

STATE OF TEXAS §
§
COUNTY OF FORT BEND §

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

(Engineering, Design, and Construction Phase Services – Project No. 23113)

This Agreement for Professional Engineering Services ("Agreement") is made and entered into by and between Fort Bend County, Texas ("County"), a political subdivision of the state of Texas, and R.G. Miller Engineers, Inc. ("Engineer"), a Texas corporation. County and Engineer may be referred to individually as a "Party" or collectively as the "Parties."

WHEREAS, Engineer is a professional engineering firm which provides professional engineering, design, and construction phase services in the Greater Houston Area; and

WHEREAS, County desires for Engineer to provide professional engineering, design, and construction phase services for the reconstruction of Rogers Road Segment 1 under Mobility Bond Project No. 23113; and

WHEREAS, Engineer represents that it is qualified and desires to perform such services for County; and

WHEREAS, pursuant to the requirements of Chapter 2254 of the Texas Government Code, County has determined that Engineer is the most highly qualified provider of such professional services and the Parties have negotiated a fair and reasonable price for the same; and

WHEREAS, this Agreement is not subject to competitive bidding requirements under Section 262.023 of the Texas Local Government Code because this Agreement is for professional engineering services and may not be competitively bid pursuant to Chapter 2254 of the Texas Government Code.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, the Parties do mutually agree as follows:

1. **Recitals.** The recitals set forth above are incorporated herein by reference and made a part of this Agreement.
2. **Scope of Services.** Engineer shall render services to County as provided in Engineer's Proposal dated August 26, 2024 attached hereto as "Exhibit A" and incorporated herein by reference (the "Services").

3. **Time for Performance.** Time for performance for the Services provided under this Agreement shall begin with Engineer's receipt of Notice to Proceed and shall end no later than December 31, 2028. Engineer shall complete such tasks described in the Scope of Services, within this time or within such additional time as may be extended by County.

4. **Compensation and Payment Terms.**

Engineer's fees for the Services shall be calculated at the rate(s) set forth in Exhibit "A" attached hereto. The Maximum Compensation to Engineer for the Services performed under this Agreement is Eight Hundred Forty Two Thousand Seven Hundred Eighty Nine and 00/100 Dollars (\$842,789.00). In no event shall the amount paid by County to Engineer under this Agreement exceed said Maximum Compensation without an approved change order.

- (a) Engineer understands and agrees that the Maximum Compensation stated is an all-inclusive amount and no additional fee, cost or reimbursed expense shall be added whatsoever to the fees stated in the attached Exhibit "A."
- (b) County will pay Engineer based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Engineer 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. Engineer shall submit invoices no more frequently than on a monthly basis. 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.
- (c) Accrual and payment of interest on any overdue payments assessed by Engineer, if any, shall be governed by Chapter 2251 of the Texas Government Code.
- (d) Engineer understands and agrees that County's obligation to make any payment(s) hereunder is dependent upon Engineer's completion of the Services in a timely, good, and professional manner and in accordance with the performance representations made in Section 25 of this Agreement. Therefore, County reserves the right to withhold payment pending verification of satisfactory work performed.

5. **Limit of Appropriation.** Engineer understands and agrees that the Maximum Compensation for the performance of the Services within the Scope of Services described in Section 2 above is \$842,789.00. In no event shall the amount paid by County under this Agreement exceed the Maximum Compensation without a County approved change order. Engineer 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 \$842,789.00 specifically allocated to fully discharge any and all liabilities County may incur under this Agreement. Engineer does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total Maximum Compensation that Engineer may become entitled to and the total maximum sum that County may become liable to pay Engineer under this Agreement shall not under any conditions, circumstances, or interpretations thereof exceed \$842,789.00.

6. **Non-appropriation.** Engineer understands and agrees that in the event no funds or insufficient funds are appropriated by the County under this Agreement, County shall immediately notify Engineer in writing of such occurrence and the Agreement shall thereafter terminate and be null and void on the last day of the fiscal period for which appropriations were received or made without penalty, liability or expense to the County. In no event shall said termination of this Agreement or County's failure to appropriate said funds be deemed a breach or default of this Agreement or create a debt by County in any amount(s) in excess of those previously funded.
7. **Taxes.** Engineer understands and agrees that County is a governmental entity and political subdivision of the state of Texas, and as such, is exempt from payment of any sales and use taxes. County shall furnish evidence of its tax-exempt status upon written request by Engineer.
8. **Insurance.** Prior to commencement of the Services, Engineer 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. Engineer shall provide certified copies of insurance endorsements and/or policies if requested by County. Engineer 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. Engineer shall obtain such insurance written on an Occurrence form 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:
 - (a) Workers Compensation in accordance with the laws of the State of Texas. Substitutes to genuine Workers' Compensation Insurance will not be allowed.
 - (b) 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.
 - (c) 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.

- (d) Business Automobile Liability coverage applying to owned, non-owned and hired automobiles with limits not less than \$1,000,000 each occurrence combined single limit for Bodily Injury and Property Damage combined.
- (e) Professional Liability insurance with limits not less than \$1,000,000.

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

If required coverage is written on a claims-made basis, Engineer warrants that any retroactive date applicable to coverage under the policy precedes the Effective Date of this Agreement 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 the work under this Agreement is completed.

Engineer shall not commence any portion of the work under this Agreement until it has obtained the insurance required herein and certificates of such insurance have been filed with and approved by County.

No cancellation of or changes to the certificates, or the policies, may be made without thirty (30) days prior, written notification to County.

Approval of the insurance by County shall not relieve or decrease the liability of the Engineer.

- 9. **Indemnity. PURSUANT TO SECTION 271.904 OF THE TEXAS LOCAL GOVERNMENT CODE, ENGINEER SHALL INDEMNIFY AND HOLD HARMLESS COUNTY, ITS OFFICIALS, OFFICERS, AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, LOSSES, DAMAGES, CAUSES OF ACTION, SUITS, LIABILITY, AND COSTS, INCLUDING THE REIMBURSEMENT OF REASONABLE ATTORNEY FEES, ARISING OUT OF OR RESULTING FROM AN ACT OF NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY ENGINEER OR ENGINEER'S AGENTS, EMPLOYEES, OR ANOTHER ENTITY OVER WHICH ENGINEER EXERCISES CONTROL. IN ADDITION, HALL FURTHER PROCURE AND MAINTAIN LIABILITY INSURANCE WITH COVERAGE AS PROVIDED IN SECTION 8 OF THIS AGREEMENT.**

ENGINEER SHALL TIMELY REPORT TO COUNTY ALL SUCH MATTERS ARISING UNDER THE INDEMNITY PROVISIONS ABOVE. UPON THE RECEIPT OF ANY CLAIM, DEMAND, SUIT, ACTION, PROCEEDING, LIEN, OR JUDGMENT, AND NO LATER THAN THE FIFTEENTH DAY OF EACH MONTH, ENGINEER SHALL PROVIDE COUNTY WITH A WRITTEN REPORT ON EACH MATTER, SETTING FORTH THE STATUS OF EACH MATTER, THE SCHEDULE OR PLANNED PROCEEDINGS WITH RESPECT TO EACH MATTER, AND THE COOPERATION OR ASSISTANCE, IF ANY, OF COUNTY REQUIRED BY ENGINEER IN THE DEFENSE OF EACH MATTER. IN THE EVENT OF ANY DISPUTE BETWEEN THE PARTIES AS TO WHETHER A CLAIM, DEMAND, SUIT, ACTION, PROCEEDING, LIEN, OR JUDGMENT APPEARS TO HAVE BEEN CAUSED BY OR APPEARS TO HAVE ARISEN OUT OF OR RESULTS FROM AN ACT OF NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY ENGINEER, OR ITS AGENTS, EMPLOYEES, OR ANOTHER ENTITY OVER WHICH ENGINEER EXERCISES CONTROL, ENGINEER SHALL, NEVERTHELESS, FULLY DEFEND SUCH CLAIM, DEMAND, SUIT, ACTION, PROCEEDING, LIEN, OR JUDGMENT UNTIL AND UNLESS THERE IS A DETERMINATION BY A COURT OF COMPETENT JURISDICTION THAT SAID ACTS AND/OR OMISSIONS OF ENGINEER ARE NOT AT ISSUE IN THE MATTER.

THE INDEMNITY PROVISIONS OF THIS SECTION SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT HOWEVER CAUSED, AND NO PAYMENT, PARTIAL PAYMENT, OR ISSUANCE OF CERTIFICATION OF COMPLETION OF THE SERVICES UNDER THIS AGREEMENT BY COUNTY, WHETHER IN WHOLE OR IN WHOLE OR IN PART, SHALL WAIVE OR RELEASE ANY OF THE PROVISIONS OF THIS SECTION.

10. **Public Information Act.** Engineer expressly acknowledges and agrees that County is a public entity and as such, is subject to the provisions of the Texas Public Information Act under Chapter 552 of the Texas Government Code. In no event shall County be liable to Engineer for release of information pursuant to Chapter 552 of the Texas Government Code or any other provision of law. Except to the extent required by law or as directed by the Texas Attorney General, County agrees to maintain the confidentiality of information provided by Engineer expressly marked as proprietary or confidential. County shall not be liable to Engineer for any disclosure of any proprietary or confidential information if such information is disclosed under Texas law or at the direction of the Texas Attorney General. Engineer further acknowledges and agrees that the terms and conditions of this Agreement are not proprietary or confidential information.
11. **Compliance with Laws.** Engineer shall comply with all federal, state, and local laws, statutes, ordinances, rules, regulations, and the 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. Engineer, in providing all services hereunder, further agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.

12. **Independent Contractor.** In the performance of work or services hereunder, Engineer 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 Engineer. Engineer 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.
13. **Use of Customer Name.** Engineer may use County's name without County's prior written consent only in Engineer's customer lists. Any other use of County's name by Engineer must have the prior written consent of County.
14. **County/County Data.** Nothing in this Agreement shall be construed to waive the requirements of Section 205.009 of the Texas Local Government Code.
15. **Personnel.** Engineer represents that it presently has, or is able to obtain adequate qualified personnel in its employment for the timely performance of the Services required under this Agreement and that Engineer shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Services when and as required and without delays.

All employees of Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee or agent of Engineer who, in County's opinion, is incompetent or by his conduct becomes detrimental to providing Services pursuant to this Agreement, shall, upon request of County, immediately be removed from association with the Services required under this Agreement.

When performing Services on-site at County's facilities, Engineer shall comply with, and will require that all Engineer's Personnel comply with, all applicable rules, regulations and known policies of County that are communicated to Engineer in writing, including security procedures concerning systems and data and remote access thereto, building security procedures, including the restriction of access by County to certain areas of its premises or systems for security reasons, and general health and safety practices and procedures.

16. **Confidential and Proprietary Information.** Engineer 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 Engineer 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 Engineer 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 Engineer) publicly known or is contained in

a publicly available document; (b) is rightfully in Engineer'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 Engineer who can be shown to have had no access to the Confidential Information.

Engineer agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Engineer 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. Engineer 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, Engineer shall advise County immediately in the event Engineer 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 Engineer will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Engineer against any such person. Engineer agrees that, except as directed by County, Engineer 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, Engineer will promptly turn over to County all documents, papers, and other matters in Engineer's possession which embody Confidential Information.

Engineer 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. Engineer 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.

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

17. **Ownership and Reuse of Documents.** All work product and data produced or developed under this Agreement by Engineer including any documents, data, notes, reports, research, graphic presentation materials, and any other related material (collectively, "Materials"), shall at all times be the property of County. County, at all times, shall have a right of access to the Materials. Engineer shall promptly furnish and deliver all such Materials to County on request. Notwithstanding the foregoing, Engineer shall bear no liability or responsibility for Materials that have been modified post-delivery to County or

used by County for a purpose other than that for which they were prepared under this Agreement.

18. **Inspection of Books and Records.** Engineer shall permit County, or any duly authorized agent of County, to inspect and examine the books, records, information, and documentation (collectively, "Records") of Engineer which relate to the Services provided under this Agreement for the purposes of making audits, examinations, excerpts, copies, and transcriptions. Engineer shall maintain all such Records in a readily available state and location, reasonably accessible to County or their authorized representatives. County's right to inspect such books and records shall survive the termination of this Agreement for a period of four (4) years, or until any litigation concerning any of the Services has been satisfactorily resolved, whichever occurs later. **ENGINEER SHALL NOT DESTROY OR DISCARD ANY RECORDS REASONABLY RELATED TO THIS AGREEMENT OR THE SERVICES, UNLESS THE TIME PERIOD FOR MAINTAINING THE SAME HAS EXPIRED.**

19. **Termination.**

- (a) Without Cause. County, in its sole discretion, and without prejudice to any other remedy to which it may be entitled to at law or in equity, may terminate this Agreement, in whole or in part, without cause, upon thirty (30) days prior written notice to Engineer.
- (b) With Cause. County, in its sole discretion, and without prejudice to any other remedy to which it may be entitled to at law or in equity, may terminate this Agreement, in whole or in part, with cause, for any of the following reasons, each of which shall constitute a material breach and "Default" of the Agreement:
- (1) Engineer fails to perform any portion of the Scope of Services within the timeframe(s) provided under this Agreement.
 - (2) Engineer fails to comply with County's documentation and reporting requirements, terms and requirements of this Agreement, or applicable federal, state, or local laws and regulations.
 - (3) Non-performance and suspension of the Agreement by Engineer that exceeds thirty (30) calendar days due to Force Majeure.
 - (4) Engineer fails to perform any obligation under this Agreement or as required by law, ordinance, or regulation and such failure creates an imminent threat to the public health and/or safety.
 - (5) Engineer otherwise 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.

- (6) County shall notify Engineer in writing of the alleged Default in reasonable detail ("Notice"). Upon receipt of said Notice, Engineer shall have opportunity to cure such Default within the time specified in the Notice by County. If Engineer fails to cure such Default within such time, and to the reasonable satisfaction of County, then County may elect to terminate this Agreement for cause.
 - (7) If, after termination of the Agreement by County for cause, it is determined for any reason whatsoever that Engineer was not in Default, or that the Default was excusable, the rights and obligations of the Parties hereunder shall be the same as if the termination had been issued by County without cause in accordance with this Agreement.
 - (c) Upon termination of this Agreement for any reason, Engineer shall cease all work and activity for the Services by the date specified by County and shall not incur any new obligations or perform any additional services for the work performed hereunder beyond the specified date. County shall compensate Engineer in accordance with Section 4, above, for such work provided by Engineer under this Agreement prior to its termination and which has not been previously presented for payment by Engineer to County.
 - (d) 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 Engineer.
20. **Force Majeure.** In the event either Party is rendered unable, wholly or in part, by Force Majeure to carry out any of its obligations under this Agreement, then, within a reasonable time after the occurrence of such event, but no later than ten (10) calendar days after, the Party whose obligations are so affected (the "Affected Party") thereby shall notify the other in writing stating the nature of the event and the anticipated duration. The Affected Party's obligations under this Agreement shall be suspended during the continuance of any delay or inability caused by the event, but for no longer period. The Affected Party shall further endeavor to remove or overcome such delay or inability as soon as is reasonably possible.

For purposes of this Agreement, Force Majeure includes, but is not limited to: acts of God, strikes, lockouts, or other industrial disturbances, acts of the public enemy, orders of any kind of the government of the United States of America or the State of Texas or any civil or military authority other than a Party to this Agreement, insurrections, riots,

epidemics, landslides, lightning, earthquakes, fires, hurricanes, severe storms, floods, washouts, drought, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, and any other inabilities of any Party, similar to those enumerated, which are not within the control of the Party claiming such inability, which such Party could not have avoided by the reasonable exercise of due diligence and care.

21. **Assignment.** Engineer not assign this Agreement to another party without the prior written consent of County.
22. **Successors and Assigns Bound.** County and Engineer each bind themselves and their successors and assigns to the other Party and to the successors and assigns of such other Party, with respect to all covenants of this Agreement.
23. **Publicity.** Contact with citizens of Fort Bend County, media outlets, or other governmental agencies shall be the sole responsibility of County. Under no circumstances, whatsoever, shall Engineer release any material or information developed or received during the performance of Services hereunder unless Engineer obtains the express written approval of County or is required to do so by law.
24. **Notice.** Any and all notices required or permitted under this Agreement shall be in writing and shall be mailed by certified mail, return receipt requested, or personally delivered to the following addresses:

If to County: Fort Bend County Engineering
Attn: County Engineer
301 Jackson Street, 4th Floor
Richmond, Texas 77469

And

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

If to Engineer: R.G. Miller Engineers, Inc.
Attn: Mark A. Gehringer, PE
1080 Eldridge Parkway, Ste 600
Houston, Texas 77077

Within five (5) business days of the Effective Date of this Agreement, each Party to this Agreement shall designate in writing to the other Party one person and one alternate

person to be that Party's designated spokesperson for communications between the Parties.

25. **Standard of Care.** Pursuant to Section 271.904 of the Texas Local Government Code, Engineer represents to County that Engineer has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession ("Professionals") practicing in the greater Houston metropolitan area. Engineer shall provide the Services to County with the same professional skill and care ordinarily provided by such Professionals under the same or similar circumstances and professional license and as expeditiously as is prudent considering the ordinary professional skill and care of a competent Professional.
26. **Travel Policy.** Mutually approved travel and mileage expenses incurred in the performance of the Services hereunder will be reimbursed to Engineer only to the extent that those costs do not exceed Fort Bend County travel reimbursement allowances. A copy of County's Travel Policy with those reimbursement limits shall be provided to Engineer upon request.
27. **Arbitration, Litigation Waiver, and Attorney Fees.** County does not agree to submit disputes arising out of this Agreement to binding arbitration nor does County agree to pay any and/or all attorney fees incurred by Engineer in any way associated with this Agreement. Therefore, any references in Engineer's Proposal to binding arbitration, waiver of a right to litigate a dispute, or payment of attorney fees are hereby deleted.
28. **No Waiver of Jury Trial.** County does not agree that all disputes (including any claims or counterclaims) arising from or related to this Agreement shall be resolved without a jury. Therefore, any references in Engineer's Proposal to County's waiver of jury trial are hereby deleted.
29. **Limitations.** Limitations for the right to bring an action, regardless of form, shall be governed by the applicable laws of the State of Texas, and any provisions to the contrary in Engineer's Proposal are hereby deleted.
30. **Indemnification by County. ENGINEER UNDERSTANDS AND AGREES THAT UNDER THE TEXAS CONSTITUTION AND THE LAWS OF THE STATE OF TEXAS, COUNTY CANNOT ENTER INTO AN AGREEMENT WHEREBY COUNTY AGREES TO INDEMNIFY OR HOLD HARMLESS ANOTHER PARTY. THEREFORE, ANY AND ALL REFERENCES IN ENGINEER'S PROPOSAL TO COUNTY DEFENDING, INDEMNIFYING, OR HOLDING OR SAVING HARMLESS ENGINEER OR ANY OTHER PARTY, FOR ANY REASON WHATSOEVER, ARE HEREBY DELETED.**

31. **Entire Agreement and Modification.** This Agreement constitutes the entire Agreement between the Parties and supersedes all previous agreements, written or oral, pertaining to the subject matter of this Agreement. Any amendment to this Agreement must be in writing and signed by each Party to come into full force and effect. **IT IS ACKNOWLEDGED BY ENGINEER THAT NO OFFICER, AGENT, EMPLOYEE, OR REPRESENTATIVE OF COUNTY HAS ANY AUTHORITY TO CHANGE THE TERMS OF THIS AGREEMENT OR ANY ATTACHED EXHIBITS HERETO UNLESS EXPRESSLY AUTHORIZED BY THE FORT BEND COUNTY COMMISSIONERS COURT.**
32. **Conflict.** In the event there is a conflict among the terms of this document entitled “Agreement for Professional Engineering Services” and the terms of Engineer’s Proposal or any other exhibit attached hereto, the terms of this document shall prevail with regard to the conflict.
33. **Understanding Fair Construction.** By execution of this Agreement, the Parties acknowledge that they have read and understood each provision, term, and obligation contained herein. This Agreement, although drawn by one party, shall be construed fairly and reasonably and not more strictly against the drafting Party than the non-drafting Party.
34. **Severability.** In case 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 provision hereof and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.
35. **No Waiver of Immunity.** Neither the execution of this Agreement nor any other conduct of either Party relating to this Agreement shall be considered a waiver or surrender by County of its governmental powers or immunity under the Texas Constitution or the laws of the state of Texas.
36. **Applicable Law and Venue.** This Agreement shall be construed according to the laws of the state of Texas. Venue for any claim arising out of or relating to the subject matter of this Agreement shall lie in a court of competent jurisdiction of Fort Bend County, Texas.
37. **Certain State Law Requirements for Contracts** The contents of this Section are required by Texas law and are included by County regardless of content For purposes of Sections 2252.152, 2271.002, and 2274.002, Texas Government Code, as amended, Engineer hereby verifies that Engineer and any parent company, wholly owned subsidiary, majority-owned subsidiary, and affiliate:
- (a) Unless affirmatively declared by the United States government to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions

regime relating to a foreign terrorist organization, Engineer is not identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 806.051, 807.051, or 2252.153 of the Texas Government Code.

- (b) If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not boycott Israel and is authorized to agree in such contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in § 808.001 of the Texas Government Code.
 - (c) If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the term of such contracts. "Boycott energy company" has the meaning provided in § 809.001 of the Texas Government Code.
 - (d) If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in § 2274.001(3) of the Texas Government Code. "Firearm entity" and "firearm trade association" have the meanings provided in § 2274.001(6) and (7) of the Texas Government Code.
38. **Human Trafficking.** BY ACCEPTANCE OF THIS AGREEMENT, ENGINEER ACKNOWLEDGES THAT FORT BEND 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.
39. **Captions.** The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of the Agreement.
40. **Electronic and Digital Signatures.** The Parties to this Agreement agree that any electronic and/or digital signatures of the Parties included in this Agreement are intended to authenticate this writing and shall have the same force and effect as the use of manual signatures.
41. **Certification.** By his or her signature below, each signatory individual certifies that he or she is the properly authorized person or officer of the applicable Party hereto and has the requisite authority necessary to execute this Agreement on behalf of such Party, and each Party hereby certifies to the other that it has obtained the appropriate approvals or authorizations from its governing body as required by law.

IN WITNESS WHEREOF, and intending to be legally bound, County and Engineer hereto have executed this Agreement to be effective on the date signed by the last Party hereto.

FORT BEND COUNTY, TEXAS

KP George, County Judge

Date

ATTEST:

Laura Richard, County Clerk

R.G. MILLER ENGINEERS, INC.
a Texas corporation




Authorized Agent – Signature

Mark A. Gehring, PE
Authorized Agent- Printed Name

President
Title

10/15/2024
Date

APPROVED:



J. Stacy Slawinski, County Engineer

AUDITOR'S CERTIFICATE

I hereby certify that funds in the amount of \$_____ are available to pay the obligation of Fort Bend County, Texas within the foregoing Agreement.

Robert Ed Sturdivant, County Auditor

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EXHIBIT A

(Engineer's Proposal Follows Behind)



August 26, 2024

Zach Jacobson, P.E. ENV SP
Project Manager
Binkley & Barfield | DCCM
1710 Seamist Drive
Houston, Texas 77008

Ref: Rogers Road Segment 1
Project No.: 23113
Study, Design, and Construction Phase Services

Dear Mr. Jacobson:

R. G. Miller Engineering (RGM) is respectfully submitting this proposal for Study, Design, and Construction Phase Services for the project identified above. The table below summarizes the proposed fees.

LEVEL OF EFFORT (LOE) FEE ESTIMATE FOR STUDY, DESIGN & CONSTRUCTION PHASE SERVICES					
PROJECT TITLE: Rogers Road Segment 1					
Revision No.: 4					August 26, 2024
BASIC SERVICES					
Task	Subtask	Description	Fee Type	Fee	Task Total Fee
100		Study Phase	LS	\$ 98,860.00	\$ 98,860.00
101		Drainage Analysis	LS	\$ 85,531.00	\$ 85,531.00
200		Design Phase	LS	\$ 155,745.00	\$ 155,745.00
201		Bridge Design			\$ 102,690.00
	001	Design Services	LS	\$ 102,690.00	
202		Survey Services			\$ 64,270.00
	001	Survey Control	LS	\$ 10,670.00	
	002	Existing Right of Way Mapping	LS	\$ 17,600.00	
	003	Topographic Surveying (Roadway)	LS	\$ 29,665.00	
	004	Project Control for Construction	LS	\$ 3,805.00	
	005	Soil Boring Locations	LS	\$ 2,530.00	
203		Geotechnical Services			\$ 82,090.00
	001	Geotechnical Investigations (Roadway)	LS	\$ 35,872.00	
	002	Geotechnical Investigations (Bridge)	LS	\$ 46,218.00	
TOTAL-BASIC SERVICES				\$	589,186.00
OPTIONAL ADDITIONAL SERVICES					
Task	Subtask	Description	Fee Type	Fee	Task Total Fee
300		Construction Phase	HR	\$ 42,235.00	\$ 42,235.00
400		Optional Additional Services			\$ 211,368.00
	001	Parcel Surveys (24 parcels @ \$2,500.00/Parcel)	EA	\$ 60,000.00	
	002	Detention Pond Survey	LS	\$ 9,935.00	
	003	Level A SUE	LS	\$ 13,930.00	
	004	Geotechnical Investigations (Detention Basin(s))	LS	\$ 58,764.00	
	005	Site Clearing for Geotechnical Investigations	LS	\$ 10,800.00	
	006	Bridge Phasing Design	LS	\$ 16,520.00	
	007	Bridge Construction Phase Services	HR	\$ 17,480.00	
	008	Brookshire Creek LOMR	LS	\$ 23,939.00	
TOTAL-OPTIONAL ADDITIONAL SERVICES				\$	253,603.00
GRAND TOTAL				\$	842,789.00

r. g. miller
engineers

Please find the following attached:

Exhibit A – General Scope of Services
Exhibit B – Project Schedule
Attachment A – Detailed Level of Effort
Attachment B – Subconsultant Proposals

If you have any questions or require further information regarding the above, please do not hesitate to contact me.

Sincerely,

R. G. Miller Engineers, Inc.



Mark Rotz, P.E.
Project Manager, Public Works Department

MR/KI

P 05236/A

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EXHIBIT A
SCOPE OF WORK

A. GENERAL DESCRIPTION

It is our understanding that the scope of work is to provide Preliminary Engineering, Final Design, and Construction Phase Services to develop documents for the reconstruction of Rodgers Road Segment 1. The corridor is approximately 4,050 linear feet. The proposed roadway will consist of a continuous 2-lane concrete roadway including roadside ditch drainage system. The project will also include detention basin(s) to provide no impact to Brookshire Creek and provide mitigation for the proposed improvements. The design process will be a collaborative effort between the Design Consultant (RGM), the Program Manager (BBI), and the County Staff (FBC).

B. GENERAL REQUIREMENTS

1. Design Criteria
 - a. The Engineer shall prepare all work in accordance with the latest version of Fort Bend County (FBC) Engineering Design Manual and applicable FBC design standards, details, and specifications and in accordance with the latest requirements of the City or MUD.
 - b. Produce roadway plans including typical sections, specifications, and estimates (PS&E) and prepare construction bid documents.
 - c. Submit 30% plans during the preliminary design phase, as well as 70%, and 95% PS&E packages for review by the Program Manager and FBC Engineering. The final 100% set will incorporate any revisions from FBC comments on the 95% set.
 - d. Provide project planning and control to include quality management.
 - e. Provide an accurate, complete and constructible set of contract documents.
 - f. FBC will have the ultimate authority for determining what constitutes an accurate, complete and constructible set of contract documents.

C. PROJECT MANAGEMENT

1. Project Coordination
 - a. Provide general coordination with the Project team members. Report and coordinate with FBC on any design issues and requests for information.
 - b. Internal administration of the project files. At the completion of the work, the project files will be shipped to the FBC, if requested.

2. Invoicing & Progress Reports

- a. Prepare and submit monthly progress reports and invoices to BBI for review and approval. The invoices will include the progress report and invoice. The progress report will list outstanding issues that need resolution, and progress of the tasks and estimated completion dates for the work.

3. Project Scheduling

- a. Prepare an overall project design schedule detailing the progression of the work. This schedule will include review dates by BBI, FBC, and other necessary entities, submittal dates for deliverables, and estimated time frame to complete the work. The schedule will be updated monthly and included in the progress report. Changes or adjustments in the schedule caused by delays due to unforeseen task difficulties or lengthy review times will be shown and reported to BBI and FBC.

4. Progress Meetings

- a. Attend coordination and interim progress review meetings Bi-weekly or as necessary, to be scheduled on an as-needed basis. Prepare and distribute meeting minutes within five working days after the meeting.

D. PRELIMINARY DESIGN

The primary goals are to (1) establish a typical cross section and cross sections in non-standard areas, (2) determine drainage system needs (drainage report and/or preliminary roadway drainage design), (3) positively determine right-of-way (ROW) acquisition needs, (4) determine potential conflicts with existing facilities, (5) identify critical path items, (6) identify problem areas and potential resolution(s), (7) determine permit and regulatory requirements, (8) prepare a reasonable construction cost estimate, and (9) prepare a 30 percent plan set consisting of all existing features show in plan and profile, and proposed improvements in plan only with minor annotation.

1. Collect Existing Data

- a. Gather and review as-built drawings for Rogers Road and adjacent areas and roadways, if available.
- b. Collect and review as-built drawings for channels, ditches, drainage systems, detention basins, and other related systems in the project area.
- c. Collect and review property boundaries, jurisdictional boundaries, and ROW boundary information.

2. Structural (See attached scope from IEA)
 - a. Provide bridge layout and detailed design in accordance with the latest version of applicable procedures, specifications, manuals, guidelines, standard drawings, and standard specifications.
3. Geotechnical (See attached scope from Associated Testing Laboratories)
 - a. Perform soil borings along the project area, gather and analysis the field and laboratory geotechnical information and data, and prepare a written report presenting the subsurface conditions found along the project alignments, with geotechnical recommendations for the design and construction of the proposed paving and widening, bridge reconstruction at Brookshire Creek, and proposed detention pond(s).
4. Surveying (See attached scope from Weisser Engineering)
 - a. Establish horizontal and vertical survey control for each site shall be referenced to the nearest Fort Bend County Survey Control Monument, or NGS if no County Monuments are established.
 - b. Survey Control Points will be established at 1,000-foot maximum intervals and tied to the calculated alignment for each site.
 - c. Deliver signed and sealed survey control maps per FBC standards with detail sketches in PDF format and CAD files.
 - d. Perform abstract survey; obtain deeds or record, and plats for the right-of-way, streets intersecting and tracts of land adjoining the project limits.
 - e. Establish the existing right-of-way and boundary lines adjoining the project limits.
 - f. Deliver signed and sealed existing Right-of-Way sheets in PDF format per FBC standards and CAD files.
 - g. Obtain cross sections at 100-foot intervals with grade breaks. The cross sections shall extend 20 feet past the proposed right-of-way on existing roads and cover a 100-foot swath in areas with no existing roadway.
 - h. The existing bridge will be detailed and cross section on the creek will be obtained, at a minimum of, at each face of bridge, at each right-of-way line, and at 100 feet upstream and downstream.
 - i. Coordinate with the pipeline companies, MUDs, HOAs, the County, and private utility agencies to obtain locations of available existing utilities and depths of existing pipelines.
 - j. Prepare existing Signed and Sealed topographic survey map of the project to be delivered in PDF per FBC standards and CAD files.
 - k. Upon authorization, recover or reestablish project control referenced to the project baseline for construction.
 - l. Prepare metes and bounds descriptions and parcel plats in accordance with FBC guidelines for property acquisition and add parcels to the existing right-of-way maps.

m. Provide boundary and topographic survey of the detention pond(s).

5. Utility Coordination

- a. Utilities will be researched and located in the field to determine the existence and location of underground utilities (pipelines, duct banks, etc.). RGME shall identify and coordinate with all utility owners for relocations required.
- b. Perform records research and field visits to determine the presence of underground or overhead private or public utilities. Collect as-built plans and/or maps from all utilities having facilities within the project limits.
- c. Send records requests to utility companies and obtain I.D. numbers (CenterPoint and AT&T)
- d. Coordinate with FBC and adjacent MUDs during the identification of utility conflicts.
- e. Depict utilities to a reasonable degree of accuracy on the plan and profile drawings.
- f. Prepare a conflict table during the Preliminary Design phase to highlight conflicts between existing utilities and proposed improvements, to be updated during the Final Design phase as required.
- g. Develop designs to avoid and/or minimize conflicts with existing and proposed utilities.
- h. Send roadway design plans to all utility companies. Coordinate relocations or adjustments with utility companies.

6. Drainage Analysis Tasks

- a. Provide a roadway impact drainage study that will include the following:
 - i. Production of a localized and exploratory preliminary HEC-RAS 2D rain on mesh (ROM) to characterize offsite drainage areas, flow patterns and inform drainage area delineation.
 - ii. Development of an existing conditions H&H model utilizing HEC-HMS and HEC-RAS 1D. Atlas 14 rainfall data will be used to calculate existing runoff for the 100-year, 25-year and 10-year rainfall events.
 - iii. Development of a proposed conditions H&H model utilizing HEC-HMS and HEC-RAS 1D. Atlas 14 rainfall data will be used to calculate proposed runoff for the 100-year, 25-year and 10-year rainfall events. The model will quantify impacts to receiving streams.
 - iv. Coordination with RGME Public Works to develop site detention options with H&H team.
 - v. Specification of detention volume requirement to mitigate impacts from the roadway reconstruction.
 - vi. Development of schematic level detention pond site layout (if applicable), flow lines and ROW requirements, up to three (3) options.
 - vii. Development of drainage report and corresponding attachments.
 - viii. Coordination of review process by Fort Bend County.

- ix. Project Management and internal project controls, resource allocation, schedule and scope monitoring.
- b. Data Collection
 - i. Gather and review available information on the subject tract and surrounding area, including information from Fort Bend County and Fort Bend County Drainage district. Such as, but not limited to, LiDAR, as-builts and FEMA effective data.
 - ii. Perform one (1) site visit.
- c. Define Existing Conditions
 - i. Develop a localized and exploratory preliminary HEC-RAS 2D rain-on-mesh (ROM) to characterize onsite and contributing offsite drainage areas, flow patterns and inform drainage area delineation.
 - ii. Delineate existing onsite and off-site contributing drainage areas. Develop hydrologic parameters for these areas based on FBCDD criteria.
- d. Develop Existing Conditions Hydrologic Model
 - i. Develop a localized existing conditions hydrologic model in HEC-HMS for the project site and contributing off-site drainage areas. Compute pre-project conditions flow rates and runoff hydrographs.
- e. Define Proposed Conditions
 - i. Delineate the proposed onsite drainage areas and contributing off-site drainage areas based on the proposed roadway plan. Update hydrologic parameters for the proposed drainage areas.
- f. Develop Proposed Conditions Hydrologic Model
 - i. Develop a localized proposed conditions hydrologic model in HEC-HMS for the project site and contributing off-site drainage areas. Compute post-project conditions flow rates and runoff hydrographs.
- g. Estimate Detention Requirement
 - i. Compute the post-project flow rates and runoff hydrographs without detention.
 - ii. Compare pre-project and post-project hydrographs at the project outfalls to estimate the minimum detention storage volume requirement.
- h. Develop Drainage Plan
 - i. Develop schematic level preliminary design of roadside ditch location, flow lines.
 - ii. Develop a preliminary pond configuration (or obtain a draft pond grading plan from RMGE Public Works) and discharge structure design for the necessary detention. Generate elevation-storage-discharge data for the facilities.
 - iii. Compute proposed conditions flow rates that reflect the increased impervious cover within the right-of-way and detention. Compare existing, proposed, and detention conditions flow rates at the outfall(s).

- i. Finalize Impact Mitigation Design
 - i. Hold one (1) meeting with RGME Public Works to review up to three (3) site detention options with H&H team.
 - ii. Revise the configuration for the detention basin, roadway drainage system, and other design parameters to eliminate any adverse impacts on receiving streams.
- j. Prepare Drainage Memorandum
 - i. Prepare a letter report with sufficient text, exhibits, and technical appendices to completely illustrate the results of the investigation.
 - ii. The memorandum will include a schematic-level design of the roadside ditch drainage system flowlines and detention pond layout, location and volumetric requirements.
 - iii. Prepare initial submission package for Fort Bend County.
- k. QA/QC
 - i. Perform QA/QC checks after each task inclusive, but not limited to, H&H models, exhibits, calculations, and data collection.
 - ii. Perform QA/QC check of final deliverables.
- l. Comment Response
 - i. Generate comment responses for up to two (2) rounds of reviews for Fort Bend County.
- m. Project Management
 - i. Attend up to three (3) in-person and/or virtual meetings with coordinating agencies.
 - ii. Develop monthly invoice and project progress report for RG Miller Public Works team.
 - iii. Attend monthly coordination call with Public Works to update on production progress.
- n. Hydraulic Analysis Tasks
 - i. Data Collection
 - 1) Collect and review available information from FEMA including the effective hydraulic model from FEMA's MSC and any TxDOT work on the adjacent, existing bridge
 - ii. Develop Hydraulic Model (Existing and Proposed)
 - 2) Develop a base (existing conditions) hydraulic model of the study area using the HEC-RAS software package. Use field survey data (by others), LiDAR elevation data, and information obtained during field visits to develop the hydraulic modeling data.
 - 3) Incorporate the proposed bridge dimensions and elevations to create the proposed conditions hydraulic model.
 - 4) Compute proposed conditions hydraulic model for the 10-year, 25-year, 100-year, and 500-year design storms that reflect the presence of the proposed bridge. Check for any increases in computed water surface elevation levels.
 - 5) Add results of the hydraulic analysis to the drainage report.
- o. Brookshire Creek LOMR

- i. Update Effective H&H Models
 - 6) Utilize FBCDD current effective HEC-RAS 2D model and HEC-HMS as current FEMA effective data. Update the models based on proposed roadway discharges into Brookshire Creek and Bessies Creek.
 - ii. Update FIRM Panels
 - 7) Updated the affected FIRM(s) panels. Include revised floodplain boundaries and tie-in points. Generate GIS shapefile of tie-in points and proposed floodplain.
 - iii. Prepare LOMR Submittal
 - 8) Including cover letter, exhibits, attachments, and forms.
 - iv. QA/QC
 - 9) Perform QA/QC checks after each task inclusive, but not limited to, H&H models, exhibits, calculations, and data collection.
 - 10) Perform QA/QC check of final deliverables.
 - v. Project Management
 - 11) Coordinate the review of the LOMR with FBCDD, Fort Bend County and FEMA.
 - vi. Comment Response
 - 12) Address review comments and resubmit up to two (2) times.
7. Preliminary Engineering Report
- p. Prepare and submit a Preliminary Engineering Report (PER) which will be in accordance with the FBC Engineering Design Manual guidelines. The PER will include the following at a minimum:
 - vii. Project location and scope
 - viii. Existing conditions
 - ix. Existing utilities, including potential conflicts
 - x. Proposed roadway design, highlighting any deviation from applicable design criteria
 - xi. Existing and proposed drainage and detention
 - xii. Proposed Right-of-Way
 - xiii. Geotechnical Investigation
 - xiv. Environmental Investigation (to be provided from FBC)
 - xv. Permit and Regulatory requirements
 - xvi. Cost Estimate
 - xvii. Appendices

- 13) PER review meeting minutes
- 14) Project location map
- 15) Alignment exhibit showing ultimate configuration
- 16) FEMA Flood Insurance Rate Maps (FIRM)
- 17) Preliminary drainage area map and calculations taking into account the ultimate roadway configuration
- 18) Sight triangle exhibit
- 19) Right-of-way exhibit
- 20) Cost Estimate
- 21) Utilities
 - a) Utility Conflict table
 - b) Correspondence with utility companies
- 22) 30 percent drawings.
 - a) Typical sections
 - b) Plan and profile sheets consisting of all existing features shown in the plan and profile, as well as proposed improvements in plan only with minor annotation.
 - c) Traffic Control Plan
 - d) Bridge Layout
- 23) Reports
 - a) Drainage Study
 - b) Geotechnical Report
 - c) Environmental Report (to be provided by FBC)

E. FINAL DESIGN

Provide detailed construction plans, specifications, final design calculations and estimates as necessary for the improvements of Rogers Road per the results of the Preliminary Engineering Phase and approved by FBC.

1. Prepare and submit a 70%, 95%, and 100% PS&E submittals for review by BBI and FBC. The submittals will provide the following at a minimum:
 - a. 70% Submittal
 - i. A digital copy of the drawings, specifications, and estimate to be submitted to the Program Manager
 - ii. Cover Sheet with a 70 percent interim seal
 - iii. Index of sheets
 - iv. General notes
 - v. Typical and non-standard cross sections
 - vi. Project layout sheet

- vii. Survey control
- viii. Right-of-way (existing and proposed)
- ix. Horizontal alignment data
- x. Plan and Profile sheets (detailed callouts not required at the 70 percent)
- xi. Bridge Layout and details
- xii. Drainage area map with hydraulic calculations
- xiii. Traffic control plan
- xiv. Signing and striping plan
- xv. Storm water pollution prevention plan
- xvi. Cross sections (100-foot intervals with earthwork calculations)
- xvii. Specification table of contents
- xviii. Construction cost estimate
- xix. Bid form
- xx. KMZ file of current design with proposed right-of-way
- xxi. 70 percent review checklist
- b. 95% Submittal
 - i. A digital copy of the drawings, specifications, and estimate to be submitted to the Program Manager
 - ii. Cover sheet with a 95 percent interim seal and include all of the 70 percent requirements plus the following:
 - iii. Verify earthwork quantities with cross sections at 100-foot intervals
 - iv. Standard construction details
 - v. Project manual (bid form, specification table of contents, any special specifications or conditions; contract documents excluded)
 - vi. KMZ file of current design and proposed right-of-way
 - vii. Responses to the 70 percent comments
 - viii. 95 percent review checklist
- c. 100% Submittal
 - i. A digital copy of the drawings, specifications, and estimate to be submitted to the Program Manager.
 - ii. Plans signed and seal by a professional engineer and include all of the 95% requirements plus the following:
 - iii. Project manual
 - iv. Construction cost estimate
 - v. KMZ file of current design with proposed right-of-way
 - vi. Responses to 95 percent comments

- vii. Recommended maximum number of calendar days for construction
 - viii. 100 percent review checklist
- 2. Quality Control
 - a. All documents are to be internally reviewed in accordance with the documented Quality Assurance/Quality Control (QA/QC) process prior to submittal to the Program Manager. FBC reserves the right to audit the QA/QC documents to ensure the process has been followed at each submittal stage.
- 3. Design Completion
 - a. All items will be submitted to the Program Manager. Final design efforts will be considered complete when FBC has approved the documents as evidence by the FBC Engineer's signature on the cover sheet.

F. BID PHASE

Upon completion of final design services, Fort Bend County will determine an advertisement and bid opening schedule. All administrative project manual documents (cover page, Notice to Bidders, etc.) will be prepared by Fort Bend County Purchasing Department and provided to the Program Manager and Design Consultant in PDF format.

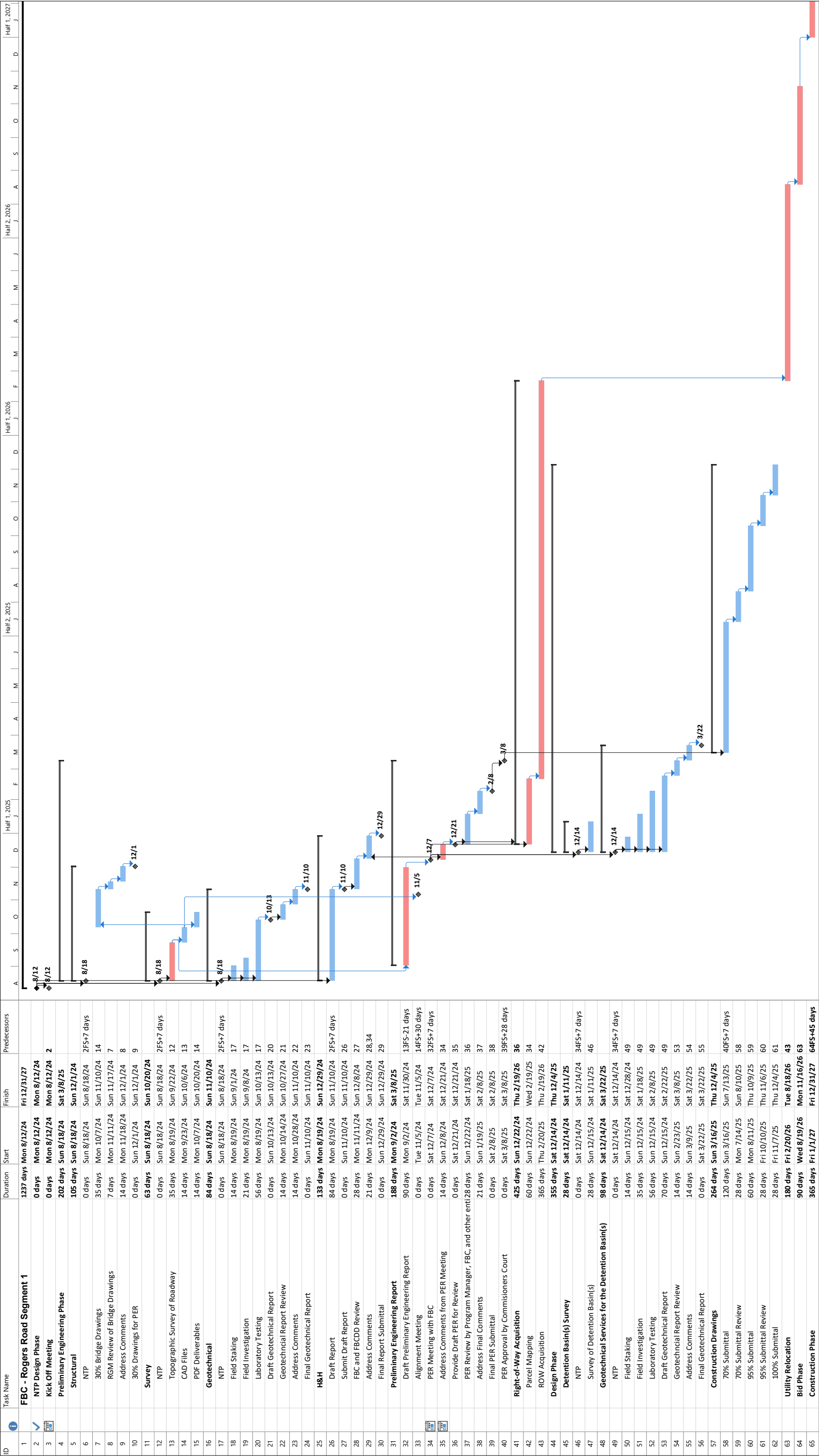
1. Prepare project manual file in PDF format consisting of:
 - a. The bid form
 - b. A sealed and signed specification table of contents
 - c. Applicable specifications and other design documents
2. Prepare the bid form in excel format. Review that the formulas are provided so the spreadsheet will calculate the totals for the vendors.
3. Attend a pre-bid meeting at the FBC Purchasing Office.
4. Answer questions, as well as any other required changes, to be included in an addendum if necessary.
5. Review the bid tabulation from the Program Manager.

G. CONSTRUCTION PHASE

1. Attend a pre-construction meeting with FBC staff, Program Manager, Construction Manager, general contractor, and construction materials testing contractor. The Program Manager is to inform on how many drawing plan sets and project manuals are required to be provided at the pre-construction meeting.
2. Review contractor submittals and responding to Requests for Information (RFIs)
3. Attend progress meetings and field visits at the request by Fort Bend County.
4. Participate in the substantial completion walkthrough.

5. Prepare record drawings based on contractor as-built markups. The sheets that have deviations from the original plans should have clouds around the changes and should be signed and dated by the Engineer. All sheets should be stamped Record Drawings, including the cover sheet. The cover sheet should be signed, sealed, dated and include the following statement: "This project was constructed in general conformance with the plans, and elevations on these drawings represent what was constructed within engineering tolerances." Provide FBC one set of the record drawings in pdf format on a CD/DVD with each sheet stamped "Record Drawings." The CD/DVD will include electronic files (AutoCAD or Microstation) as well as a KMZ file showing the existing/proposed right-of-way and proposed improvements. The information contained on the CD/DVD will be uploaded to the appropriate folder within Masterworks.

Rogers Road Saiment 1
Exhibit B - Schedule



PROJECT NAME: ROGERS RD SEGMENT 1
CONTRACT NUMBER:
DATE: 07/23/2024
STUDY PHASE SERVICE

Description/Task	Department Manager	Sr. Project Manager I	Project Manager	Assitant Project Manager	Engineer-In-Training III	Designer	CADD Operator	Admin Assistant	Subtotal (hrs)	Hours / Sheet	Total Fee
	Hourly Billing Rate										
100. STUDY PHASE SERVICES											
100.A Project Management											
i. Kickoff Meeting				3	3				1	10	N/A
ii. Send out ROE's to Adjacent Landowners (Approx. 25 Parcels)			3	6	18				24	51	N/A
iii. Topo Survey Field Verification Meeting			9	9	9					27	N/A
iv. Alignment/ROW Meeting with FBC (3 Alternatives)	1		6	6	6			5		18	N/A
v. Develop schedule to identify critical path items			3	9						12	N/A
vi. Progress Meeting (Bi-Weekly over 3 Month, 6-30 Mins Meetings)	2		6	6						14	N/A
100.A SUBTOTAL Project Management Hours	3	0	30	39	30	0	5	25	132		
100.A SUBTOTAL Project Management Fee	\$840.00	\$0.00	\$6,450.00	\$6,825.00	\$4,500.00	\$0.00	\$475.00	\$2,500.00			\$21,590.00
100.B Utility Coordination											
i. Utility Coordination Meeting (Est. 2 Meetings)			4	4	4					12	N/A
ii. Private Utilities			4	10	10		15	5	5	44	N/A
iii. Municipal Utility District (MUD 216)	1		4	4			10			19	N/A
iv. Fort Bend County Drainage District	1		2	3	5		5			16	N/A
v. Site Visits	1		5	10	10					26	N/A
vi. Prepare Utility Conflict Table			1	4	10					15	N/A
100.B SUBTOTAL Utility Coordination Hours	3	0	20	35	39	0	30	5	132		
100.B SUBTOTAL Utility Coordination Fee	\$840.00	\$0.00	\$4,300.00	\$6,125.00	\$5,850.00	\$0.00	\$2,850.00	\$500.00			\$20,465.00
100.C Preliminary Engineering Report											
i. Evaluation of existing site conditions											
ii. Coordination with subconsultants and review reports (H&H and Geotech)			2	6	10					18	N/A
iii. Proposed Alternatives and Analysis	1		2	6	10					18	N/A
iv. Findings and Recommendations	1		2	9	12					24	N/A
v. Prepare Cost Estimate	1		2	6	11					24	N/A
vi. Final Report	2		2	6	15					20	N/A
100.C SUBTOTAL Preliminary Engineering Report Hours	5	0	12	42	70	0	0	0	129	25	N/A
100.C SUBTOTAL Preliminary Engineering Report Fee	\$1,400.00	\$0.00	\$2,580.00	\$7,350.00	\$10,500.00	\$0.00	\$0.00	\$0.00			\$21,830.00
100.D Design and Deliverables											
i. Front End Drawings											
a. Project Title Sheet and Project Location Map (est. 2 sheets)				1	1		4		4	6	3
b. Index of Sheets (est. 1 sheet)			1	2					4	7	3.5
e. Project Overall Layout (est. 1 sheet)			2	4	4				5	15	15
f. Typical Sections (est. 2 sheets)			2	4	4				5	15	7.5
ii. Design, Plan & Profile											
a. Drainage and Roadway Plan & Profile (est. 8 sheets)			3	9	12		24		24	48	6
b. Detention Layout (est. 2 sheets)			2	4	8		10		10	24	12
iii. Traffic Control Plan (TCP)											
a. Coordinate with Bridge Engineer Regarding Bridge Construction Phases			3	3						6	N/A
b. Traffic Control Plan Sheets (est. 4 sheets)			2	3	6		10		10	21	5.25
iv. Proposed ROW Taking Assessment											
a. Proposed Right-of-Way Exhibit (est. 4 sheets)			2	4	8				12	26	6.5
b. Proposed Roll Plot Layout			1	2	3				6	12	N/A
c. Sight Triangle Evaluation Exhibit (est. 4 sheets)			2	5	10				15	32	8
v. Internal QA/QC of Review of Summary Report and Exhibits	1		2	5	8				10	26	N/A
vi. PER meeting with FBC and preparation				6	6					12	N/A
100.D SUBTOTAL Design and Deliverables Hours	1	0	28	52	64	0	105	0	250		
100.D SUBTOTAL Design and Deliverables Fee	\$280.00	\$0.00	\$6,020.00	\$9,100.00	\$9,600.00	\$0.00	\$9,975.00	\$0.00			\$34,975.00
TOTAL Study Phase Service Hours											
TOTAL Study Phase Service Fee											
	12	0	90	168	203	0	140	30	643		\$98,860.00
	\$3,360.00	\$0.00	\$19,350.00	\$29,400.00	\$30,450.00	\$0.00	\$13,300.00	\$3,000.00			

PROJECT NAME: ROGERS RD SEGMENT 1
CONTRACT NUMBER:
DATE: 07/23/2024
DRAINAGE ANALYSIS SERVICES

Description/Task		Sr. Project Manager	Project Manager	Senior Hydrologist	Project Engineer	Associate Engineer	GIS Specialist	Admin Assistant	Subtotal (hrs)	Total Fee
101. DRAINAGE ANALYSIS SERVICES		\$260.00	\$215.00	\$208.00	\$155.00	\$105.00	\$148.00	\$97.00		
101.A Drainage Analysis										
Hourly Billing Rate										
i. Data Collection		2	10			8	10		30	\$4,990.00
ii. Define Existing Conditions		2	15			12			29	\$5,005.00
iii. Develop Existing Hydrological Model		2	20			10			32	\$5,870.00
iv. Define Proposed Conditions		2	20			10			32	\$5,870.00
v. Develop Proposed Hydrologic Model		2	20			10			32	\$5,870.00
vi. Estimate Detention Requirement		2	10			10			22	\$3,720.00
vii. Develop Drainage Plan		2	35			18			55	\$9,935.00
viii. Finalize Impact Mitigation Design		2	35			18		4	59	\$10,323.00
ix. Prepare Drainage Memorandum		2	2			16			20	\$2,630.00
x. QA/QC		8	8			8			24	\$4,640.00
xi. Project Management		12	10			4			26	\$5,690.00
101.B Hydraulic Analysis										
i. Data Collection		6	20			10			36	\$6,910.00
ii. Develop Hydraulic Model		6	35			25	16		82	\$14,078.00
101.C Brookshire Creek LOMR (Optional Additional)										
i. Update Effective H&H Models		1	30			20			51	\$8,810.00
ii. Update FIRM Panel(s)		2	10			5	16		33	\$5,563.00
iii. Prepare LOMR Submittal		2	3			6			11	\$1,795.00
iv. QA/QC		2	4			1			7	\$1,485.00
v. Project Management		2	6			8			16	\$2,650.00
vi. Comment Response		2	6			10		8	26	\$3,636.00
101. SUBTOTAL Drainage Analysis Hours		61	299	0	0	209	42	12	623	
101. SUBTOTAL Drainage Analysis Fee		\$15,860.00	\$64,285.00	\$0.00	\$0.00	\$21,945.00	\$6,216.00	\$1,164.00		\$109,470.00
TOTAL Design Phase Service Hours		61	299	0	0	209	42	12	623	
TOTAL Design Phase Service Fee		\$15,860.00	\$64,285.00	\$0.00	\$0.00	\$21,945.00	\$6,216.00	\$1,164.00		\$109,470.00

PROJECT NAME: ROGERS RD SEGMENT 1
CONTRACT NUMBER:
DATE: 07/23/2024
DESIGN PHASE SERVICE

Description/Task	Department Manager	Sr. Project Manager I	Project Manager	Assitant Project Manager	Engineer-In-Training III	Designer	CADD Operator	Admin Assistant	Subtotal (hrs)	Hours / Sheet	Total Fee
200. DESIGN PHASE SERVICES	Hourly Billing Rate	\$280.00	\$230.00	\$215.00	\$175.00	\$150.00	\$95.00	\$100.00			
200.A Project Management											
i. Project Meetings	2		12	12					26	N/A	\$5,240.00
ii. Internal QA/QC (70% Submittal, 95% Submittal & 100% Submittal)	40		12	12					64	N/A	\$15,880.00
iii. Site Meeting with Construction				5	5				15	N/A	\$2,700.00
iv. Coordinate, Review and Approvals with FBC	1		10	12					23	N/A	\$4,530.00
v. Coordinate, Review and Approvals with Regulatory Offices (FBCDD, MUD, etc.)	1		10	12					23	N/A	\$4,530.00
200.A SUBTOTAL Project Management Hours	44	0	49	53	5	0	0	0	151		
200.A SUBTOTAL Project Management Fee	\$12,320.00	\$0.00	\$10,535.00	\$9,275.00	\$750.00	\$0.00	\$0.00	\$0.00			\$32,880.00
200.B Utility Coordination											
i. Coordinate/Approval with Private Utilities			6	9					27	N/A	\$4,665.00
ii. Coordinate with Adjacent Ongoing Projects	1		9	12					22	N/A	\$4,315.00
v. Field Visits			3	4	6		10		23	N/A	\$3,195.00
200.B SUBTOTAL Utility Coordination Hours	1	0	18	25	18	0	10	0	72		
200.B SUBTOTAL Utility Coordination Fee	\$280.00	\$0.00	\$3,870.00	\$4,375.00	\$2,700.00	\$0.00	\$950.00	\$0.00			\$12,175.00
200.C Design and Deliverables											
i. Front End Drawings											
a. Project Title Sheet and Project Location Map (est. 1 sheet)			1	1	1		4		7	7	\$920.00
b. Index of Sheets (est. 1 sheet)			1	1	1		4		7	7	\$920.00
c. Legends (Cons. & Topo), Abbreviation & Plan & Profile Key Notes (est. 1 sheets)				2	3		6		12	12	\$1,585.00
d. General Construction & Private Utility Notes (est. 2 sheets)			1	2	3		6		12	6	\$1,585.00
e. Project Overall Layout (est. 2 sheets)			1	3	6		9		19	9.5	\$2,495.00
f. Typical Sections (est. 2 sheets)			1	3	6		9		19	9.5	\$2,495.00
g. Demolition Plan (est. 4 sheets)			2	4	9		15		30	7.5	\$3,905.00
h. Drainage Area & Overland Sheet Flow Map (est. 2 sheets)			1	3	4		9		17	8.5	\$2,195.00
i. Drainage Calculations (est. 2 sheets)			1	2	3		9		15	7.5	\$1,870.00
ii. Design, Plan & Profile											
a. Vertical Design			6	9	15		4		34	N/A	\$5,495.00
b. Proposed Drainage Layout (est. 2 sheets)			1	2	3		5		11	5.5	\$1,490.00
c. Horizontal Alignment Data Sheet (est. 4 sheets)				1	3		5		14	3.5	\$1,965.00
d. Drainage and Roadway Plan and Profile (est. 8 sheets)			12	20	30		60		122	15.25	\$16,280.00
e. Driveway Summary (est. 1 sheet)			1	2	4		8		15	15	\$1,925.00
f. Driveway Details (est. 1 sheet)				1	2		4		7	7	\$855.00
g. Earthwork Cross Sections and Cul/Fill Calculations (est. 5 sheets)			1	3	6		9		19	3.8	\$2,495.00
h. Paving Marking and Striping Plans (est. 5 sheets)				2	4		9		15	3	\$1,805.00
iii. Detention Pond											
a. Basin Design and Layout (est. 2 sheets)			2	6	12		24		44	22	\$5,560.00
b. Cross Sections (est. 4 sheets)			2	4	6		18		30	7.5	\$3,740.00
c. Weir Plan and Profile Sheet (est. 4 sheets)			2	4	9		18		33	8.25	\$4,190.00
d. Outfall Plan and Profile Sheet (est. 4 sheets)			2	4	9		18		33	8.25	\$4,190.00
e. Geometric Layout (est. 4 sheets)			1	4	6		12		23	5.75	\$2,955.00
f. SWPPP Layout (est. 2 sheets)			1	4	6		9		20	10	\$2,670.00
iv. Standard Details											
a. Pavement Details (est. 2 sheets)				1	2		4		7	3.5	\$855.00
b. Excavation, Bedding, & Backfill Details (est. 2 sheets)				1	2		4		7	3.5	\$855.00
c. Storm Sewer Details (est. 2 sheets)				1	2		4		7	3.5	\$855.00
d. Pavement Marking Details (est. 2 sheets)				1	2		4		7	3.5	\$855.00
e. Project Sign (est. 1 sheet)				1	1		2		4	4	\$515.00
v. Traffic Control Plan											
a. Traffic Control Plan Sheets (est. 5 sheets)			3	6	12		24		45	9	\$5,775.00
b. Detour Plans (est. 2 sheets)			1	4	4		12		21	10.5	\$2,655.00
c. Standard Details (est. 2 sheets)				1	1		2		4	2	\$515.00

PROJECT NAME: ROGERS RD SEGMENT 1
CONTRACT NUMBER:
DATE: 07/23/2024
DESIGN PHASE SERVICE

Description/Task	Department Manager	Sr. Project Manager I	Project Manager	Assitant Project Manager	Engineer-In-Training III	Designer	CADD Operator	Admin Assistant	Subtotal (hrs)	Hours / Sheet	Total Fee
Hourly Billing Rate	\$280.00	\$230.00	\$215.00	\$175.00	\$150.00	\$150.00	\$95.00	\$100.00			
vi. Storm Water Pollution Prevention Plan											
a. Storm Water Pollution Prevention Plan Sheets (est. 4 sheets)				3	4			9	16	4	\$1,980.00
b. Storm Water Pollution Prevention Plan Details (est. 2 sheets)				1	1			2	4	2	\$515.00
vii. Project Manual											
a. Contract Documents (TOC, Intro Info, Bid Reqmt, Contract Reqmt)			3	6	12				10	N/A	\$4,495.00
b. Sheet by Sheet Quantity Take-off and Cost Estimate			6	12	24				42	N/A	\$6,990.00
c. Specification Book			3	6	12				10	N/A	\$4,495.00
200.C SUBTOTAL Design and Deliverables Hours	0	0	58	133	232	0		341	20	784	
200.C SUBTOTAL Design and Deliverables Fee	\$0.00	\$0.00	\$12,470.00	\$23,275.00	\$34,800.00	\$0.00	\$32,395.00	\$2,000.00			\$104,940.00
200.D Bid Phase Services											
i. Pre-Bid Meeting			2							2	N/A
ii. Answer Contractor Inquires, Draft and Issue Addendums	1		3	12			6		22	N/A	\$3,595.00
iii. Bid Tabulation	1		2	3					6	N/A	\$1,235.00
iv. Issue Letter of Recommendation			1	1					1	3	N/A
200.D SUBTOTAL Bid Phase Services Hours	2	0	8	16	0	0	6	1	33		
200.D SUBTOTAL Bid Phase Services Fee	\$560.00	\$0.00	\$1,720.00	\$2,800.00	\$0.00	\$0.00	\$570.00	\$100.00			\$5,750.00
TOTAL Design Phase Service Hours	47	0	133	227	255	0	357	21	1040		
TOTAL Design Phase Service Fee	\$13,160.00	\$0.00	\$28,595.00	\$39,725.00	\$38,250.00	\$0.00	\$33,915.00	\$2,100.00			\$155,745.00

PROJECT NAME: ROGERS RD SEGMENT 1
CONTRACT NUMBER:
DATE: 07/23/2024
CONSTRUCTION PHASE SERVICE

Description/Task	Department Manager	Sr. Project Manager I	Project Manager	Assitant Project Manager	Engineer-In-Training III	Designer	CADD Operator	Admin Assistant	Subtotal (hrs)	Total Fee
300. CONSTRUCTION PHASE SERVICES										
Project Management										
i. Attend Preconstruction Meeting	4		4	4						
ii. Review Submittals			3	18	30				12	\$2,680.00
iii. Review construction change orders and provide recommendation			8	10					51	\$8,295.00
iv. Review and respond to RFIs			10	18	12		20		18	\$3,470.00
v. Project site visit	4		4	12	12				60	\$9,000.00
vi. Develop final 'as built' drawings				8	15		20		32	\$5,680.00
vii. Substantial Completion Walkthrough				8					43	\$5,550.00
viii. Final Completion Walkthrough	4		8	8					16	\$3,120.00
300. SUBTOTAL Project Management Hours	12	0	45	86	69	0	40	0	20	\$4,240.00
300. SUBTOTAL Project Management Fee	\$3,360.00	\$0.00	\$9,675.00	\$15,050.00	\$10,350.00	\$0.00	\$3,800.00	\$0.00	252	\$42,235.00
TOTAL Design Phase Service Hours	12	0	45	86	69	0	40	0	252	
TOTAL Design Phase Service Fee	\$3,360.00	\$0.00	\$9,675.00	\$15,050.00	\$10,350.00	\$0.00	\$3,800.00	\$0.00		\$42,235.00



Date: 08/26/2024

Mark Rotz, P.E.
Project Manager
R.G. Miller | DCCM
16340 Park Ten Place, Suite 350
Houston, Texas, 77084

RE: Rogers Road Segment 1 – Brookshire Creek Bridge Design Scope and Fee Proposal

Dear Mr. Rotz,

Thank you for the opportunity to assist Fort Bend County and R.G. Miller with the subject project. Attached you will find our Scope and Fee proposal for Brookshire Creek Bridge Design.

The following is a Cost Summary of the Design Services and Construction Phase Services. Detailed breakdown of the cost can be found in the attachments.

Summary	Method of Payment	Total Cost
Design Services and Expense	Lump Sum	\$102,690.00
Construction Phase Services	Specified Rates	\$17,480.00
Total Contract Cost:		<u>\$120,170.00</u>
Optional Phase construction design		\$16,520.00

We look forward to working with you on this important project for Fort Bend County.

Respectfully,

Hua Liu, P.E.
Bridge Project Engineer

IEA Inc.

13501 Katy Freeway, Suite 3425, Houston, TX 77079
Direct 832-380-2617

Wilson Wong, P.E.
Houston Office Director

IEA Inc.

13501 Katy Freeway, Suite 3425, Houston, TX 77079
Direct 832-494-3790 • Cell 832-275-5037

Attachments: Attachment A – FBC-Rogers Road Seg 1 Bridge – SCOPE
Attachment B – FBC-Rogers Road Seg 1 Bridge – FEE PROPOSAL

ATTACHMENT A
SCOPE OF SERVICES
ROGERS ROAD SEGMENT 1 BRIDGE OVER BROOKSHIRE CREEK
(BASIC SERVICES AND CONSTRUCTION PHASE SERVICES)

BASIC SERVICES

Provide bridge layout and detailed design for bridge in accordance with the latest version of applicable procedures, specifications, manuals, guidelines, standard drawings, and standard specifications. Detailed scope is as follows:

- 1) Data Collection
- 2) Evaluate existing topo data.
- 3) Coordination with engineers and evaluate bridge limits.
- 4) Bridge type alternative analysis
- 5) Review soil boring data and geotechnical.
- 6) Identify any utility conflicts.
- 7) Perform bridge analysis and detailing as follows:
 - a) Bridge Layout and typical section
 - b) Abutment no. 1 and 2 plan & elevation.
 - c) Abutment details
 - d) Bridge slab plan and sections with sidewalk
 - e) Bridge Girder Layout
 - f) Prestressed concrete girder design table
 - g) Miscellaneous details
 - h) Bridge bearing seat elevations
 - i) Bridge quantities
 - j) List of TxDOT Bridge standard details.
 - k) Construction phasing details (temp. shoring, etc.) (Optional)
- 8) Prepare specifications and special provision.
- 9) Prepare construction cost estimate.
- 10) Coordinate with RG Miller, FBC and FBCDD
- 11) Prepare invoices, progress reports, meeting minutes.
- 12) QA/QC

CONSTRUCTION PHASE SERVICES

Detailed scope is as follows:

- 1) Attend Pre-bid/ Pre-Construction Meeting
- 2) Review Shop Drawings
- 3) Site Visit
- 4) Respond to Request-for-Information (RFI)
- 5) Invoicing

Rogers Road Segment 1 Bridge over Brookshire Creek
Cost Summary
Basic Services and Construction Phase Services
IEA, Inc.

Summary	Method of Payment	Total Cost
Design Services and Expense	Lump Sum	\$102,690.00
Construction Phase Services	Specified Rates	\$17,480.00
Total Contract Cost:		\$120,170.00
Optional Phased construction design		\$16,520.00

Rogers Road Segment 1 Bridge over Brookshire Creek
Cost Summary
Basic Services
IEA, Inc.

I. Basic Services (Lump Sum)

Task Description	No. of Sheets	Project Manager	Sr. Structural Engineer	Engineer In Training	CADD Designer	Clerical	Total
1 Data collection and site visit			6	6			12
2 Evaluate existing topo data		2	4	6	6		18
3 Coordinate with engineers and evaluate bridge limits		2	6	6	4		18
4 Bridge type alternative analysis		4	8	16	8		36
5 Review soil boring data and geotechnical			4	4			8
6 Identify any utility conflicts		2	2	4	2		10
7 Perform bridge analysis and detailing as follows:							
I. <u>Detailed Design</u>							
a Bridge layout and typical section	1	4	8	16	20		48
b Abutment no. 1 and 2 plan & elevation	2		12	20	32		64
c Abutment details	1		6	16	16		38
d Bridge slab plan and sections with sidewalk	1		6	12	16		34
e Bridge Girder Layout	1		8	20	6		34
f Prestressed concrete girder design table	1		12	20	6		38
g Miscellaneous details	1		6	8	12		26
h Bridge bearing seat elevations	1		8	12	6		26
i Bridge quantities	1	2	8	16	6		32
j List of TxDOT Bridge standard details	15	2	4	6	2		14
8 Prepare specifications and special provision		4	4	2		4	14
9 Prepare construction cost estimate		4	8	12		4	28
10 Coordinate w/ RG Miller, FBC and FBCDD		12	12			6	30
11 Prepare invoices, progress reports, meeting minutes		12	6			12	30
12 QA/QC			40				40
Subtotal	25	50	178	202	142	26	598
Contract Rates		\$280.00	\$240.00	\$120.00	\$135.00	\$90.00	
Total Labor Fee		\$14,000.00	\$42,720.00	\$24,240.00	\$19,170.00	\$2,340.00	\$102,470.00

II. Direct Expenses

Description	Unit	Quantity	Cost	Total
Mileage	Mile	60	Current IRS Approved Rate	\$50.00
Reproduction - Xerox	Each	100	\$0.20	\$20.00
Plotting - Paper	Each	100	\$1.00	\$100.00
Deliveries, Tel., Photos, Parking, Tolls, Etc.	L.S.	1	\$50.00	\$50.00
Total Expenses				\$220.00

Total Cost: \$102,690.00

Optional task	No. of Sheets	Project Manager	Sr. Structural Engineer	Engineer In Training	CADD Designer	Clerical	Total
1 Construction phasing details (temp. shoring, etc.)	2	2	24	40	40		106
Contract Rates		\$280.00	\$240.00	\$120.00	\$135.00	\$90.00	
Total Labor Fee		\$560.00	\$5,760.00	\$4,800.00	\$5,400.00	\$0.00	\$16,520.00

Rogers Road Segment 1 Bridge over Brookshire Creek
Cost Summary
Construction Phase Services
IEA, Inc.

II. Construction Phase Services (Specified Rates)							
Task Description	No. of Sheets	Project Manager	Sr. Structural Engineer	Engineer In Training	CADD Designer	Clerical	Total
1 Attend Pre-bid / Pre-Construction Meeting			4			2	6
2 Review Shop Drawings			12	12		6	30
3 Site Visit			4	4			8
4 Respond to Request-for-Information (RFI)		2	12	12	4	2	32
5 Invoicing		12				12	24
Subtotal		14	32	28	4	22	100
Contract Rates		\$280.00	\$240.00	\$120.00	\$135.00	\$90.00	
Total Labor Fee		\$3,920.00	\$7,680.00	\$3,360.00	\$540.00	\$1,980.00	\$17,480.00

Total Cost: \$17,480.00

PROPOSAL AGREEMENT FOR PROFESSIONAL SERVICES

Effective Date: July 22, 2024

Mengyang (Robbie) Jiang, P.E.
R.G. Miller – DCCM
16340 Park Ten Place, Suite 350
Houston, TX 77084
281-921-8654
mjiang@rgmiller.com

Proposal for Professional Services in Connection With: Rogers Road, Segment 1 (as shown on the attached aerial images), Fort Bend County, Texas

Weisser Engineering & Surveying is pleased to submit this proposal and terms of service (together, the “Agreement”) to R.G. Miller – DCCM (the “Client”).

I. BASE 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, or the existing baseline if available. The Surveyor shall create an existing utility list (Excel Format) including owner 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 and shown on the attached Aerial Images:

The linear topographic and right-of-way survey will begin on Hannibal approximately 1,550 feet west of Pool Hill Road and proceed east along Hannibal Road and Rogers Road to a point approximately 2,950 feet east of Pool Hill Road, for an approximate total of **4,500 linear feet**. (As Shown on the Attached Aerial Images)

1. Survey Control

- a. Horizontal and Vertical Survey Control for each site shall be referenced to the nearest Fort Bend County Survey Control Monument, or NGS if no County Monuments are established.
- b. Survey Control Points will be established at 1,000-foot maximum intervals and tied to the Calculated Alignment for each site.
- c. Deliverable will be Signed and Sealed Survey Control Maps per Fort Bend County standards with Detail Sketches in PDF format and CAD Files.

COST: \$10,670.00

2-Person Survey Crew	20 hrs @ \$145/hr	\$2,900.00
Survey Technician	30 hrs @ \$110/hr	\$3,300.00
CADD Technician	30 hrs @ \$95/hr	\$2,850.00
Clerical	2 hrs @ \$65/hr	\$ 130.00
Field Coordinator	2 hrs @ \$105/hr	\$ 210.00
RPLS	8 hrs @ \$160/hr	\$1,280.00

2. Existing Right of Way Mapping (Cat. 1B, Cond. 3)

- a. Perform abstract survey; obtain deeds of record, and plats for the right-of-way, streets intersecting and tracts of land adjoining the project limits.
- b. Establish the existing right-of-way and boundary lines adjoining the project limits.
- c. Deliverable will be Signed and Sealed existing Right-of-Way Map Sheets in PDF format per Fort Bend County standards and CAD Files.

COST: \$17,600.00

2-Person Survey Crew	30 hrs @ \$145/hr	\$4,350.00
Survey Technician	60 hrs @ \$110/hr	\$6,600.00
CADD Technician	35 hrs @ \$95/hr	\$3,325.00
Clerical	2 hrs @ \$65/hr	\$ 130.00
Field Coordinator	3 hrs @ \$105/hr	\$ 315.00
RPLS	18 hrs @ \$160/hr	\$2,880.00

3. Topographic Surveying (Cat. 6, Cond. 1)

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

- a. For the roadway and ditches, obtain cross-sections at 100-foot intervals with grade breaks. Cross-sections shall extend 20 feet beyond the Proposed right-of-way on existing roads and cover a 100-foot wide swath in areas with no existing roadway. Topographic Survey will include the following: Identify locations and elevations of physical features to include edges or curbs and gutters of pavement, parking lanes, center of the median, fences, walls, tree-lines (individual tree locations is not included), sidewalks, driveways and driveway curbs, power poles, light poles, water meters, water wells, ponds, sprinklers, off-site drain pipe, elevations at ditch banks, toe, flow line, and side slope, 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 marked by "One Call" within the project limits. The rim (top) and flow line elevations will be obtained on inlets, manholes (sanitary and storm), and drainage structures, including culverts, SETs, etc. The rise, width, flowlines, etc. of the drainage elements will be obtained where accessible.
- b. For the crossing at Brookshire Creek, the existing bridge will be detailed and cross-section on the creek will be obtained, at a minimum of, at each face of bridge, at each right-of-way line, and at 100 feet upstream and downstream.
- c. The Surveyor will coordinate with SUE consultant (if applicable), pipeline companies, municipal utility districts (MUDs), homeowner's associations (HOA's), the County, and private utility agencies to obtain locations of available existing utilities and depths of existing pipelines. These will be shown with the rest of the survey.
- d. Prepare existing Signed and Sealed Topographic Survey Map of the Project to be delivered in PDF per Fort Bend County standards and CAD Files.

COST: \$29,665.00

2-Person Survey Crew	95 hrs @ \$145/hr	\$13,775.00
Survey Technician	20 hrs @ \$110/hr	\$2,200.00
CADD Technician	80 hrs @ \$95/hr	\$7,600.00
Clerical	2 hrs @ \$65/hr	\$ 130.00
Field Coordinator	8 hrs @ \$105/hr	\$ 840.00
RPLS	32 hrs @ \$160/hr	\$5,120.00

TOTAL COST FOR BASE SERVICES: \$57,935.00

II. OPTIONAL ADDITIONAL SERVICES

1. Project Control for Construction

- a. Recover or re-establish project control referenced to the project baseline for construction.

COST: \$3,805.00

2. Parcel Surveys

- a. Prepare metes and bounds descriptions and parcel plats 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 (estimated 24 parcels)

Total Cost for Parcel Surveys: \$60,000.00

3. Detention Pond

- a. Boundary and topographic survey of two (2) 2.5 to 3-acre detention ponds east of Brookshire Creek.
- b. Boundary and topographic survey of two (1) 2.5 to 3-acre detention ponds west of Brookshire Creek (appears to be Heavily Wooded).
- c. Also includes Topographic Survey with cross-sections at 100-foot intervals along Brookshire Creek between Pond Sites.

COST: \$3,485.00 per pond East of Creek

COST: \$6,450.00 for pond West of Creek

Total Cost for Detention Ponds: \$9,935.00

4. Soil Boring Locations

- a. Field Locate Soil Borings performed by others.
- b. Soil Borings will be added into existing CAD files.

COST: \$2,530.00

(assumes one trip to locate all Soil Borings)

5. Level "A" SUE

- a. Cost includes a maximum of six Test Holes up to a depth of twenty feet.
- b. Data Sheets for each Test Hole will be provided.
- c. Location and elevation of each Test Hole will be included in Survey Deliverables.
- d. Cost does not include Traffic Control Plan if required.

COST: \$13,930.00

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

R.G. Miller – DCCM

By: _____

Printed Name: _____

Title: _____

Date of Acceptance: _____

WEISSER ENGINEERING & SURVEYING

By: Taylor R. Sass

Printed Name: Taylor R. Sass

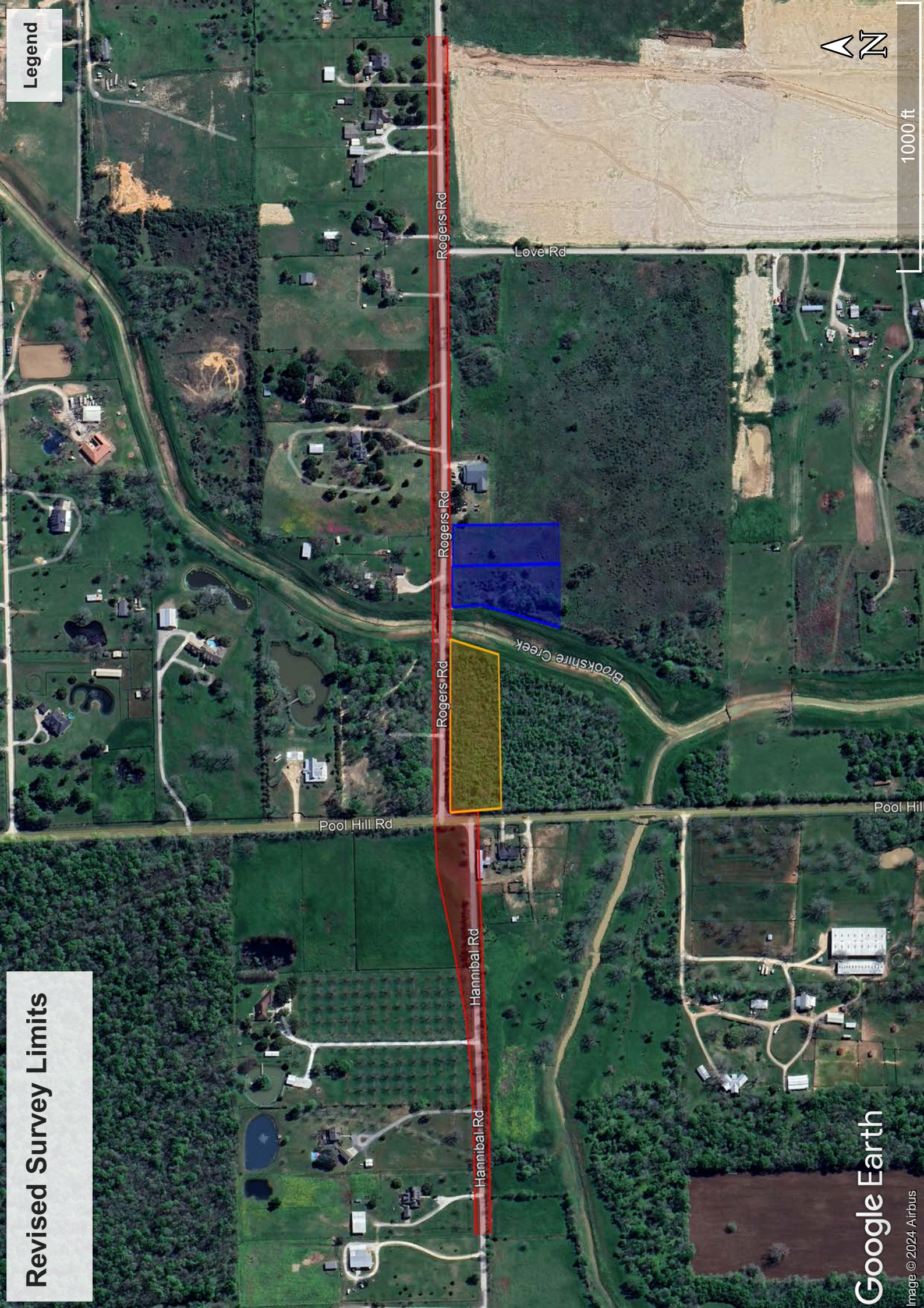
Title: President & CEO

Date of Acceptance: 07/222/2024

Please provide an email address for Accounts Payable contact for invoicing purposes:

Revised Survey Limits

Legend



Geotechnical Investigation Proposal
Rogers Road Pavement

July 1, 2024

Proposal No: GP24-0605_A

Mr. Mark Rotz, P.E.

Project Manager

R.G. Miller Engineers, Inc.

16340 Park Ten Place, Suite 350

Houston, Texas 77084

**Reference: Proposal for Geotechnical Investigation
Rogers Road Segment 1
Fort Bend County, Texas**

Mr. Rotz:

Associated Testing Laboratories, Inc. (ATL) is pleased to submit a proposal for the above-referenced project. Our goal for the geotechnical field investigation, testing, and soil data report should comply with the requirements of Fort Bend County Engineering Guidelines.

INTRODUCTION

We understand that **R.G. Miller/DCCM** is in contract with Fort Bend County to provide design engineering services for the Rogers Road Segment 1 Road Paving project.

SCOPE OF WORK:

Based on the available project information, ATL proposes eight (8) soil borings at 15 ft deep to be drilled along Rogers Road Segment 1 alignment shown in **Figure 1**.

The objective of this geotechnical investigation is to perform soil borings along the project area, gather and analyze the field and laboratory geotechnical information and data, and prepare a written report presenting the subsurface conditions found along the project alignments, with geotechnical recommendations for the design and construction of the proposed paving widening of Rogers Road Segment 1 with a total length of approximately 3,700 LF.

GEOTECHNICAL INVESTIGATION

Field Exploration

All the proposed borings are located in existing street pavement areas. Mechanical truck coring machines will perform coring in boring locations before soil drilling and sampling. The borings will be drilled using a truck-mounted rig.

The project alignment is located on a 2-lane-traffic road. Thus, traffic control measures including

signs, cones, as well as flagmen will be required during pavement coring and at the time of pavement coring and actual soil drilling and sampling.

Based on the available project information, ATL proposes the following borings to investigate the subsurface soils and groundwater conditions. The site location plan is presented in **Figure 1** as shown in Table A below:

Boring No. (Piezometer)	No of Borings	Street / Location	Depth, ft	Total, ft
B-1P thru B-8P	8	Rogers Road Segment 1	15	120
		TOTAL, LINEAR FEET, LF		120

Soil samples will be obtained continuously from 15 ft deep to the termination depths. Standard Penetration Tests (SPT) will be performed in sands if encountered, and clays will be sampled by Shelby tube. Shear strengths of the clays will be measured in the field with a hand penetrometer and correlations between this data and laboratory shear strength data will be made during analysis.

Depth to groundwater will be important for the design and construction of this project. For this reason, the borings will be drilled dry until groundwater is encountered, or caving of soils occurs. Drilling will be suspended for 15 minutes to facilitate water level observation in the boring. After recording the water level, drilling will be resumed. The boreholes will be backfilled with soil cuttings and the pavement surface core will be patched back with lean concrete.

Laboratory Testing

Laboratory tests will be assigned corresponding to the types of soils encountered to classify the soil's physical and index properties, moisture contents, unconfined compressive strength, undrained unconsolidated compressive strength, Atterberg limits, percent finer than No. 200 sieve, sieve analysis, dry density, crumb test, double hydrometer test, consolidated undrained triaxial test, and specific gravity.

All tests will be performed in accordance with the American Society of Testing Materials (ASTM) Procedures. Estimated test types and quantities are presented on the attached sheet.

Engineering Analyses and Reporting

The field and laboratory data will be summarized in an engineering report. Analyses of data will be presented, and recommendations made in accordance with the Fort Bend County Engineering Criteria Guidelines. The following geotechnical information and recommendations will be provided:

- Boring logs in GeoLogs format and boring log profiles showing the generalized soil stratigraphy and groundwater levels.
- Site preparation and grading.
- Discussion of subsurface soils and stratigraphy and groundwater information.
- Recommendations for roadside drainage excavation.
- Select fill requirements & fill placements.

- Suitability for reuse of on-site soil.
- Dewatering consideration and recommendations.
- Pavement recommendations.
- Construction recommendations.

COST ESTIMATE

Based on the scope of geotechnical work outlined above, we estimate the following costs:

Geotechnical Investigation for Proposed	Estimated Fee
Proposed Rogers Road Segment 1, including Brookshire Creek Bridge	\$35,872.00

The cost estimates using the project quantities and requirements are presented in the enclosed **Itemized Geotechnical Fee Estimate** spreadsheet. This estimate assumes that: (i) underground utilities at proposed boring locations will be cleared by Texas 811 Call Service and/or private property maintenance personnel; (ii) the boring sites will be accessible to our truck-mounted drill rig equipment; (iii) permission/permit to access the site if needed, will be arranged by others at no cost to ATL.

TIME SCHEDULES

We estimate that the fieldwork can be started immediately after authorization is received. The field staking and utility clearance will take about two weeks. The field investigation will take about 2 to 3 weeks, and the regular laboratory testing will take about 4 to 6 weeks. A geotechnical report draft will be submitted approximately 8 to 10 weeks after receiving the official notice to proceed.

We appreciate the opportunity to submit this proposal and look forward to serving you on this project.

Thank you,
ASSOCIATED TESTING LABORATORIES, INC.



Anita Singh, P.E.
Principal

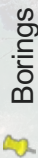
Enclosure:

Figure1 – Boring Location Plan

Rogers Rd. Seg. 1 - Paving

Borign Locations

Legend



Borings

P-6(15')

P-5(15')

P-4(15')

P-3(15')

P-2(15')

P-1(15')

P-7(15')

P-8(15')

Rogers Rd

Hannibal Rd

Hannibal Rd

Love Rd

Brookshire Creek

SIRE Therapeutic Horsemanship

Google Earth

Image © 2024 Airbus

SIRE Fort Bend

Zion Chapel Missionary Baptist Church

ASH Automated Con

Fulshear Wedding & Event Venue

Pool Hill Rd

Hala Ranch



1000 ft

Geotechnical Investigation Proposal
Rogers Road Segment 1 - Paving

Fort Bend County, Texas
ATL Proposal No. GP2024-0605_A
July 1, 2024



ITEMIZED GEOECHANICAL FEE ESTIMATE

Rogers Road Segment 1 - Paving

Borings: 8@15' [120 LF]				
A. FIELD EXPLORATION	Current Qty.	Unit	Unit Rate	Amount
Mobilization/Demobilization (Truck Rig)	1	LS	\$746.00	\$746.00
Mobilization/Demobilization - ATV Rig Surcharge	0	LS	\$266.00	\$0.00
Technician for Staking, Utilities Clearance, Coordination	16	hrs.	\$96.00	\$1,536.00
Soil Drilling and Sampling (continuous; <up to 20')	120	ft.	\$27.00	\$3,240.00
Soil Drilling and Sampling (20'-50' continuous)	0	ft.	\$32.00	\$0.00
ATV Surcharge	0	ft.	\$11.00	\$0.00
Soil Drilling and Sampling (0'-50' intermittent)	0	ft.	\$24.00	\$0.00
Logging (NICET II)	16	hr.	\$96.00	\$1,536.00
Grouting Holes	120	ft.	\$13.00	\$1,560.00
Coring (6-inches)	8	ea.	\$192.00	\$1,536.00
Coring (>6-inches thickness)	48	ft.	\$18.00	\$864.00
Piezometer Installation	0	ft.	\$26.00	\$0.00
Piezometer Abandonment	0	ft.	\$21.00	\$0.00
24-Hr, 7-Day & 1 month PZ Water Level Readings	0	hrs.	\$96.00	\$0.00
Vehicle Charge	16	hrs.	\$13.00	\$208.00
	SUBTOTAL			\$11,226.00
B. GEOTECHNICAL LABORATORY TESTING		Unit	Unit Rate	Amount
Moisture Content (ASTM D-2216)	60	ea.	\$12.00	\$720.00
Atterberg Limits (ASTM D-4318)	24	ea.	\$76.00	\$1,824.00
Passing No. 200 Sieve (ASTM D-1140)	24	ea.	\$59.00	\$1,416.00
Unconfined Compression (ASTM D-2166)	14	ea.	\$54.00	\$756.00
Unconsolidated-Undrained Triaxial Test (ASTM D-2850)	20	ea.	\$77.00	\$1,540.00
Consolidated-Undrained Triaxial Test (ASTM D-4767) *3-stage w/3 samples/set	0	ea.	\$1,800.00	\$0.00
Double Hydrometer Tests (ASTM D-4221), with D ₉₀ and D50	0	ea.	\$266.00	\$0.00
Crumb Tests (ASTM D-6572)	0	ea.	\$46.00	\$0.00
Specific Gravity (ASTM D854)	0	ea.	\$71.00	\$0.00
	SUBTOTAL			\$6,256.00
D. TRAFFIC CONTROL				
Flagmen	48	hrs.	\$40.00	\$1,920.00
Peace Officer	24	hrs.	\$75.00	\$1,800.00
	SUBTOTAL			\$3,720.00
D. ANALYSES & REPORT PREPARATION		Unit	Unit Rate	Amount
Senior Engineer (P.E.)	20	hrs.	\$218.00	\$4,360.00
Project Manager (P.E.)	25	hrs.	\$176.00	\$4,400.00
Graduate Engineer	30	hrs.	\$122.00	\$3,660.00
Draftsman/word Processor	30	hrs.	\$75.00	\$2,250.00
	SUBTOTAL			\$14,670.00
TOTAL ESTIMATED FEE OF PROPOSED SCOPE				\$35,872.00

Geotechnical Investigation Proposal
Brookshire Creek Bridge

July 3, 2024

Proposal No: GP24-0605_B

Mr. Mark Rotz, P.E.

Project Manager

R.G. Miller Engineers, Inc.

16340 Park Ten Place, Suite 350

Houston, Texas 77084

**Reference: Proposal for Geotechnical Investigation
Rogers Road Segment 1 – Brookshire Creek Bridge
Fort Bend County, Texas**

Mr. Rotz:

Associated Testing Laboratories, Inc. (ATL) is pleased to submit a proposal for the above-referenced project. Our goal for the geotechnical field investigation, testing, and soil data report should comply with the requirements of Fort Bend County Engineering Guidelines.

INTRODUCTION

We understand that **R.G. Miller/DCCM** is currently under contract with Fort Bend County to provide design engineering services for the Rogers Road Segment 1 – Bridge at Brookshire project.

SCOPE OF WORK:

Based on the available project information, ATL proposes two (2) soil borings at 60 ft deep at each side of the existing bridge and the widening section shown in **Figure 1 – Boring Locations Plan**.

The objective of this geotechnical investigation is to perform soil borings near the bridge area, gather and analyze the field and laboratory geotechnical information and data, and prepare a written report presenting the subsurface conditions found in our geotechnical field investigation. Prepare geotechnical recommendations for the design and construction of the proposed bridge reconstruction at Brookshire Creek spanning Rogers Rd.

GEOTECHNICAL INVESTIGATION

Field Exploration

All the proposed borings are located near existing bridge. Mechanical truck coring machines will perform coring in boring locations before soil drilling and sampling. The borings will be drilled using a truck-mounted rig.

The project is located on a 2-lane-traffic road. Thus, traffic control measures including signs, cones,

as well as flagmen will be required during pavement coring and at the time of actual soil drilling and sampling.

Based on the available project information, ATL proposes the following borings to investigate the subsurface soils and groundwater conditions. The site location plan is presented in **Figure 1** as shown in Table A below:

Boring No. (Piezometer)	No of Borings	Street / Location	Depth, ft	Total, ft
B-1 & B-2	2	Bridge at Brookshire Creek – widening section of the bridge	60	120
B-1 & B-2, (Piezometers PZ-1 & PZ-2)	2	Rogers Road Segment 1 (Bridge Boring)	*40	*80
TOTAL, LINEAR FEET, LF				120

**Piezometer PZ-1 & PZ-2 will be installed at B-1 & B2 to a depth of 40 ft. each after sampling and drilling.*

Soil samples will be obtained continuously to 20 ft and at every 5 ft interval thereafter to the termination depths. Standard Penetration Tests (SPT) will be performed in sands if encountered, and clays will be sampled by Shelby tube. Shear strengths of the clays will be measured in the field with a hand penetrometer and correlations between this data and laboratory shear strength data will be made during analysis.

Depth to groundwater will be important for the design and construction of this project. For this reason, the borings will be drilled dry until groundwater is encountered, or caving of soils occurs. Drilling will be suspended for 15 minutes to facilitate water level observation in the boring. After recording the water level, drilling will be resumed. The boreholes will be backfilled with soil cuttings and the pavement surface core will be patched back with lean concrete.

Laboratory Testing

Laboratory tests will be assigned corresponding to the types of soils encountered to classify the soil's physical and index properties, moisture contents, unconfined compressive strength, undrained unconsolidated compressive strength, Atterberg limits, percent finer than No. 200 sieve, sieve analysis, dry density, crumb test, double hydrometer test, consolidated undrained triaxial test, and specific gravity.

All tests will be performed in accordance with the American Society of Testing Materials (ASTM) Procedures. Estimated test types and quantities are presented on the attached sheet.

Engineering Analyses and Reporting

The field and laboratory data will be summarized in an engineering report. Analyses of data will be presented, and recommendations made in accordance with the Fort Bend County Engineering Criteria Guidelines. The following geotechnical information and recommendations will be provided:

- Boring logs in GeoLogs format and boring log profiles showing the generalized soil stratigraphy and groundwater levels.
- Site preparation and grading.
- Discussion of subsurface soils and stratigraphy and groundwater information.
- Suitability for reuse of on-site soil.
- Dewatering consideration and recommendations.
- Piezometer installation and groundwater measurements.
- Soil dispersion tests (Crumb and Double Hydrometer - D₉₅ & D₅₀ values).
- Deep foundation recommendations for the reconstruction bridge at Brookshire Creek, including capacity curves for driven piles and drilled shafts, and foundation construction recommendations.

COST ESTIMATE

Based on the scope of geotechnical work outlined above, we estimate the following costs:

Geotechnical Investigation for Proposed	Estimated Fee
Proposed Rogers Road Segment 1, including Brookshire Creek Bridge	\$46,218.00
Site Clearing	\$3,600.00

This estimate assumes that: (i) underground utilities at proposed boring locations will be cleared by Texas 811 Call Service and/or private property maintenance personnel; (ii) the boring sites will be accessible to our truck-mounted drill rig equipment; (iii) permission/permit to access the site if needed, will be arranged by others at no cost to ATL.

TIME SCHEDULES

We estimate that the fieldwork can be started immediately after authorization is received. The field staking and utility clearance will take about two weeks. The field investigation will take about 2 to 3 weeks, and the regular laboratory testing will take about 4 to 6 weeks. A geotechnical report draft will be submitted approximately 8 to 10 weeks after receiving the official notice to proceed.

We appreciate the opportunity to submit this proposal and look forward to serving you on this project.

Thank you,
ASSOCIATED TESTING LABORATORIES, INC.




Anita Singh, P.E.
Principal

Enclosure:
Figure1 – Boring Location Plan

Rogers Road Segment 1 Bridge

Legend

 Boring Location

33034

Brookshire Creek

B-2(60')



Rogers Rd

Rogers Rd

Google Earth

Image © 2024 Airbus



100 ft

B-1(60')



Brookshire Creek

Geotechnical Investigation Proposal
Brookshire Bridge at Rogers Rd Segment 1

Fort Bend County, Texas
ATL Proposal No. GP2024-0605_B
July 3, 2024



ITEMIZED GEOECHANICAL FEE ESTIMATE

Brookshire Bridge at Rogers Rd Segment 1

Borings: 2 @ 60', Total [120 LF], & 2 Piezometers @ 40LF, Total [80LF]

A. FIELD EXPLORATION	Current Qty.	Unit	Unit Rate	Amount
Mobilization/Demobilization (Truck Rig)	1	LS	\$746.00	\$746.00
Mobilization/Demobilization - ATV Rig Surcharge	1	LS	\$266.00	\$266.00
Technician for Staking, Utilities Clearance, Coordination	0	hrs.	\$96.00	\$0.00
Soil Drilling and Sampling (continuous; <up to 20')	40	ft.	\$27.00	\$1,080.00
Soil Drilling and Sampling (20'-50' continuous)	80	ft.	\$32.00	\$2,560.00
ATV Surcharge	120	ft.	\$11.00	\$1,320.00
Soil Drilling and Sampling (0'-50' intermittent)	0	ft.	\$24.00	\$0.00
Logging (NICET II)	16	hr.	\$96.00	\$1,536.00
Grouting Holes	0	ft.	\$13.00	\$0.00
Coring (6-inches)	0	ea.	\$192.00	\$0.00
Coring (>6-inches thickness)	0	ft.	\$18.00	\$0.00
Piezometer Installation	80	ft.	\$26.00	\$2,080.00
Piezometer Abandonment	80	ft.	\$21.00	\$1,680.00
24-Hr, 7-Day & 1 month PZ Water Level Readings	24	hrs.	\$96.00	\$2,304.00
Vehicle Charge	24	hrs.	\$13.00	\$312.00
	SUBTOTAL			\$13,884.00
B. GEOTECHNICAL LABORATORY TESTING		Unit	Unit Rate	Amount
Moisture Content (ASTM D-2216)	60	ea.	\$12.00	\$720.00
Atterberg Limits (ASTM D-4318)	24	ea.	\$76.00	\$1,824.00
Passing No. 200 Sieve (ASTM D-1140)	24	ea.	\$59.00	\$1,416.00
Unconfined Compression (ASTM D-2166)	10	ea.	\$54.00	\$540.00
Unconsolidated-Undrained Triaxial Test (ASTM D-2850)	30	ea.	\$77.00	\$2,310.00
Consolidated-Undrained Triaxial Test (ASTM D-4767) *3-stage w/3 samples/set	2	ea.	\$1,800.00	\$3,600.00
Double Hydrometer Tests (ASTM D-4221), with D ₉₀ and D50	2	ea.	\$266.00	\$532.00
Crumb Tests (ASTM D-6572)	30	ea.	\$46.00	\$1,380.00
Specific Gravity (ASTM D854)	2	ea.	\$71.00	\$142.00
	SUBTOTAL			\$12,464.00
D. TRAFFIC CONTROL				
Flagmen	32	hrs.	\$40.00	\$1,280.00
Peace Officer	16	hrs.	\$75.00	\$1,200.00
	SUBTOTAL			\$2,480.00
D. ANALYSES & REPORT PREPARATION		Unit	Unit Rate	Amount
Senior Engineer (P.E.)	25	hrs.	\$218.00	\$5,450.00
Project Manager (P.E.)	30	hrs.	\$176.00	\$5,280.00
Graduate Engineer	30	hrs.	\$122.00	\$3,660.00
Draftsman/word Processor	40	hrs.	\$75.00	\$3,000.00
	SUBTOTAL			\$17,390.00
TOTAL ESTIMATED FEE OF PROPOSED SCOPE				\$46,218.00

Geotechnical Investigation Proposal
First Detention Pond

July 1, 2024
Proposal No: GP24-0605_C

Mr. Mark Rotz, P.E.
Project Manager
R.G. Miller Engineers, Inc.
16340 Park Ten Place, Suite 350
Houston, Texas 77084

**Reference: Proposal for Geotechnical Investigation
Detention Pond- A - Rogers Road Segment 1
Fort Bend County, Texas**

Mr. Rotz:

Associated Testing Laboratories, Inc. (ATL) is pleased to submit a proposal for the above-referenced project. The geotechnical field investigation, testing, and soil data report should comply with the requirements of Fort Bend County Engineering Guidelines.

INTRODUCTION

We understand that **R.G. Miller/DCCM** is currently under contract with Fort Bend County to provide design engineering services for the proposed detention pond at Rogers Road Segment 1.

SCOPE OF WORK:

Based on the available project information, one (1) detention pond in a separate location is to be determined at a later date. The one (1) detention pond has an estimated total area of 2.5 acres at a maximum depth of 15 feet below the existing grade. ATL proposes three (3) soil borings at 30 feet deep to be drilled at the proposed detention pond site location. One (1) piezometer will be installed to monitor 24-hour, 15-day, and 30-day water level readings.

The objective of this geotechnical investigation is to perform soil borings along the detention pond project area, gather and analyze the field and laboratory geotechnical information and data, and prepare a written report presenting the subsurface conditions found with geotechnical recommendations for the design and construction of the proposed detention pond.

GEOTECHNICAL INVESTIGATION

Field Exploration

All the proposed boring locations are not known at the time of this proposal. The use of a dozer-clearing machine may be needed on detention pond areas before actual soil drilling and sampling. Borings will be drilled using an ATV (all-terrain mounted) drill rig.

Based on the available project information, ATL proposes the following borings to investigate the subsurface soils and groundwater conditions. The site location plan is presented as shown in Table A below:

Boring No.	No of Borings	Location	Depth, ft	Total, ft
DB-1 thru DB-3	3	Pond A	30	90
PZ-1			*30	*30

**Piezometer PZ-1 at Pond A will be installed to a depth of 30 ft. after sampling and drilling.*

Soil samples will be obtained continuously to 20 ft and every 5 ft interval thereafter to the termination depths. Standard Penetration Tests (SPT) will be performed in sands if encountered, and clays will be sampled by Shelby tube. Shear strengths of the clays will be measured in the field with a hand penetrometer and correlations between this data and laboratory shear strength data will be made during analysis.

Depth to groundwater will be important for the design and construction of this project. For this reason, the borings will be drilled dry until groundwater is encountered, or caving of soils occurs. Drilling will be suspended for 15 minutes to facilitate water level observation in the boring. After recording the water level, drilling will be resumed. The boreholes will be backfilled with soil cuttings after drilling.

Laboratory Testing

Laboratory tests will be assigned corresponding to the types of soils encountered to classify the soil's physical and index properties, moisture contents, unconfined compressive strength, undrained unconsolidated compressive strength, Atterberg limits, percent finer than No. 200 sieve, sieve analysis, dry density, crumb test double hydrometer test, specific gravity test, and consolidated undrained triaxial test.

All tests will be performed in accordance with the American Society of Testing Materials (ASTM) Procedures. Estimated test types and quantities are presented on the attached sheet.

Engineering Analyses and Reporting

The field and laboratory data will be summarized in an engineering report. Analyses of data will be presented, and recommendations made in accordance with the Fort Bend County Engineering Criteria Guidelines. The following geotechnical information and recommendations will be provided:

- Boring logs in GeoLogs format and boring log profiles showing the generalized soil stratigraphy and groundwater levels.
- Discussion of subsurface soils and stratigraphy and groundwater information.
- Dewatering consideration and recommendations.
- Piezometer installation and groundwater measurements.
- Slope stability analyses for short-term, rapid drawdown, and long-term conditions.
- Soil dispersion tests (Crumb and Double Hydrometer - D₉₅ & D₅₀ values) for the Detention Ponds).

COST ESTIMATE

Based on the scope of geotechnical work outlined above, we estimate the following costs:

Geotechnical Investigation for Proposed	Estimated Fee
Rogers Road Segment 1 – Detention Ponds	\$29,382.00
Site Clearing	\$3,600.00

The cost estimates using the project quantities and requirements are presented in the enclosed **Itemized Geotechnical Fee Estimate** spreadsheet. This estimate assumes that: (i) underground utilities at proposed boring locations will be cleared by Texas 811 Call Service and, or private property maintenance personnel; (ii) the sites will be accessible to our ATV (all-terrain vehicle) mounted drill rig equipment; (iii) permission/permit to access the site if needed, will be arranged by others at no cost to ATL.

TIME SCHEDULES

We estimate that the fieldwork can be started immediately after authorization is received. The field staking and utility clearance will take about two weeks. The field investigation will take about 3 to 5 weeks (assuming no complications in site access or site clearing), and the regular laboratory testing will take about 6 to 8 weeks. The draft geotechnical report will be submitted approximately 8 to 10 weeks after receiving the official notice to proceed.

We appreciate the opportunity to submit this proposal and look forward to serving you on this project.

Thank you,
ASSOCIATED TESTING LABORATORIES, INC.



Anita Singh, P.E.
Principal

Geotechnical Investigation Proposal

Rogers Road Segment 1 - Detention Pond-A

Fort Bend County, Texas

ATL Proposal No. GP2024-0605_C

July 1, 2024

**ITEMIZED GEOECHANICAL FEE ESTIMATE****Rogers Road Segment 1 - Detention Pond-A**

Borings: 3@30' [90 LF] & Piezometers: 1@30', [30 LF]

A. FIELD EXPLORATION	Current Qty.	Unit	Unit Rate	Amount
Mobilization/Demobilization (Truck Rig)	1	LS	\$746.00	\$746.00
Mobilization/Demobilization - ATV Rig Surcharge	1	LS	\$266.00	\$266.00
Technician for Staking, Utilities Clearance, Coordination	16	hrs.	\$96.00	\$1,536.00
Soil Drilling and Sampling (continuous; <up to 20')	60	ft.	\$27.00	\$1,620.00
Soil Drilling and Sampling (20'-50' continuous)	30	ft.	\$32.00	\$960.00
ATV Surcharge	90	ft.	\$11.00	\$990.00
Soil Drilling and Sampling (0'-50' intermittent)	0	ft.	\$24.00	\$0.00
Logging (NICET II)	16	hr.	\$96.00	\$1,536.00
Grouting Holes	0	ft.	\$13.00	\$0.00
Piezometer Installation	30	ft.	\$26.00	\$780.00
Piezometer Abandonment	30	ft.	\$21.00	\$630.00
24-Hr, 7-Day & 1 month PZ Water Level Readings	24	hrs.	\$96.00	\$2,304.00
Vehicle Charge	24	hrs.	\$13.00	\$312.00
	SUBTOTAL			\$11,680.00
B. GEOTECHNICAL LABORATORY TESTING		Unit	Unit Rate	Amount
Moisture Content (ASTM D-2216)	45	ea.	\$12.00	\$540.00
Atterberg Limits (ASTM D-4318)	18	ea.	\$76.00	\$1,368.00
Passing No. 200 Sieve (ASTM D-1140)	18	ea.	\$59.00	\$1,062.00
Unconfined Compression (ASTM D-2166)	8	ea.	\$54.00	\$432.00
Unconsolidated-Undrained Triaxial Test (ASTM D-2850)	16	ea.	\$77.00	\$1,232.00
Consolidated-Undrained Triaxial Test (ASTM D-4767) *3-stage w/3 samples/set	1	ea.	\$1,800.00	\$1,800.00
Double Hydrometer Tests (ASTM D-4221), with D ₉₀ and D ₅₀	2	ea.	\$266.00	\$532.00
Crumb Tests (ASTM D-6572)	20	ea.	\$46.00	\$920.00
Specific Gravity (ASTM D854)	1	ea.	\$71.00	\$71.00
	SUBTOTAL			\$7,957.00
C. ANALYSES & REPORT PREPARATION		Unit	Unit Rate	Amount
Senior Engineer (P.E.)	10	hrs.	\$218.00	\$2,180.00
Project Manager (P.E.)	15	hrs.	\$176.00	\$2,640.00
Graduate Engineer	25	hrs.	\$122.00	\$3,050.00
Draftsman/word Processor	25	hrs.	\$75.00	\$1,875.00
	SUBTOTAL			\$9,745.00
TOTAL ESTIMATED FEE OF PROPOSED SCOPE				\$29,382.00

Geotechnical Investigation Proposal
Second Detention Pond

July 1, 2024

Proposal No: GP24-0605_D

Mr. Mark Rotz, P.E.

Project Manager

R.G. Miller Engineers, Inc.

16340 Park Ten Place, Suite 350

Houston, Texas 77084

**Reference: Proposal for Geotechnical Investigation
Detention Pond-B at Rogers Road Segment 1
Fort Bend County, Texas**

Mr. Rotz:

Associated Testing Laboratories, Inc. (ATL) is pleased to submit a proposal for the above-referenced project. The geotechnical field investigation, testing, and soil data report should comply with the requirements of Fort Bend County Engineering Guidelines.

INTRODUCTION

We understand that **R.G. Miller/DCCM** is currently under contract with Fort Bend County to provide design engineering services for the proposed detention pond at Rogers Road Segment 1.

SCOPE OF WORK:

Based on the available project information, one (1) detention pond in a separate location is to be determined at a later date. The one (1) detention pond has an estimated total area of 2.5 acres at a maximum depth of 15 feet below the existing grade. ATL proposes three (3) soil borings at 30 feet deep to be drilled at the proposed detention pond site location. One (1) piezometer will be installed to monitor 24-hour, 15-day, and 30-day water level readings.

The objective of this geotechnical investigation is to perform soil borings along the detention pond project area, gather and analyze the field and laboratory geotechnical information and data, and prepare a written report presenting the subsurface conditions found with geotechnical recommendations for the design and construction of the proposed detention pond.

GEOTECHNICAL INVESTIGATION

Field Exploration

All the proposed boring locations are not known at the time of this proposal. The use of a dozer-clearing machine may be needed on detention pond areas before actual soil drilling and sampling. Borings will be drilled using an ATV (all-terrain mounted) drill rig.

Based on the available project information, ATL proposes the following borings to investigate the subsurface soils and groundwater conditions. The site location plan is presented as shown in Table A below:

Boring No.	No of Borings	Location	Depth, ft	Total, ft
DB-4 thru DB-6	3	Pond B	30	90
PZ-2			*30	*30

**Piezometer PZ-2 at Pond B will be installed to a depth of 30 ft. after sampling and drilling.*

Soil samples will be obtained continuously to 20 ft and every 5 ft interval thereafter to the termination depths. Standard Penetration Tests (SPT) will be performed in sands if encountered, and clays will be sampled by Shelby tube. Shear strengths of the clays will be measured in the field with a hand penetrometer and correlations between this data and laboratory shear strength data will be made during analysis.

Depth to groundwater will be important for the design and construction of this project. For this reason, the borings will be drilled dry until groundwater is encountered, or caving of soils occurs. Drilling will be suspended for 15 minutes to facilitate water level observation in the boring. After recording the water level, drilling will be resumed. The boreholes will be backfilled with soil cuttings after drilling.

Laboratory Testing

Laboratory tests will be assigned corresponding to the types of soils encountered to classify the soil's physical and index properties, moisture contents, unconfined compressive strength, undrained unconsolidated compressive strength, Atterberg limits, percent finer than No. 200 sieve, sieve analysis, dry density, crumb test double hydrometer test, specific gravity test, and consolidated undrained triaxial test.

All tests will be performed in accordance with the American Society of Testing Materials (ASTM) Procedures. Estimated test types and quantities are presented on the attached sheet.

Engineering Analyses and Reporting

The field and laboratory data will be summarized in an engineering report. Analyses of data will be presented, and recommendations made in accordance with the Fort Bend County Engineering Criteria Guidelines. The following geotechnical information and recommendations will be provided:

- Boring logs in GeoLogs format and boring log profiles showing the generalized soil stratigraphy and groundwater levels.
- Discussion of subsurface soils and stratigraphy and groundwater information.
- Dewatering consideration and recommendations.
- Piezometer installation and groundwater measurements.
- Slope stability analyses for short-term, rapid drawdown, and long-term conditions.
- Soil dispersion tests (Crumb and Double Hydrometer - D₉₅ & D₅₀ values) for the Detention Ponds).

COST ESTIMATE

Based on the scope of geotechnical work outlined above, we estimate the following costs:

Geotechnical Investigation for Proposed	Estimated Fee
Rogers Road Segment 1 – Detention Ponds	\$29,382.00
Site Clearing	\$3,600.00

The cost estimates using the project quantities and requirements are presented in the enclosed **Itemized Geotechnical Fee Estimate** spreadsheet. This estimate assumes that: (i) underground utilities at proposed boring locations will be cleared by Texas 811 Call Service and, or private property maintenance personnel; (ii) the sites will be accessible to our ATV (all-terrain vehicle) mounted drill rig equipment; (iii) permission/permit to access the site if needed, will be arranged by others at no cost to ATL.

TIME SCHEDULES

We estimate that the fieldwork can be started immediately after authorization is received. The field staking and utility clearance will take about two weeks. The field investigation will take about 3 to 5 weeks (assuming no complications in site access or site clearing), and the regular laboratory testing will take about 6 to 8 weeks. The draft geotechnical report will be submitted approximately 8 to 10 weeks after receiving the official notice to proceed.

We appreciate the opportunity to submit this proposal and look forward to serving you on this project.

Thank you,
ASSOCIATED TESTING LABORATORIES, INC.



Anita Singh, P.E.
Principal

Geotechnical Investigation Proposal

Rogers Road Segment 1 - Detention Pond-B

Fort Bend County, Texas

ATL Proposal No. GP2024-0605_D

July 1, 2024

**ITEMIZED GEOECHANICAL FEE ESTIMATE**
Rogers Road Segment 1 - Detention Pond-B

Borings: 3@30' [90 LF] & Piezometers: 1@30', [30 LF]

A. FIELD EXPLORATION	Current Qty.	Unit	Unit Rate	Amount
Mobilization/Demobilization (Truck Rig)	1	LS	\$746.00	\$746.00
Mobilization/Demobilization - ATV Rig Surcharge	1	LS	\$266.00	\$266.00
Technician for Staking, Utilities Clearance, Coordination	16	hrs.	\$96.00	\$1,536.00
Soil Drilling and Sampling (continuous; <up to 20')	60	ft.	\$27.00	\$1,620.00
Soil Drilling and Sampling (20'-50' continuous)	30	ft.	\$32.00	\$960.00
ATV Surcharge	90	ft.	\$11.00	\$990.00
Soil Drilling and Sampling (0'-50' intermittent)	0	ft.	\$24.00	\$0.00
Logging (NICET II)	16	hr.	\$96.00	\$1,536.00
Grouting Holes	0	ft.	\$13.00	\$0.00
Piezometer Installation	30	ft.	\$26.00	\$780.00
Piezometer Abandonment	30	ft.	\$21.00	\$630.00
24-Hr, 7-Day & 1 month PZ Water Level Readings	24	hrs.	\$96.00	\$2,304.00
Vehicle Charge	24	hrs.	\$13.00	\$312.00
	SUBTOTAL			\$11,680.00
B. GEOTECHNICAL LABORATORY TESTING		Unit	Unit Rate	Amount
Moisture Content (ASTM D-2216)	45	ea.	\$12.00	\$540.00
Atterberg Limits (ASTM D-4318)	18	ea.	\$76.00	\$1,368.00
Passing No. 200 Sieve (ASTM D-1140)	18	ea.	\$59.00	\$1,062.00
Unconfined Compression (ASTM D-2166)	8	ea.	\$54.00	\$432.00
Unconsolidated-Undrained Triaxial Test (ASTM D-2850)	16	ea.	\$77.00	\$1,232.00
Consolidated-Undrained Triaxial Test (ASTM D-4767) *3-stage w/3 samples/set	1	ea.	\$1,800.00	\$1,800.00
Double Hydrometer Tests (ASTM D-4221), with D ₉₀ and D50	2	ea.	\$266.00	\$532.00
Crumb Tests (ASTM D-6572)	20	ea.	\$46.00	\$920.00
Specific Gravity (ASTM D854)	1	ea.	\$71.00	\$71.00
	SUBTOTAL			\$7,957.00
C. ANALYSES & REPORT PREPARATION		Unit	Unit Rate	Amount
Senior Engineer (P.E.)	10	hrs.	\$218.00	\$2,180.00
Project Manager (P.E.)	15	hrs.	\$176.00	\$2,640.00
Graduate Engineer	25	hrs.	\$122.00	\$3,050.00
Draftsman/word Processor	25	hrs.	\$75.00	\$1,875.00
	SUBTOTAL			\$9,745.00
TOTAL ESTIMATED FEE OF PROPOSED SCOPE				\$29,382.00