		2.0	1.0	2.0		10.0	\$ 2,145.40	\$ 2,145.40
PLAN & PROFILE												
Sheets - 2	Taper Connection	2.0	2.0	2.0		4.0	4.0	4.0		18.0	\$ 1,710.20	\$ 3,420.40
Sheets - 3	Roundabout Design	15.0	15.0	15.0		15.0	15.0	36.0		111.0	\$ 7,204.60	\$ 21,613.80
Sheets - 4	Paving Details		4.0			8.0	8.0	8.0		28.0	\$ 1,115.20	\$ 4,460.80
Sheets - 2	Storm Details	2.0	2.0			4.0	4.0	8.0		20.0	\$ 1,655.80	\$ 3,311.60
TRAFFIC CONTROL												
Sheets - 3	Taper Connection - Traffic Control Plans	3.0	3.0		3.0	6.0		6.0		21.0	\$ 1,390.60	\$ 4,171.80
Sheets - 12	Roundabout - Traffic Control Plans	12.0	24.0		12.0	24.0		48.0		120.0	\$ 1,880.20	\$ 22,562.40
Sheets - 15	Traffic Control Plan Details	15.0	0.0		15.0	0.0		30.0		60.0	\$ 812.60	\$ 12,189.00
SIGNING & PAVEMENT MARKING												
Sheets - 5	Signing & Pavement Marking Plan	5.0	5.0		5.0	10.0	5.0	10.0		40.0	\$ 1,550.40	\$ 7,752.00
Sheets - 3	Signing & Pavement Marking Details	3.0	3.0		3.0	6.0	3.0	6.0		24.0	\$ 1,550.40	\$ 4,651.20
STORM WATER POLLUTION PREVENTION												
Sheets - 1	Storm Water Pollution Prevention Plans	1.0	1.0	1.0		2.0	1.0	4.0		10.0	\$ 1,768.00	\$ 1,768.00
CROSS SECTIONS												
Sheets - 1	Cross Sections	1.0	2.0	1.0		2.0	1.0	2.0		9.0	\$ 1,822.40	\$ 1,822.40
DETAILS												
Sheets - 1	Barricade Details	1.0	1.0					4.0		6.0	\$ 1,030.20	\$ 1,030.20
Sheets - 1	SWPPP Details	2.0	1.0					4.0		7.0	\$ 1,353.20	\$ 1,353.20
Sheets - 1	Construction Sign Details	1.0	2.0					4.0		7.0	\$ 1,302.20	\$ 1,302.20
2P - Design Plans Total												
2P - Project Management (Meetings & Coordination)												
	Monthly Progress Meetings (6 Months)	6.0	6.0							12.0	\$ 595.00	\$ 3,570.00
	SW3P Narrative		1.0	1.0		2.0				4.0	\$ 850.00	\$ 850.00
	Cost Estimate	6.0				24.0				30.0	\$ 1,870.00	\$ 5,610.00
2P - Project Management (Meetings & Coordination) Total												
\$ 10,030.00												
BASIC SERVICES - PHASE 2 ENGINEERING DESIGN PHASE												
\$ 125,069.00												
OPTIONAL / ADDITIONAL SERVICES - PHASE 2 DESIGN PHASE												
OPTIONAL / ADDITIONAL SERVICES - PHASE 2 DESIGN PHASE												
\$ -												
TOTAL - PHASE 2 DESIGN PHASE												
\$ 125,069.00												

PRODUCTION MANHOURLY LEVEL OF EFFORT - PHASE 3 BID & CONSTRUCTION SERVICES

Project: **Reading Road Roundabouts Design**
 Project #: Project Number 20109 (GG# P2021-032)
 Date: 7/9/2021
 Revised: 7/15/2021

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 / SHEET	COST
		\$374.00	\$323.00	\$272.00	\$272.00	\$272.00	\$153.00	\$159.80	\$108.80	\$102.00			
BASIC SERVICES - PHASE 3 BID SERVICES PHASE													
3P - Bid Services													
	Table of Contents		2.0							1.0	3.0		\$ 748.00
	Bid Form		2.0				2.0			1.0	5.0		\$ 1,054.00
	Summary of Work		2.0				2.0			1.0	5.0		\$ 1,054.00
	Technical Specifications	1.0	2.0				2.0			1.0	6.0		\$ 1,428.00
	NON - Technical Specifications	1.0	1.0				2.0			1.0	5.0		\$ 1,105.00
	Pre-Bid Conf & Meeting Minutes	1.0	1.0				2.0			1.0	5.0		\$ 1,105.00
	Addenda		2.0	1.0	1.0		2.0			1.0	7.0		\$ 1,598.00
	Bid Tabulations		1.0	1.0	1.0		2.0			1.0	6.0		\$ 1,275.00
	Award Recommendation	1.0	1.0							1.0	3.0		\$ 799.00
3P - Bid Services Total												\$	10,166.00
3P - Construction Services													
	Time & Material												\$ 20,000.00
3P - Construction Services Total												\$	20,000.00
BASIC SERVICES - PHASE 3 BID SERVICES												\$	30,166.00
OPTIONAL / ADDITIONAL SERVICES - PHASE 3 BID SERVICES													
3.1S - Survey													
	Project Control for Construction												\$ 5,380.00
	Pre Construction ROW Staking												\$ 5,380.00
3.1S - Survey Total												\$	10,760.00
OPTIONAL / ADDITIONAL SERVICES - PHASE 3 BID SERVICES												\$	10,760.00
TOTAL - PHASE 3 BID SERVICES												\$	40,926.00



PROPOSAL AGREEMENT FOR PROFESSIONAL SERVICES

Effective Date: June 30, 2021

Stephanie Anderson
Gradient Group
2107 CityWest Boulevard, Suite 450-
Houston, TX 77042
832-779-5700
sandereson@gradient-group.com

Proposal for Professional Services in Connection With: Bridlewood at Rustling Oaks, Reading Road at Bridlewood Dr. and Reading Road at Rustling Oaks Dr. Roundabouts in Fort Bend County, Texas

Weisser Engineering & Surveying is pleased to submit this proposal and terms of service (together, the "Agreement") to Gradient Group (the "Client").

I. SCOPE OF SERVICES

Surveying and Mapping

The Surveyor shall evaluate the existing ROW envelope and make recommendations for the acquisition of ROW necessary for the Project including but not limited to roadway, corner cuts, sight distance triangles, detention, and outfalls, if necessary. The Surveyor shall establish a project baseline based on the centerline of the right-of-way. The Surveyor shall create an available existing utility list (Excel Format) including the type, owner, location, and contact information for available existing utilities within the project limits to be supplied to the Engineering Consultant to complete the identification of potential utility conflicts. The Surveyor shall sign and seal all survey documents.

The specific survey limits are as follows:

The linear topographic and right-of-way survey will begin at the intersection of Reading Road and Bridlewood Drive and proceed 500 feet East and 700 feet West and 300 feet North and South of the intersection, begin again at the intersection of Reading Road and Rustling Oaks Drive and proceed 500 feet East and West and 300 feet North and South of the intersection and begin again at the intersection of Bridlewood Drive and Rustling Oaks Drive and proceed 500 feet North and South and 300 feet East and West for an approximate total of **5,000 linear feet.** (As Shown on the Attached Aerial Images)

1. Existing Right of Way Mapping (Cat. 1B; Cond. II)

- a. Perform abstract survey; obtain deeds of record, and plats for Reading Road, Bridlewood Drive and Rustling Oaks Drive right-of-way and tracts of land adjoining Reading Road, Bridlewood Drive and Rustling Oaks Drive.
- b. Establish the existing right-of-way of Reading Road, Bridlewood Drive and Rustling Oaks Drive.
- c. Prepare existing Right-of-Way Map of the Project certifying to a Cat. 1B, Cond. II Right-of-Way Survey to be delivered in PDF format.
- d. Prepare Survey Control Sheet(s) for the project to be delivered in PDF format.

COST: \$24,620.00 (non-taxable)

3-Person Survey Crew	50 hrs @ \$165/hr	\$8,250.00
Survey Technician	48 hrs @ \$105/hr	\$5,040.00

CADD Technician	60 hrs @ \$90/hr	\$5,400.00
Clerical	5 hrs @ \$60/hr	\$ 300.00
Field Coordinator	5 hrs @ \$100/hr	\$ 500.00
Records Research	28 hrs @ \$80/hr	\$2,240.00
Project Manager	14 hrs @ \$140/hr	\$1,960.00
RPLS	6 hrs @ \$155/hr	\$ 930.00

2. Topographic Surveying for Reading Road, Bridlewood Drive and Rustling Oaks Drive (Cat 6; Cond. II)

The Surveyor will provide the following within the surveying limits described in above:

- a. Utilize existing Fort Bend County horizontal and vertical control.
- b. For the roadway and ditches, obtain cross-sections at 100-foot intervals with grade breaks. Cross-sections shall extend 25 feet beyond the existing or proposed right-of-way lines where accessible. Identify locations and elevations of physical features to include buildings, fences, walls, trees (trunk diameter, drip line, and type), sidewalks, driveways and driveway curbs, power poles, light poles, water meters, water wells, ponds, sprinklers, off-site drain pipe, etc. Horizontally and vertically locate available existing utilities within, crossing, and adjoining project limits. Utilities will be located and tied based on visual evidence and utilities based on maps, plans, and marked by “One Call” within the project limits, flow line elevations, sizes, material types and directions of pipes will be obtained on storm sewer lines, sanitary sewer lines and culverts. The rim (top) and flow line elevations will be obtained on inlets, manholes, and drainage structures.
- c. The Surveyor will coordinate with pipeline companies, municipal utility districts (MUDs), homeowner’s associations (HOA’s), Fort Bend County, and private utility agencies to obtain locations of available existing utilities and depths of existing pipelines per plans.
- d. Survey geotechnical bore hole locations as indicated by Client and provide information to Client in an approved digital format.
- e. Prepare existing Topographic Survey Map of the Project certifying to a Cat. 6, Cond. II Topographic Survey to be delivered in PDF format.
- f. The 3D topographical survey base map and digital terrain model (DTM) will be created and delivered for the existing roadway using AutoCAD (DWG).

COST: \$27,860.00 (non-taxable)

3-Person Survey Crew	60 hrs @ \$165/hr	\$9,900.00
Survey Technician	42 hrs @ \$105/hr	\$4,410.00
CADD Technician	74 hrs @ \$90/hr	\$6,660.00
Clerical	8 hrs @ \$60/hr	\$ 480.00
Field Coordinator	6 hrs @ \$100/hr	\$ 600.00
Records Research	26 hrs @ \$80/hr	\$2,080.00
Project Manager	20 hrs @ \$140/hr	\$2,800.00
RPLS	6 hrs @ \$155/hr	\$ 930.00

3. Subsurface Utility Engineering (Level B) Utility/Pipeline Investigations

The Survey shall perform such investigations, research, and other activities necessary to identify any potential utility/pipeline conflicts with the Project, including but not limited to:

- a. Locating and identifying available existing utilities/pipelines including casings and vent pipes within the existing and proposed rights-of-way, including obtaining information from utility owners record drawings and site reconnaissance, as well as shooting elevations marked or

uncovered by others, and providing Subsurface Utility Engineering Level B effort to locate all available subsurface utilities within the existing and proposed right-of-way.

- Level B – Two dimensional (x,y) information obtained through the application and interpretation of non-destructive surface geophysical methods. Also known as “designating”, this quality level provides the horizontal position of subsurface utilities within approximately one foot.

COST: \$4,960.00 (non-taxable)

2-Person Survey Crew	16 hrs @ \$140/hr	\$2,240.00
Survey Technician	4 hrs @ \$105/hr	\$ 420.00
CADD Technician	10 hrs @ \$90/hr	\$ 900.00
Clerical	2 hrs @ \$60/hr	\$ 120.00
Field Coordinator	2 hr @ \$100/hr	\$ 200.00
Records Research	10 hrs @ \$80/hr	\$ 800.00
Project Manager	2 hrs @ \$140/hr	\$ 280.00

4. Project Control for Construction

- Recover or Reestablish project control referenced to the project baseline for construction.
- Recover or Reestablish monumentation on project baseline at the beginning, end, street intersections, angle points, beginning of curves, end of curves and at 1,000-foot intervals in between.

COST: \$5,620.00 (non-taxable)

3-Person Survey Crew	20 hrs @ \$165/hr	\$3,300.00
Survey Technician	6 hrs @ \$105/hr	\$ 630.00
CADD Technician	6 hrs @ \$90/hr	\$ 540.00
Clerical	2 hrs @ \$60/hr	\$ 120.00
Field Coordinator	3 hrs @ \$100/hr	\$ 300.00
Project Manager	3 hrs @ \$140/hr	\$ 420.00
RPLS	2 hr @ \$155/hr	\$ 310.00

II. Optional Additional Services

- Parcel Surveys (Cat. 1A; Cond. II)** - Prepare metes and bounds descriptions in accordance with Fort Bend County guidelines for property acquisition and add parcels to the existing right-of-way maps.

COST: \$2,500.00 per parcel (non-taxable)
(Estimated 4 Tract = \$10,000.00)

III. TERMS AND CONDITIONS

- This Agreement may only be modified by a writing acknowledging agreement of modification by both parties.
- The Responsible Party signing this Agreement agrees to be fully responsible for the timely and complete payment for Services within thirty (30) days of invoicing. Any requests for modification of this provision must be signed by an officer or department director of Weisser Engineering & Surveying.
- Weisser Engineering & Surveying is an independent contractor. Nothing in this Agreement forms a partnership, joint venture, employment, franchise, master-servant, or agency relationship between Client and Weisser Engineering & Surveying.
- WEISSER ENGINEERING & SURVEYING SHALL ONLY BE LIABLE FOR DAMAGE OR LOSS TO ANY PERSON OR PROPERTY TO THE EXTENT SUCH DAMAGE OR LOSS IS**

CAUSED BY WEISSER ENGINEERING & SURVEYING'S NEGLIGENT ACT OR OMISSION IN CONNECTION WITH THE SERVICES. WEISSER ENGINEERING & SURVEYING'S LIABILITY TO CLIENT OR ANY OTHER PARTY FOR CLAIMS OF ANY KIND, WHETHER BASED ON CONTRACT OR TORT OR OTHERWISE RELATING TO THIS AGREEMENT, SHALL NOT EXCEED THE COMPENSATION PAID OR OWED TO WEISSER ENGINEERING & SURVEYING FOR SERVICES UNDER THIS AGREEMENT.

5. Client shall not solicit Weisser Engineering & Surveying employees for purposes of employment during the course of the Agreement or for a period of twelve (12) months thereafter. Client acknowledges and agrees that breach of this provision may result in irreparable and continuing damage to Weisser Engineering & Surveying, for which there would be no adequate remedy at law, and that, in the event of such breach, Weisser Engineering & Surveying may be entitled to equitable or injunctive relief and/or a decree for specific performance, in addition to all such other and further relief as may be available at law, in equity, or otherwise.
6. Upon request, Weisser Engineering & Surveying may make electronic files of its CAD drawings available to Client on an "as is" basis for informational purposes only that may not be relied upon for any other purpose. ALL WARRANTIES AND REPRESENTATIONS OF ANY KIND WITH REGARD TO ELECTRONIC FILES ARE DISCLAIMED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. Since revisions or additions to design file drawings may occur at any time, Client agrees to indemnify, defend and hold harmless Weisser Engineering & Surveying, its officers, directors, agents, shareholders, and employees from and against any and all claims, suits, losses, damages or costs, including reasonable attorney's fees, arising from the use of outdated or amended design file drawings by Client or any third party, and such indemnification shall survive acceptance of said file(s) by Client or the termination of this Agreement. Client promises to notify any third party that the third party may not reasonably rely on electronic files, drawings, or documents not directly provided to such third party by Weisser Engineering & Surveying.
7. This Agreement shall be deemed entered into in Texas and shall be governed by and construed and interpreted in accordance with the laws of the State of Texas, without reference to any rules of conflict of laws. Venue shall be in Houston, Harris County, Texas.
8. In the event that any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.
9. This Agreement may be executed by facsimile or scanned and electronically transferred signatures. A copy of this Agreement bearing such a signature or signatures shall have the same force and effect as an original agreement with inked original signatures. Once signed, any reproduction of this Agreement made by reliable means (e.g., photocopy, scan, facsimile) is considered an original.
10. Client's failure to sign and return this Agreement to Weisser Engineering & Surveying within fifteen (15) days of Effective Date renders the Agreement voidable by Weisser Engineering & Surveying.
11. Notwithstanding anything to the contrary in this Agreement or any other ancillary documents, Weisser Engineering & Surveying shall not be responsible for delays caused by factors beyond Weisser Engineering & Surveying's reasonable control, including but not limited to delays because of strikes, lockouts, work slowdowns or stoppages, government ordered industry shutdowns, power or server outages, acts of nature, widespread infectious disease outbreaks (including, but not limited to epidemics and pandemics), failure of any governmental or other regulatory authority to act in a timely manner, failure of the Client to furnish timely information or approve or disapprove of Weisser Engineering & Surveying's services or work product, or delays caused by faulty performance by the Client or by contractors of any level. When such delays beyond Weisser Engineering & Surveying's reasonable control occur, Client agrees that Weisser Engineering & Surveying shall not be responsible for damages, nor shall Weisser Engineering & Surveying be deemed in default of this Agreement or any other agreement.

We appreciate the opportunity to provide this proposal. If you have any questions or comments, please do not hesitate to contact John Harvill, RPLS (jharvill@weissereng.com).

The Client, by signing below, represents that he or she has the authority to enter into this Agreement, agrees to the terms and conditions in this Agreement, is willing to be the Responsible Party, promises to pay the invoiced amount within thirty (30) days of invoicing, and authorizes Weisser Engineering & Surveying to proceed with the Services as described above.

CLIENT

Gradient Group

By: _____

Printed Name: _____

Title: _____

Date of Acceptance: _____

WEISSER ENGINEERING & SURVEYING

By:  _____

Printed Name: Walter P. Sass


Title: Principal

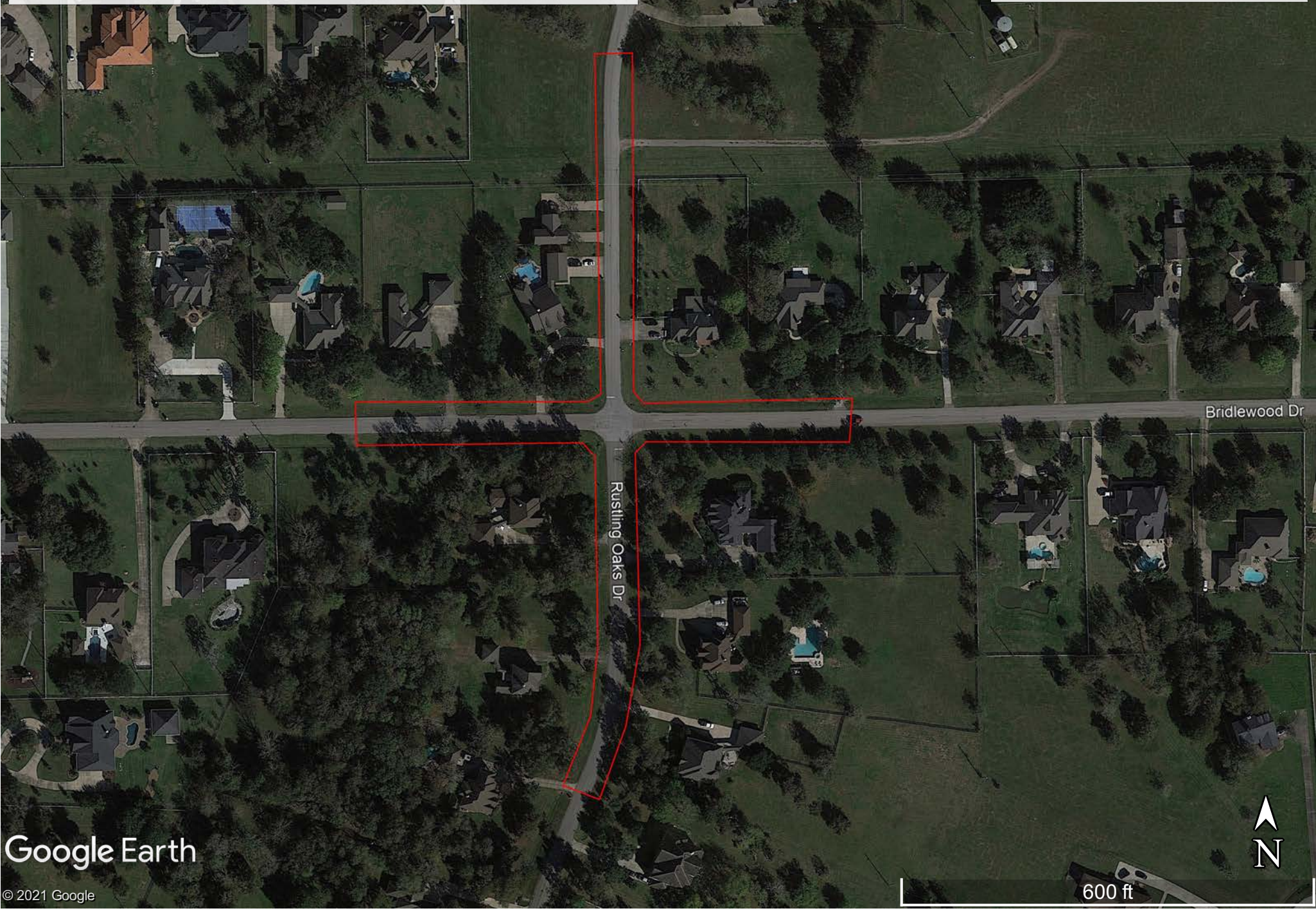
Date of Acceptance: 6/30/2021

Bridlewood Drive @ Rustling Oaks Drive

Write a description for your map.

Legend

 Bridlewood @ Rustling Oaks



Reading Road @ Rustling Oaks Drive

Legend



Reading Road @ Bridlewood Drive

Legend



Google Earth

© 2021 Google

500 ft



**REVISED
PROPOSAL FOR
DESKTOP GEOLOGIC FAULT STUDY AND GEOTECHNICAL STUDY
READING ROAD – ROUNDABOUTS AND TAPERS ADDITIONS
FORT BEND COUNTY PROJECT NO. 20109
FORT BEND COUNTY, TEXAS
REVISION III**

PROPOSAL NO. P21-071



TO

**GRADIENT GROUP LLC
HOUSTON, TEXAS**

BY

GEOTECH ENGINEERING AND TESTING

www.geotecheng.com

JULY 2021

Gradient Group LLC
2107 CityWest Blvd Suite 450
Houston, Texas 77042

Proposal No. P21-071
July 7, 2021
Tel.: 832-779-5700

E-mail: sanderson@gradient-group.com

Attention: Ms. Stephanie Anderson, P.E., ENV SP
President

**REVISED
PROPOSAL FOR
DESKTOP GEOLOGIC FAULT STUDY AND GEOTECHNICAL STUDY
READING ROAD – ROUNDABOUTS AND TAPERS ADDITIONS
FORT BEND COUNTY PROJECT NO. 20109
FORT BEND COUNTY, TEXAS
REVISION III**

Dear Madam:

At your request, we are pleased to submit this proposal for roundabouts and asphalt tapers additions on Reading Road in Fort Bend County, Texas. We understand that two asphalt tapers will be added near the transition Reading Road from the boulevard section on the west to the two-lane asphalt road (shown on cover page). The intersections at Misty Meadows – Reading Road, Rustling Oaks – Reading Road and Bridlewood Drive – Rustling Oaks will be converted to roundabouts. Furthermore, the pavement improvements are not expected to extend more than 250-ft past each roundabout. About 500-ft of existing asphalt paving will be restriped in each direction of each roundabout. The planned tapers and roundabouts additions were discussed in detail with Ms. Stephanie Anderson, P.E. in order to plan a study that would provide the necessary design and construction data.

INTRODUCTION

It is planned for roundabouts and asphalt tapers addition on Reading Road in Fort Bend County, Texas. The details on these additions are provided below:

Facility	Remarks
Asphalt Tapers	Two asphalt tapers will be added near the transition Reading Road from the boulevard section on the west to the two-lane asphalt road (shown on cover page)
Roundabouts	The intersections at Misty Meadows – Reading Road, Rustling Oaks – Reading Road and Bridlewood Drive – Rustling Oaks will be converted to roundabouts. At each roundabout, about 500-ft of existing asphalt paving will be restriped in each direction. Furthermore, about 250-ft of existing pavement will be improved past each roundabout.



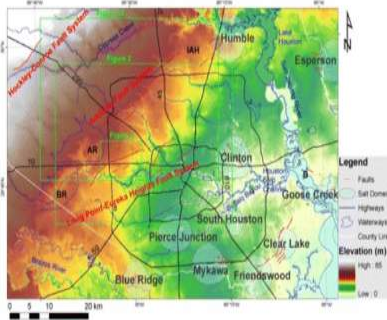
This proposal is divided into two sections. Each section will be discussed and estimated separately. These sections are as follows:

- o Desktop Geologic Fault Study.
- o Geotechnical Exploration Study for the addition of asphalt tapers and roundabouts.

The scope of our work will be in general accordance with the Fort Bend County Engineering Guidelines (Draft) August 2020 edition. At the request by the client, we will conduct a desktop geologic fault study instead of Geologic Fault Study as recommended in Fort Bend County Engineering Guidelines (Draft) August 2020 edition. We will not perform the geotechnical exploration for the road in accordance with the TxDOT Guidelines. We understand that the scope of our work will not include review of plans and specifications prior to the final design.

DESKTOP GEOLOGIC FAULT STUDY

The project site is located in Fort Bend County, Texas. Geologic faults are scattered throughout Houston. In general, faults are caused by groundwater and oil removal from the underlying surface. Faults originate several thousand feet below the ground surface and can often cause displacement of the ground surface, causing broken pavement, water lines, and damage to residential and commercial structures.



A Desktop Geologic Fault Study will be conducted. A desktop geologic fault study will include a study of published data on surface faults in the area of the site from the Geotech Engineering and Testing Library. A report of our findings will be provided.

GEOTECHNICAL STUDY

Field Exploration

Site Access. The site access can be provided using a truck-mounted drilling rig. Traffic control will be required.

Surveying. The client will establish and provide GET the boring coordinates and ground surface elevations. GET will mark the boring locations in the field so that the survey crew can locate them.

Checking for Utilities. GET will call Texas 811-Call for the locations of utilities. GET will coordinate these activities. GET will not hire a contractor to conduct subsurface utility studies to find location of any and all utilities. This is not the scope of GET work. We recommend the scope of our work to include subsurface utility investigation at boring locations to assess that underground utilities are not hit during field exploration.

Traffic Control. Traffic control will be required along the project alignment during our field exploration. The scope of our field work will require a lane closure during drilling and sampling and borehole grouting. Our traffic control will be subcontracted out.



Drilling and Sampling. We will evaluate the soil stratigraphy and groundwater conditions for the proposed asphalt tapers and roundabouts additions by conducting seven (7) soil borings to a depth of 10-ft from existing grade. It should be noted that spacing between borings is about 500-ft. The Plan of Borings for the proposed facilities is shown on Plate 2. The borings schedule is as follows:

<u>Facility</u>	<u>Borings</u>	<u>Depth, ft</u>	<u>Remark</u>
Asphalt Tapers	B-1	10	A truck-mounted drilling rig.
Roundabout at Misty Meadows – Reading Road	B-2 and B-3	10	A truck-mounted drilling rig.
Roundabouts at Rustling Oaks – Roothing Road	B-4 and B-5	10	A truck-mounted drilling rig.
Roundabouts at Rustling Oaks – Bridlewood Drive	B-6 and B-7	10	A truck-mounted drilling rig.

Soil samples will be obtained continuously from the surface to the completion depth of borings. The cohesive soils will be sampled, using a Shelby Tube sampler. Standard Penetration Tests (SPT) will be performed in sands, if encountered. Shear strengths of the clays will be measured in the field with a hand penetrometer and correlations between this data and laboratory unconfined compression and Torvane tests used to supplement laboratory shear strength data.

Groundwater. Depth to groundwater will be important for design and construction of the facilities. For this reason, borings will be drilled dry and the depth at which groundwater is encountered will be recorded.

Borehole Grouting. All of the geotechnical boreholes will be grouted with cement and bentonite, after drilling and sampling.



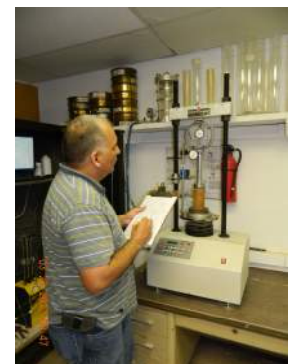
LABORATORY TESTING

Laboratory tests will vary with the soils encountered but will be planned to evaluate soils design parameters for the proposed asphalt pavement.



It is anticipated that the tests will include hand penetrometer, torvane, unconfined compression, unit weight, moisture content, percent passing #200 sieve, liquid and plastic limit tests, etc.

All of the subsoils will be classified in general accordance with the American Society of Testing Materials (ASTM) Soil Classification System. All tests will be performed in general accordance with the ASTM Procedures.



ENGINEERING ANALYSES AND REPORTING

The field and laboratory data will be summarized in an engineering report. Analyses of these data will be presented, and recommendations made relative to the following:

<u>Facility</u>	<u>Recommendations</u>
General	<ul style="list-style-type: none">○ Summary.○ Project site pictures.○ Geology.○ Results of the Desktop Geologic Fault Study and recommendations for Phase I Study, if warranted.○ Generalized soils stratigraphy and groundwater levels.○ Boring logs per GET format.
Asphalt Paving	<ul style="list-style-type: none">○ Estimated subgrade properties (based on correlations) including CBR and Resilient Modulus values for natural soils.○ Asphalt Pavement design using traffic loading.○ Pavement recommendations.○ Soil stabilization requirements for the pavements.○ Potential construction problems.○ Recommendations on site drainage.



COST ESTIMATE

General

Based on the scope of work outlined above, we estimate the cost for field, laboratory, and engineering services based on the Harris County Fee Schedule as shown on Plates 3 and 4. This estimate assumes underground obstructions will not be encountered that require boring relocations. GET is not responsible for damages to underground utilities, man-made utilities, etc. In the event that concrete, rock/rubble is encountered, the boring(s) will be terminated. We understand that all of the boring elevations will be provided by the client prior to completion of GET report. Our cost estimate includes one draft report copy and one final report copy. A digital copy of the report will also be provided. Additional report copies will be provided at a separate charge.

Underground Utilities

The cost estimate for geotechnical services assumes that underground obstructions will not be encountered during boring that requires boring relocation(s). GET will contact Texas 811 for the presence of underground utilities. However, Texas 811 does not have information regarding the presence of underground utilities inside the properties. GET is not responsible for damage to underground utilities, man-made objects, etc., that are not identified by Texas 811. The scope of our work does not include subsurface utility engineering. We recommend the scope of our work to include subsurface utility investigation at boring locations to assess that underground utilities are not hit during field exploration.

Traffic Control Allowance

The cost estimate for traffic control is only an allowance. The actual cost may be lower or higher, depending on access, pavement thickness, strength and daily production. GET is prepared to use any qualified traffic control subcontractor specified by the client. **Our estimated traffic control schedule is as follow:**

	<u>Day</u>	<u>Services</u>
	<u>2.0</u>	Drilling and Sampling, Borehole Grouting
Total:	<u>2.0</u>	

Cost Summary

A summary of estimated cost is presented below:

<u>Scope of Work</u>	<u>Estimated Cost</u>	<u>Cost Breakdown Plate(s)</u>
Desktop Geologic Fault Study	\$ 620.00	3
Geotechnical Exploration for tapers and roundabouts	22,043.00	3 – 4
Traffic Control (allowance)	<u>1,441.00</u>	4
Grand Total	\$ <u>24,104.00</u>	

REPORT REVIEWS AND COMMENTS

Our report will be submitted to Gradient Group, LLC in a draft form for comments. Once these reviews are completed, a final report will be issued. All of these comments will be incorporated in the final report. The client agrees that all reviews are complete once a notice for a final report is issued. Any changes to the final report will be outside the scope of our study. We will incorporate any future comments after the final report is issued on a time and materials basis per the applicable fee schedule.

TIME SCHEDULES

We estimate that the field work can be started about one (1) week after authorization is received. The project schedule will be as follows:

<u>Facility</u>	<u>Right of Way/Utility Clearance</u>	<u>Field Exploration</u>	<u>Laboratory Testing</u>	<u>Engineering</u>	<u>Total</u>
Asphalt Tapers and Roundabouts	10	10	15	25	60

Preliminary recommendations will be submitted during the course of the exploration, if required to expedite design.

We appreciate the opportunity to submit this proposal and look forward to being of service to you on this project. Formal acceptance of this proposal and our general conditions can be acknowledged by signing below and returning one copy for our files.

Very truly yours,

GEOTECH ENGINEERING AND TESTING
TBPE Registration Number F-001183



James Namekar, Ph D., P.E.
Chief Engineer

ACCEPTED BY: _____

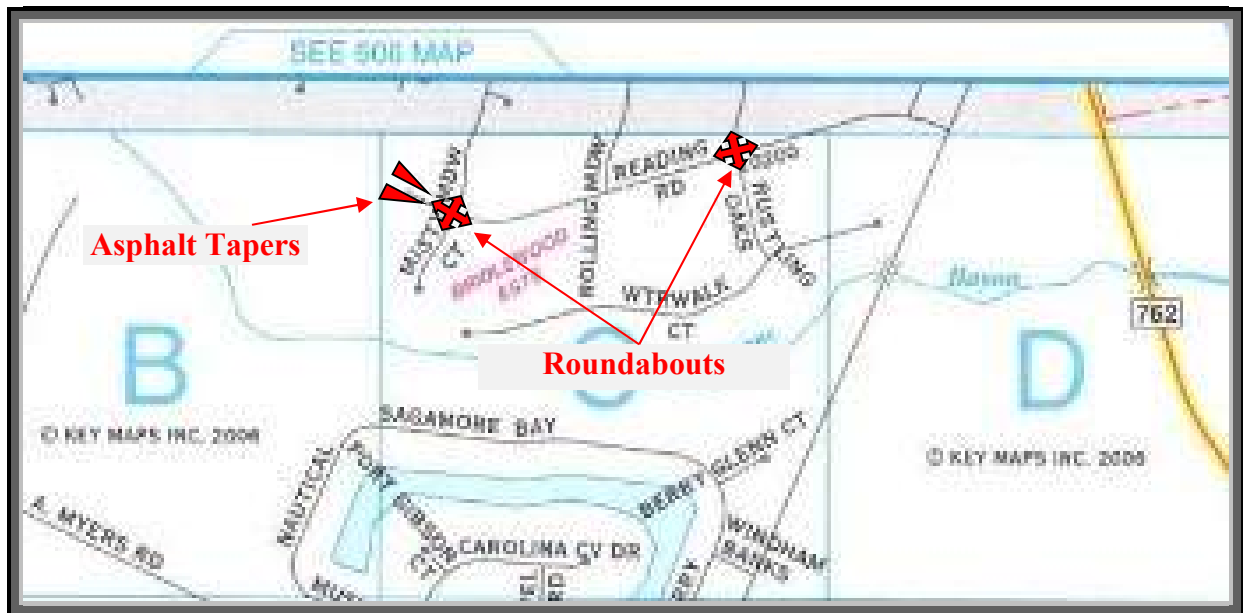
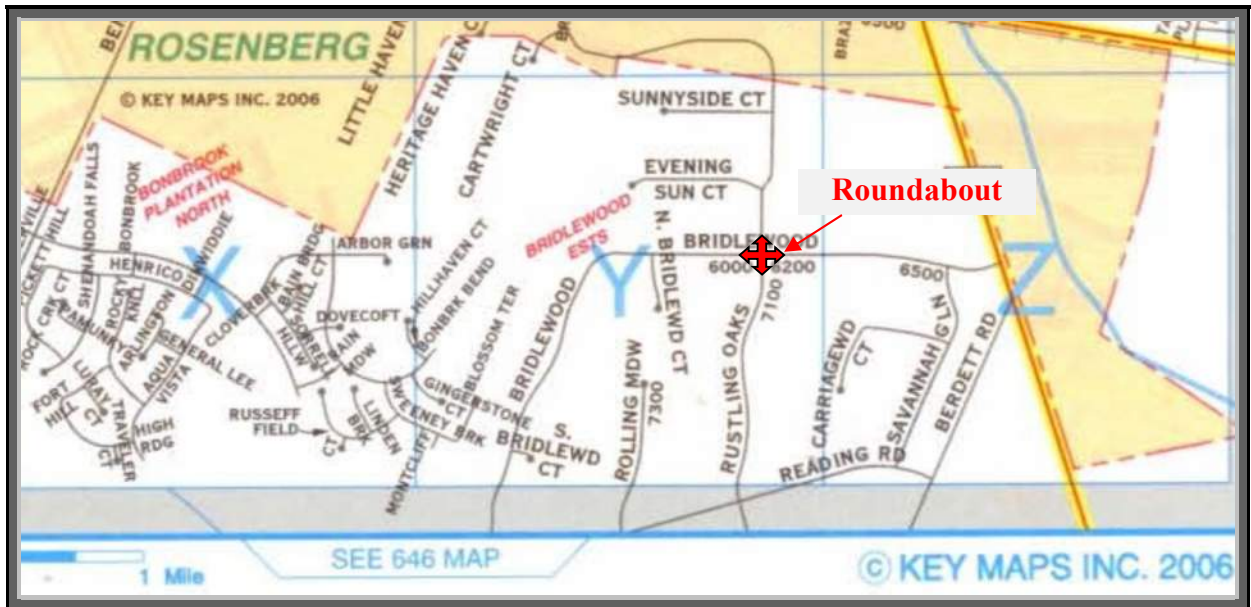
COMAPANY NAME: _____

PRINTED NAME: _____

DATE: _____

- Enclosures: Site Vicinity Map – Plate 1
Plan of Borings – Plate 2
Cost Estimate – Plates 3 and 4
General Conditions
Harris County Fee Schedule

Copies Submitted: (1) Gradient Group LLC - Ms. Stephanie Anderson, P.E., ENV SP
(1) DAE



SITE VICINITY MAP

PROJECT: Geologic Fault Study & Geotechnical Study for Reading Road – Roundabouts and Tapers additions
 FBC Project No. 20109, Fort Bend County, Texas

SCALE: NOT TO SCALE

DATE: JULY 2021

PROPOSAL NO.: 21-071E

NORTH





PLAN OF BORINGS (Boring locations are approximate)

PROJECT: Geologic Fault Study & Geotechnical Study for Reading Road – Roundabouts and Tapers additions
 FBC Project No. 20109, Fort Bend County, Texas

SCALE: NOT TO SCALE

DATE: JULY 2021

PROPOSAL NO.: 21-071E

NORTH



Estimated Cost Summary (Detailed)
Geologic Fault Study and Geotechnical Study
Reading Road - Asphalt Tapers and Roundabouts Additions
Fort Bend County, Texas

P21-071

Consultant Proposal Breakdown

GEOTECH ENGINEERING AND TESTING		Principal Engineer	Senior Engineer	Graduate Engineer	Field Technician	Typing/Drafting	Unit of Measure	Estimated Quantity	Rate	Subtotal (Cost \$)
Date: May 20, 2021										
PER HARRIS COUNTY FEE SCHEDULE		\$250.00	\$205.00	\$115.00	\$55.00	\$70.00				
Task No.		Task Description		* LEVEL OF EFFORT						
Desktop Geologic Fault Study										
1	Review of Existing Published Fault Maps by Staff Engineer			3						\$345.00
3	Reporting		0.5	1.5						\$275.00
									Total:	\$620.00
Project Initiation upon Receiving NTP										
4	Review of the scope of the work	3	2	1						\$1,275.00
5	Coordinate with Client, in obtaining the updated information of the project			1						\$115.00
Asphalt Tapers and Roundabouts along project alignment, 7 Borings										
Field Investigation										
6	Develop a Drilling Plan			1						\$115.00
7	Staking the seven (7) Borings in the Field			6						\$690.00
8	Coordinate with Surveyors to Locate & Tie in Borings at Site			1						\$115.00
9	Field Coordination during Drilling Including Utility Clearance, Texas One Call, and/or obtain drilling permission			8						\$920.00
10	Mobilization / Demobilization						LS	1	\$700.00	\$700.00
11	Drilling and Sampling Seven (7) Borings									
12	Continuous (0' - 10')						LF	70	\$25.00	\$1,750.00
13	Borehole Grouting						FT	70	\$12.00	\$840.00
14	Technician, Logging Borings, Borehole cleaning and Water Level Reading				24					\$1,320.00
15	Vehicle Charge (Boring staking, site visits during field coordination during drilling including utility clearance, Texas One Call etc., and borehole logging and grouting)						HR	36	\$12.00	\$432.00
									Subtotal	\$8,272.00
Laboratory Testing										
16	Assign Laboratory Tests, Looking at Soil Samples			3						\$345.00
17	Data Reduction and Evaluation			1						\$115.00
18	Water Content (all samples)						EA	35	\$11.00	\$385.00
19	Liquid and Plastic Limits						EA	14	\$71.00	\$994.00
20	Percent Passing #200 Sieve						EA	14	\$55.00	\$770.00
21	Torvane						EA	35	\$3.00	\$105.00
22	Hand Penetrometer						EA	35	\$4.00	\$140.00
23	Unconfined Compression						EA	7	\$51.00	\$357.00
									Subtotal	\$3,211.00

Estimated Cost Summary (Detailed)
Geologic Fault Study and Geotechnical Study
Reading Road - Asphalt Tapers and Roundabouts Additions
Fort Bend County, Texas

P21-071

Consultant Proposal Breakdown

GEOTECH ENGINEERING AND TESTING		Principal Engineer	Senior Engineer	Graduate Engineer	Field Technician	Typing/Drafting	Unit of Measure	Estimated Quantity	Rate	Subtotal (Cost \$)
Date: May 20, 2021										
PER HARRIS COUNTY FEE SCHEDULE		\$250.00	\$205.00	\$115.00	\$55.00	\$70.00				
Task No.		Task Description		* LEVEL OF EFFORT						
Engineering Analysis and Report										
24	Prepare Plan of Borings			1						\$115.00
25	Analyze field and laboratory test results			3						\$345.00
26	Prepare summary of laboratory test data			1						\$115.00
27	Edit and prepare final boring log profiles			9						\$1,035.00
28	Prepare and develop boring log profiles			1						\$115.00
29	Develop asphalt pavement design based on traffic loading	0.5	2	6						\$1,225.00
30	Document the results of soil exploration, laboratory testing and geotechnical recommendations in a geotechnical draft report	2	8	32						\$5,820.00
31	Responding to comments from MBCO Engineering LLC	1	2	4						\$1,120.00
32	Technical Typing/Drafting					6				\$420.00
33	Report Reproduction Allowance									\$250.00
									Subtotal	\$10,560.00
									Total:	\$22,043.00
ALLOWANCE ITEMS										
Traffic Coordination/Allowance										
34	Traffic Control (cost + 10%)						DAY	2	\$720.50	\$1,441.00
Plate 4									Total:	\$1,441.00
									Grand Total:	\$24,104.00

GENERAL CONDITIONS

PAYMENT TERMS - The entire payment is due upon receipt of our invoice. Any retainers are for the sole purpose of the securing part of the expenses. Upon completion of the project, any overpayment will be issued back to client, including the retainer paid (if applicable). If payment is not received within ten (10) days from the invoice date, Client agrees to pay a finance charge on the principal amount of the past due account of one and one-half percent per month (18% per annum). If one and one-half percent per month exceeds the maximum allowed by law, the charge shall automatically be reduced to the maximum legally allowable. Reasonable attorney fees, David Eastwood's hourly charges spent on collections, or any other cost incurred in collecting delinquent counts will be charged to the client. All sums are due and payable in Harris County, Texas. In the event of any dispute concerning this contract, venue for such dispute shall be in the County and State of GET's principal office location, Harris County, Texas, and shall be determined by binding arbitration conducted by the American Arbitration Association, if and only if, the amount in controversy exceeds the jurisdictional limits of the Small Claims Courts of Harris County, Texas. All disputes not exceeding the Small Claims Court's jurisdictional limit shall be litigated in the Small Claims Courts Precinct 2, located at 101 S. Richey, Suite B, Pasadena, Harris County, Texas 77506. By signing this document, the client agrees this will be the venue for the litigation and it will override any other venues.

In the event Client requests termination of the services prior to completion, a termination charge in an amount equal to all charges incurred through the date services are stopped plus any shutdown costs may, at the discretion of GEOTECH ENGINEERING AND TESTING ("GET"), be made. If during the execution of the services, GET is required to stop operations as a result of changes in the scope of services, such as requests by the Client or requirements of third parties, additional charges will be applicable.

INSURANCE - GET maintains Worker's Compensation and Employer's Liability Insurance in conformance with applicable state law. In addition, we maintain Comprehensive General Liability Insurance and Automobile Liability Insurance with bodily injury and property damage. A certificate of insurance can be supplied evidencing such coverage upon written request. The certificate contains a clause providing fifteen days written notice is given prior to cancellation by the Insurer. Cost of providing such certificate is included in our quoted fees.

STANDARD OF CARE - The only warranty or guarantee made by GET in connection with the services requested or performed hereunder is that we will use that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality. No other warranty, expressed or implied, is made or intended by our proposal for consulting services or by our furnishing oral or written reports.

LIMITATION OF LIABILITY - Client agrees that GET's liability for any damage on account of any error, omission or other professional negligence will be limited to a sum not to exceed GET's fee. If Client prefers to have higher limits on professional liability, GET agrees to increase the limits up to a maximum of \$250,000 (Annual claims made) upon Client's written request at the time of accepting our proposal provided that Client agrees to pay an additional consideration of five percent of our total fee, or \$100.00, whichever is greater. The additional charge for the higher liability limits is because of the greater risk assumed and is not strictly a charge for additional professional liability insurance.

SAMPLING OR TESTING LOCATION - The fees included in this proposal do not include costs associated with surveying of the site or the accurate horizontal and vertical locations of tests. Field tests or boring locations described in GET's report, or shown on sketches, are based on specific information furnished by others or estimates made in the field by our technicians. Such dimensions, depths, or elevations should be considered as approximations unless otherwise specified in our report.

RIGHT-OF-ENTRY - Unless otherwise agreed, Client will furnish right-of-entry on the property for GET to make the planned borings, surveys, tests, and/or explorations. We will take reasonable precautions to minimize damage to the property caused by our operations but have not included in our fee the cost of restoration of damage which may result. If client desires restoration of the property to its former condition, an additional fee will be required and notice of such desire must be provided in writing to GET, prior to our completion of services under this contract.

DAMAGE TO EXISTING MAN-MADE OBJECTS - It shall be the responsibility of the Client or his duly authorized representative, to disclose the presence and accurate location of all hidden or obscure man-made objects on the property where the field tests or boring will be performed. GET's field personnel are trained to recognize clearly identifiable stakes or markings in the field, and without special written instructions, to initiate field testing, drilling and/or sampling within a reasonable distance of each designated location. If GET is cautioned, advised, or given data, in writing, revealing the presence or potential presence of underground or overground obstructions, such as utilities, GET will give special instructions to its field personnel. As evidenced by Client's acceptance of this proposal, Client agrees to indemnify and hold GET harmless from all claims, suits, losses, personal injury, death and property liability resulting from unusual subsurface conditions or damages to subsurface structures, owned by Client or third parties, occurring in the performance of the proposed services, whose presence and exact locations were not revealed to GET in writing, or to reimburse GET for expenses incurred defending any such claims or suits, including reasonable attorneys' fees.

SAMPLE DISPOSAL AGREEMENT - Unless otherwise requested, test specimens or samples will be disposed of immediately upon completion of tests. Drilling samples or other specimens will be disposed of 14 days after submission of our report. Upon written request, GET will retain test specimens or drilling samples for a specified period of time, to be determined at the time of the writing. An acceptable storage charge will be determined prior to such storage.

OWNERSHIP OF DOCUMENTS - All documents, including, but not limited to, drawings, specifications, reports, boring logs, field notes, laboratory data, calculations and estimates, prepared by GET as instruments of service pursuant to this Agreement, shall be the sole property of GET. Client agrees that all documents of any nature furnished to Client or Client's agents or designees, if not paid for, will be returned upon demand and will not be used by Client for any purpose whatsoever. Client further agrees that under no circumstances shall any documents produced by GET, pursuant to this Agreement be used at any location or for any project not expressly provided for in this Agreement without the written permission of GET. At the request and expense of Client, GET will provide copies of documents created in the performance of the work for a period not exceeding five years following the submission of the report contemplated by this Agreement.

SAFETY - Should GET provide periodic observations or monitoring services at the job site during construction, Client agrees that, in accordance with generally accepted construction practices, the contractor will be solely and completely responsible for working conditions on the job site, including safety of all persons and property during the performance of the work and compliance with OSHA regulations, and that these requirements will apply continuously and not be limited to normal working hours. Any monitoring of the contractor's procedures conducted by GET is not intended to include review of the adequacy of the contractor's safety measures in, on, adjacent to, or near the construction site.

SITE VISIT - Client agrees that GET will not be expected to make exhaustive or continuous on-site inspections but that periodic observations appropriate to the construction stage shall be performed. It is further agreed that GET will not assume responsibility for the contractor's means, methods, techniques, sequences, or procedures of construction, and it is understood that field services provided by GET will not relieve the contractor of his responsibilities for performing the work in accordance with the plans and specifications. The words "supervision", "inspection", or "control" are used to mean periodic observation of the work and the conducting of tests by GET to verify substantial compliance with the plans, specifications and design concepts. Continuous inspections by our employees do not mean that GET is observing placement of all materials. Full-time inspections mean that an employee of GET has been assigned for eight-hour days during regular business hours. Any alteration of plans, including but not limited to; alteration of blueprints, specifications, recommendations, etc. by the Client or a third party, shall relieve GET of all liability for damages incurred, directly or indirectly, from such changes.

CORPORATE STRUCTURE - The company is a partnership, DAE and Associates, LTD doing business as Geotech Engineering and Testing.

Initial _____

Harris County Fee Schedule
 Construction Materials Engineering Services
 Labor and Unit Rates
 Effective: January 1, 2020

Labor Rates

Code	Description	Unit	Current Fee
10100	Principal, P.E.	Hr.	\$250.00
10200	Senior Engineer, P.E. (10 yrs experience)	Hr.	\$205.00
10300	Project Engineer, P.E. or Project Geologist, P.G.	Hr.	\$165.00
10400	Graduate Engineer, Graduate Geologist or Project Manager	Hr.	\$115.00
10500	Technician, NICET IV	Hr.	\$105.00
10600	Technician, NICET III, HMA – II	Hr.	\$100.00
10700	Technician, NICET II, ACI Construction Inspector, HMA – 1A, Logger or both TxDOT Soil SB-101 and SB-102	Hr.	\$90.00
10750	Technician, ACI Field Grade I and TxDOT Soil SB – 102	Hr.	\$78.00
10800	Technician, ACI Field Grade I, TxDOT Soil SB – 101, or SB-102 or HMA – 1B	Hr.	\$65.00
10900	Technician (Non-Certified)	Hr.	\$55.00
11000	Senior Certified Welding Inspector, SCWI or Non Destructive Tester, ACCP Level III	Hr.	\$130.00
11100	Welding Inspector, CWI or Non Destructive Tester, ACCP II	Hr.	\$115.00
11200	Associate Welding Inspector CAWI	Hr.	\$75.00
11400	Non Destructive Tester, ACCP II with Assistant (2 man crew)	Hr.	\$170.00
11500	Administrative Assistant and Clerical Support	Hr.	\$70.00
15000	Vehicle Charge	Hr.	\$12.00
15100	Reimbursable Expenses	Cost	+10%
15200	Services provided by quotation	Cost	+ 10%

Harris County Fee Schedule
 Construction Materials Engineering Services
 Labor and Unit Rates
 Effective: January 1, 2020

Aggregates

Code	Description	Standard	Unit	Current Fee
20100	Sieve Analysis – Coarse Aggregates	C136	Ea.	\$62.00
20200	Sieve Analysis – Fine Aggregates	C136	Ea.	\$62.00
20300	Rel. Density & Absorption – Coarse Aggregates	C127	Ea.	\$92.00
20400	Rel. Density & Absorption – Fine Aggregates	C128	Ea.	\$112.00
20500	Bulk Density & Voids in Aggregate	C29	Ea.	\$43.00
20600	Absorption – Coarse Aggregates	C127	Ea.	\$51.00
20700	Absorption – Fine Aggregates	C128	Ea.	\$51.00
20800	Finer Than 75-um (No. 200) Sieve	C117	Ea.	\$56.00
20900	Organic Impurities in Fine Aggregates	C40	Ea.	\$55.00
21000	L.A Abrasion (Fine and Coarse Aggregate)	C131/535	Ea.	\$236.00
21100	Clay Lumps and Friable Particles	C142	Ea.	\$63.00
21200	Lightweight Particles	C123	Ea.	\$300.00
21300	Sand Equivalent	D2419	Ea.	\$74.00
21400	Na/Mg Sulfate Soundness of Aggregates (5 Cycles)	C88	Ea.	\$400.00
21500	Na/Mg Sulfate Soundness of Aggregates (add'l Cycles)	C88	Ea.	\$231.00

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Portland Cement Concrete

Code	Description	Standard	Unit	Current Fee
30050	Mix Design Review	None	Ea.	\$500.00
30100	Compressive Str. Cylinder	C39	Ea.	\$20.00
30200	Flexural Str. Beam	C78	Ea.	\$31.00
30300	Split Tensile Str. (Incl. Prep)	C496	Ea.	\$124.00
30400	Time of Set by Penetration	C403	Ea.	\$362.00
30500	Linear Shrinkage & Thermal Coef (Bar)	C531	Set 3	\$371.00
30600	Length Change of Hydraulic-Cement Mortar and Concrete	C490/ C157	Set 3	\$132.00
30700	Density of Structural Lightweight Concrete	C567	Ea.	\$92.00
30800	Concrete Coring, Minimum Charge	C42	Min	\$600.00
30900	Concrete Coring (4" Diameter to 6" Thickness)	C42	Ea.	\$119.00
31000	Concrete Coring, Additional Thickness (Over 6" to 12")	C42	In	\$11.00
31100	Concrete Coring, Additional Thickness (Over 12")	C42	In	\$14.00
31110	Concrete Coring (6" Diameter to 6" Thickness)	C42	Ea.	\$170.00
31112	Concrete Coring 6" Additional Thickness (Over 6" to 12")	C42	In	\$16.00
31113	Concrete Coring 6" Additional Thickness (Over 12")	C42	In	\$21.00
31200	Preparation of Core, Cap & Test	C42	Ea.	\$89.00
31300	Measuring Length of Core	C42	Ea.	\$30.00
31400	Pachometer Survey (Magnetic Induction)	None	Day	\$103.00
31500	Probe Penetration Test Equipment (Plus Probes)	C803	Day	\$104.00

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HMAC

Code	Description	Standard	Unit	Current Fee
40100	Mix Design Review	None	Ea.	\$500.00
40200	HMAC Design (In-Place)	None	Ea.	\$2,460.00
40300	Trial Batch (Up to 5 Points) Excludes Testing	None	Ea.	\$1,846.00
40400	Additional Points	None	Ea.	\$266.00
40500	Extraction/Gradation	Tex-210F	Ea.	\$230.00
40600	Specific Gravity	D2041 & Tex-201F	Ea.	\$82.00
40700	HVEEM Stability	Tex-208F	Set	\$108.00
40800	Bulk Density – Lab Molded or Cores	Tex-207F	Set	\$61.00
40900	Bulk Density Core	Tex-207F	Ea.	\$55.00
41000	Molding Specimens	Tex-206F	Set	\$72.00
41100	Maximum Theoretical Specific Gravity	Tex-227F	Ea.	\$103.00
41200	Apparent Specific Gravity	Tex-202F	Ea.	\$77.00
41300	Abson Recovery	Tex-211F	Ea.	\$370.00
41400	Moisture Susceptibility	Tex-531C	Ea.	\$538.00
41500	Penetration	D5	Ea.	\$98.00
41600	Ductility	D113	Ea.	\$130.00
41700	Viscosity	D2170	Ea.	\$108.00
41800	Asphalt Coring, Minimum Charge	None	Min.	\$600.00
41900	Asphalt Coring (4”Dia. to 6” Thickness)	None	Ea	\$106.00
42000	Asphalt Coring (4”Dia. over 6” Thickness)	None	In	\$10.00
42150	Asphalt Coring (6”Dia. to 6” Thickness)	None	Ea.	\$159.00
42160	Asphalt Coring (6”Dia. over 6” Thickness)	None	In	\$14.00
42200	Measuring Thickness of Asphalt	D3549	Ea.	\$25.00
42300	PMA Extraction/Gradation	D2172	Ea.	\$308.00
42400	PMA Extraction/Gradation	D6307	Ea.	\$191.00
42500	Asphalt Content	D4125	Ea.	\$92.00
42600	Molding Superpave Specimens	Tex-241-F	Set	\$500.00
42700	Hamburg Wheel	Tex-242-F	Ea.	\$1000.00

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Structural Steel

Code	Description	Standard	Unit	Current Fee
50100	Radiographic Source, Iridium	None	Day	\$139.00
50200	Radiographic Source, Cobalt 60	None	Day	\$161.00
50300	Ultrasonic Equipment	E114 E273 E587 E797	Day	\$103.00
50400	Magnetic Particle Inspection	E709	Day	\$39.00
50500	Skidmore-Wilhelm Tension Indicator	None	Day	\$154.00
50600	Torque Wrench	None	Day	\$57.00
50700	Discontinuity (Holiday) Equipment	None	Day	\$108.00
50800	Dry Film Thickness Equipment (Tooke Gauge)	D4138	Day	\$39.00
50900	Dry Film Thickness Equipment (Magnetic)	D7091	Day	\$39.00

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Masonry

Code	Description	Standard	Unit	Current Fee
60100	Compressive Strength, Mortar Cubes	C109	Set 6	\$159.00
60200	Compressive Strength, Mortar Cubes	C109	Ea.	\$26.00
60300	Compressive Strength, Mortar or Grout Cylinder	C780/C39	Ea.	\$26.00
60400	Compressive Strength, Grout Prism	C1019	Set 3	\$159.00
60500	Measurement, Brick	C67	Ea.	\$63.00
60600	Compressive Strength Test, Brick	C67	Ea.	\$38.00
60700	Flexural Strength Test, Brick	C67	Ea.	\$49.00
60800	Absorption of Brick, 24 hr.	C67	Ea.	\$82.00
60900	Absorption of Brick, 5 hr.	C67	Ea.	\$81.00
61000	Measurement, CMU	C140	Ea.	\$33.00
61100	Weight, CMU	C140	Ea.	\$92.00
61200	Moisture Content, CMU	C140	Ea.	\$92.00
61300	Compressive Strength, CMU	C140	Ea.	\$150.00
61400	Compressive Strength, CMU Hollow Prism	C1314	Ea.	\$200.00
61500	Compressive Strength, CMU Grouted Prism	C1314	Ea.	\$300.00

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Fireproofing

Code	Description	Standard	Unit	Current Fee
70100	Density of SFRM	E605	Ea.	\$43.00
70200	Cohesion/Adhesion of SFRM (Equipment only)	E736	Ea.	\$33.00

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Roofing

Code	Description	Standard	Unit	Current Fee
80400	Compressive Strength of Lwt. Insulating Concrete	C495	Set 4	\$129.00
80500	Compressive Strength of Lwt. Insulating Concrete	C495	Ea.	\$34.00
80600	Unit Weight of Lwt. Insul. Concrete	C495	Set 2	\$58.00

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Soils

Code	Description	Standard	Unit	Current Fee
90100	Liquid and Plastic Limits	D4318	Ea.	\$71.00
90200	Moisture Content of Soils by Mass	D2216	Ea.	\$11.00
90300	Moisture Content by Microwave	D4643	Ea.	\$34.00
90400	Sieve Analysis	D422	Ea.	\$65.00
90500	Sieve Analysis w/ Hydrometer	D7928	Ea.	\$145.00
90600	Percent Passing #200 Sieve	D1140	Ea.	\$55.00
90700	Specific Gravity	D854	Ea.	\$67.00
90800	pH of Soils	D4972	Ea.	\$20.00
90900	Unconfined Compressive Strength	D2166	Ea.	\$51.00
91100	Unconsolidated-undrained Triaxial Compression	D2850	Ea.	\$72.00
91200	One-Dimension Consolidation	D2435	Ea.	\$450.00
91300	Consolidation, Additional Increment	D2435	Ea.	\$58.00
91400	Dispersive Characteristic by Pinhole Test	D4647	Ea.	\$324.00
91500	Dispersive Characteristic by Crumb Test	D6572	Ea.	\$43.00
91600	Double Hydrometer	D4221	Ea.	\$250.00
91700	Soil Suction – Filter Paper	None	Ea.	\$65.00
91900	California Bearing Ratio	D1883	Ea.	\$243.00
92000	Soil Shrinkage Factors by Mercury Method	D427	Ea.	\$72.00
92100	Soil Shrinkage Factors by Wax Method	D4943	Ea.	\$86.00
92200	One-Dimensional Swell, Cohesive Soil	D4546	Ea.	\$350.00
92300	OMD Standard Compaction	D698	Ea.	\$231.00
92400	OMD Modified Compaction	D1557	Ea.	\$247.00
92500	Max. & Min. Density – Sand	D4253 D4254	Ea.	\$300.00
92600	Percent Solids in Lime Slurry	None	Ea.	\$49.00
92700	Optimum Lime Content – pH Method	D6276	Ea.	\$266.00
92800	Optimum Lime Content – PI Method	None	Ea.	\$274.00
94100	Cement Sand Compressive Strength	D1633	Ea.	\$81.00
94200	Cement Content of Soil-Cement	D806	Ea.	\$354.00
94300	Sieve Analysis - Base Material	C136	Ea.	\$108.00
94400	Compressive Strength Treated Base	Tex-120E	Ea.	\$292.00
94500	OMD Standard Compaction, Treated	D698	Ea.	\$256.00
94600	OMD Modified Compaction, Treated	D1557	Ea.	\$271.00
95100	Nuclear Density Gauge	D6938	Hr.	\$12.00

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Slip-Lining and Manhole Repair

Code	Description	Standard	Unit	Current Fee
100200	Coring and Strength of Gunite Panel	C42/C39	Core	\$137.86

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**Subsurface Exploration
(Geotechnical Drilling)**

Code	Description	Standard	Unit	Current Fee
110010	Soil Boring, Intermittent 3-in. dia. (0 to 50')	None	Ft	\$23.00
110020	Soil Boring, Intermittent 3-in. dia. (50' to 100')	None	Ft	\$25.00
110030	Soil Boring, Continuous 3-in. (0 to 20')	None	Ft	\$25.00
110031	Soil Boring, Continuous 3-in. (20' to 50')	None	Ft	\$30.00
110032	Soil Boring, Continuous 3-in. (50' to 100')	None	Ft	\$40.00
110040	Soil Boring over 100' (Surcharge)	None	Ft	\$10.00
110050	Wash Boring	None	Ft.	\$14.00
111060	Auger Boring	None	Ft.	\$13.00
110070	Undisturbed/Split-Spoon in Wash/Auger	None	Ea.	\$45.00
110071	Piezometer Installation	None	Ft.	\$24.00
110072	Piezometer Abandonment	None	Ft.	\$20.00
110080	Grouting of Completed Boring	None	Ft.	\$12.00
110090	ATV Surcharge	None	Ft.	\$10.00
110100	Minimum Charge for the Exploration (to be used if charges are less than \$1000.00)	None	LS	\$1000.00
110110	Mobilization/Demobilization	None	LS	\$700.00
110120	TDH Cone Penetration Test	None	Ea.	\$31.00
110130	ATV Mobilization Surcharge	None	LS	\$250.00
110140	Portable Drilling Rig Operation (Crew of two)	None	Hr	\$300.00
110150	Standby (Crew of two)	None	Hr	\$300.00
110160	Daily Mobilization (Crew)	None	Day	\$500.00

Harris County Fee Schedule "General Notes" 2020

1 GENERAL

- 1.1 All construction materials engineering services including sampling, field and laboratory testing, and inspection services ("Services") performed by Consultants for Harris County must be authorized by Harris County.
- 1.2 Services not specifically authorized by Harris County will not be paid for.
- 1.3 Failure to perform specified services in accordance with Harris County requirements may result in cancellation of Consultant's purchase order.
- 1.4 Harris County may require use of various internet-based software programs (eBuilder, Unifier, Captrac Etc.) to maintain consistent administrative and technical control on its projects through the County.

The Consultant is required to use the software directed for reporting of all reports relating to field sampling, inspection, field and laboratory testing, invoices, submittals, or other items as directed, in accordance with procedures provided by the County.

At no cost to the Consultant, the County will provide system login account(s) and provide training for consultant personnel. The consultant must update with any new or revised information within 24 hours of that information becoming known to Consultant.

2 ENGINEERING SERVICES

- 2.1 Engineering Services shall be performed by a professional engineer licensed in the State of Texas and employed full-time by the Consultant ("Engineer")
- 2.2 All construction materials engineering reports ("Reports") relating to Services performed by the Consultant shall be reviewed and signed by Consultant's Engineer. The Consultants Engineer does not need to sign specimen pick-ups or project cancellation reports.
- 2.3 For engineering review of services and engineering reports by Consultant's Engineer, Harris County will compensate the Consultant at the Project Engineer rate of $\frac{1}{2}$ (0.5) hour of engineering time for each Engineering Report. Engineering review time will not be allowed on specimen pick up reports, cancellation reports and on revised or updated reports to include additional data on a report such as additional compressive strength test on concrete cylinder and CSS molded specimen reports.
- 2.4 Harris County shall also compensate Consultant when Consultant's Engineer attends Project-related on-site and progress meetings at the request of the Director.
- 2.5 Overtime will not be allowed for any Engineering Service.

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3 FIELD SERVICES

- 3.1 "Sampling" is defined as the process of procuring materials for subsequent testing or examination that is performed by a certified technician with knowledge of appropriate sampling procedures.**
- 3.2 "Specimen Pickup" is defined as the process of retrieving "specimens" usually pre-fabricated in the field such as cylinders, beams, or cubes and transporting those specimens to the laboratory for subsequent testing or examination.**
- 3.3 Field Services shall be performed by Consultant's certified engineering technicians and invoiced based on the technician's certification level in accordance with the Fee Schedule. Certifications should be through NICET, ACI, TXAPA/HMA, ACCP and programs associated with ASNT- TC1A.**
- 3.3.1 A non-certified technician may be allowed to assist a certified technician on a Project provided two or more technicians required.**
- 3.3.2 Specimen Pickup shall be performed, whenever possible, as part of a scheduled field trip or by the full-time technician assigned to the Project.**
- 3.3.3 Specimen Pickup not performed as a part of a scheduled field trip or by the technician assigned to the Project shall be compensated at the technician rate. Specimen pick up shall be invoiced based on the technician's certification level but not than the Code 10700 rate.**
- 3.3.4 Field sieve analysis, drilled shaft slurry tests and lime slurry percent-solids determination shall be performed in the field as part of the field inspection without an additional testing charge.**
- 3.3.5 The rates for coring of Portland cement concrete or asphaltic concrete (HMAC) are inclusive of the coring equipment and patching of the core hole with a conventional concrete mixture for concrete or cold-patch asphaltic materials for asphaltic concrete. The technician time for performing the coring and vehicle charges will be in addition to the applicable coring rates. Patching with specialty materials will be reimbursed by Harris County at cost plus 10%.**
- 3.3.6 A minimum of a 30-minute unpaid lunch shall be taken by the field technician for work over eight (8) hours unless otherwise approved in writing by Harris County.**
- 3.4 Harris County shall compensate Consultant for Services for reasonable travel time, with a maximum travel time of one (1) hour travel to the project and maximum travel time of one (1) hour return travel from the project, unless otherwise approved by Harris County, on a portal-to-portal basis between the Consultant's facility and the Harris County Project or other Project - related location.**

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4 LABORATORY SERVICES

- 4.1 Fees for laboratory tests are inclusive of sample preparation unless specifically noted in Attachment. Compensation shall not be paid for personnel services and / or materials related to such testing, except as specifically noted in this Attachment.**
- 4.2 Unless otherwise requested by Harris County, an aggregate correction factor will not be determined for use in adjusting the aggregate gradation and asphalt content when testing HMAC in accordance with ASTM D6307. Laboratory reports should include a note indicating that an aggregate correction factor was not used in the calculation of the reported results.**

5 OTHER SERVICES

5.1 GEOTECHNICAL SERVICES

- 5.1.1 All geotechnical borings shall be staked by the Consultant and shall be compensated at the rate applicable to the lab representative performing the staking however, the rate shall not exceed that for a Graduate Engineer.**
- 5.1.2 Geotechnical logging shall be performed by a technician qualified in geotechnical soil sampling and soil classification or a Graduate Engineer or Graduate Geologist. Unless the services of an Engineer or Geologist are approved by Harris County in advance, logging shall be compensated at the NICET Level II technician rate. Costs for logging services shall be in addition to fees for geotechnical drilling and sampling services.**
- 5.1.3 In accordance with Harris County Guidelines for Consultants performing Geotechnical Investigations, unless otherwise required by Harris County, geotechnical borings shall be continuously sampled to a minimum depth of 15' and at 5' intervals below that depth.**

5.2 TRAFFIC CONTROL

- 5.2.1 If traffic control is necessary during geotechnical field operations, qualified personnel or a qualified subcontractor should be engaged to provide traffic control. Proposed use of traffic control must be approved in advance by the Director.**

6 REPORTING

Consultant shall document all field and laboratory Services in a written report prepared in accordance with Project Specifications and standard methods.

6.1 Reports shall contain the following:

- 6.1.1 Project Name, Consultant Report Number, and Harris County Job Number**
- 6.1.2 Personnel name and certification typed or printed legibly.**

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- 6.1.3 Time of departure from Consultant's facility.**
 - 6.1.4 Time of arrival at Project.**
 - 6.1.5 Standby time, if any.**
 - 6.1.6 Services requested and performed.**
 - 6.1.7 Time of departure from Harris County Project.**
 - 6.1.8 Time of arrival at Consultant's facility.**
 - 6.1.9 Overtime hours, if any.**
 - 6.1.10 Appropriate Specification and/or Test Method.**
 - 6.1.11 Signature of Engineer Reviewing Report**
- 6.2 Reports shall contain hours of service for each visit to the Harris County Project, including Specimen Pickup.**
- 6.3 All Reports must be received by Harris County within 14 calendar days of the original date of service or completion of required laboratory tests.**
- 6.4 Final reports presenting strength test results shall be sent to Harris County within three (3) business days following the test date.**
- 6.5 Failing laboratory test results must be reported to Harris County by telephone and by fax or email within one business day of the date of the failing test.**
- 7 COMPENSATION AND INVOICING**
- 7.1 Compensation of Consultant for personnel performing sampling, testing, inspection and traffic control services shall be as stated in the Fee Schedule and shall include reasonable travel time, as agreed to by Harris County, between Consultant's facility and Harris County Project.**
- 7.2 Fees for services are inclusive of all tools, equipment and consumable supplies needed to perform the subject services, except for coring or as specifically noted in this Attachment.**
- 7.3 Fees for Services performed on an hourly basis shall be recorded to the nearest 1/4 (0.25) hour and will be compensated at the applicable rate.**
- 7.4 Overtime for field services is applicable for any hours worked before 6:00a.m. or after 6:00 p.m., Monday through Friday, and any hours worked on Saturday, Sunday or a holiday or over 8 hours per day. The overtime rate is 1.5 times the standard rate.**

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- 7.5 A minimum charge of four (4) hours for field technician, vehicle and equipment (where charged on an hourly rate) shall apply to each visit to the Project site or an authorized off-site location for sampling, observation, inspection, or testing as outlined in the Fee Schedule. The maximum Vehicle Charge shall be eight (8) hours at the rate outlined in the Fee Schedule.**
- 7.6 All hourly services invoiced shall be accompanied by the Company representative's signed time sheet, including the name and classification of the individual. Hourly services shall be invoiced to the nearest 1/4 hour.**
- 7.7 A minimum of 30-minute lunch shall be taken for continuous work of more than eight (8) hours on Harris County Projects.**
- 7.8 If a technician has departed for the Project, prior to receipt of a cancellation notice, Consultant shall be compensated at the applicable technician rate for the time required to and from the Consultant's facility plus the applicable Vehicle Charge. A two (2) hour minimum shall apply.**
- 7.9 If a technician / inspector is assigned to more than one Harris County Project in one day, his or her actual time on both Projects shall be charged (i.e. no minimum charge for both Projects), provided the total time exceeds four (4) hours. All hours invoiced must be supported by copies of Reports and a signed time-sheet or daily activity report sheets, which contains the name of the personnel and their certification, shall be signed by third-party inspector or Contractor if available.**
- 7.10 Consultant may be reimbursed by Harris County for services of a qualified subcontractor or consultant, authorized in advance by Harris County, at cost plus 10%.**
- 7.11 Reproduction charges shall be compensated at current commercial rates.**
- 7.12 All reimbursable expenses of Consultant shall be supported by documentation acceptable to Harris County. Reimbursables such as photographs, reproduction material, delivery, background checks, safety training / orientation, traffic control, parking, and badging, etc., shall be invoiced and reimbursed at cost + 10%. Receipts for reimbursable expenses must be submitted with the Consultant's invoice for the reimbursable expense.**
- 7.13 For preparation, input, reproduction, mail out/distribution and filing of Reports by Consultant's Administrative/Clerical Support Staff, Harris County will compensate the Consultant at the Administrative Assistant and Clerical Support rate for 1/2 (0.5) hour of time for each report issued. Administrative/Clerical Support Staff will be allowed only once for each report. This rate will apply only to the initial issuance of a report and does not apply to updated or revised reports which may include additional data on a report such as additional compressive strength tests on concrete cylinder and CSS molded specimen reports.**