

(Bellaire Blvd at Mason Road, Project No. 23415)

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 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 Two Hundred Eighty-Five Thousand Seven Hundred Ninety and 39/100 Dollars (\$285,790.39). 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 \$285,790.39. 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 \$285,790.39 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 \$285,790.39.

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, ENGINEER SHALL 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 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 shall not assign this Agreement to another party without the prior written consent of County, which consent shall not be unreasonably withheld, conditioned, or delayed. Any purported or attempted assignment or transfer in violation of this Section shall be null and void.
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: FCM Engineers, PC
3300 Gessner Road, Suite 249
Houston, Texas 77063

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. **Multiple Counterparts.** This Agreement may be executed in multiple counterparts, each having equal force and effect of an original.

42. **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

FCM ENGINEERS, PC



Authorized Agent – Signature

Frank C. Mbachu, P.E. DEE

Authorized Agent- Printed Name

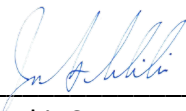
President

Title

5/27/2025

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)



3300 S. Gessner Rd.
Suite 249
Houston, Texas 77063
T-713-706-4414
F-713-706-4410

February 28, 2025

Mr. Stacy Slawinsky, P.E.
Attn: Mr. Robert T. McBride, PE
Program Manager
LJA Engineering
3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042

Re: Fort Bend County 2023 Mobility Bond Program
Bellaire Boulevard @ Mason Road Turn Lane
Project No 23415

Subject: Fee Proposal for Phase I, II, and III Design Services

Dear Mr. McBride:

Attached is FCM Engineers, PC (FCM) revised fee proposal for phase I, II, and III Design Services for Bellaire Boulevard @ Mason Road Turn Lane. The total fee proposal including the additional services is in the amount of Two Hundred Eighty-Five Thousand Seven Hundred Ninety Dollars and Thirty-Nine (\$285,790.39). The attached spreadsheet shows the itemized cost of the services required to implement the scope of work as conceptualized.

The revised fee proposal from FCM Engineers, PC, revised fee proposal from Rekha Engineering, Inc. for survey services, fee proposal from Earth Engineering Inc. for geotechnical investigation and fee proposal from Mbroh Engineering Inc. for traffic signal design are attached. The summary of the fee proposal is shown below:

Engineering Firms	Fee Proposal (\$)
FCM Engineers, PC	154,320.00
Rekha Engineering Inc.	62,945.00
Earth Engineering Inc.	25,065.00
Mbroh Engineering Inc.	43,460.39
Grand Total	285,790.39

Attached also is FCM scope of work. If you have any questions, please let me know.

Yours Sincerely,
FCM Engineers, PC



Dr. Frank C. Mbachu, P.E., DEE
President

cc: FCM File 2024102

FCM ENGINEERS PC SCOPE OF BELLAIRE AT MASON TURN LANE

1) Roadway

The project scope consists of intersection improvement of Bellaire Boulevard at Mason Road Turn Lane. The right turn lanes will be added to the existing intersection and will include the installation of traffic signal and push bottom cross walk at the intersection. The existing traffic control is a four-way corner stop signs with one in four stop sign located median nose of each Street.

2) Drainage

The impact of proposed intersection improvement will allow for adjustment of affected inlet location. The impact on the drainage system will be verified and noted.

3) Utilities

All existing utilities both private and public will be reviewed to see what impact the proposed intersection improvement will have on them. Any possible conflict will be coordinated with utilities and mitigated during design,

4) Right of Way (ROW)

It is anticipated that the proposed intersection improvement will require proposed ROW acquisition. The requirement for TCE will be evaluated and where right of entry (ROE) may be required will be determined during design. The fee proposal from Rekha Engineering, Inc. for topographic survey and easement acquisition is attached.

5) Environmental

There is an understanding that ESA is not required because of a wider area work being performed by Fort Bend County that includes wetlands study. The ESA information on the proposed roadway rehabilitation will be obtained from the County when the engineer requests for the information.

6) Geotechnical Investigation

The geotechnical recommendations will be incorporated into design of project as necessary. Geotechnical investigation and material recommendation will be provided by Earth Engineering Inc. The fee proposal for geotechnical investigation is also attached.

7) Permitting/Coordination

Coordination will be made with any entity that have any assets within the proposed and existing ROW. This will include private and public utilities; pipeline companies and entities with particular interest on the proposed rehabilitation. These coordinations will include possible permitting and approvals from agencies such as:

- HOA Management
- Fort Bend County Drainage District
- AT&T
- CenterPoint Energy
- Comcast
- Pipelines, if any

8) Deliverables

The deliverable associated with scope of work will include the followings

- Preliminary design report to include cost estimate, 30% plans, topographic survey, geotechnical investigation, documenting existing conditions and prepared rehabilitation.
- 70% design drawings, specifications and cost estimate
- 95% design drawings, specifications and cost estimate
- 100% design drawings, specifications and cost estimate
- Construction Phase Services as shown on the Fee Proposal

9) Project Schedule

Within first seven days of NTP, the EOR will submit a detailed schedule for completing the project. The Table below show a tentative schedule in days after NTP the EOR believes it will take to complete the project.

Scheduled Items	Number of Days from NTP
Topographic Survey	60
Geotechnical Investigation	60
Preliminary Engineering Report	135
70% Design	195
95% Design	240
100% Design	270



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

October 30, 2024 12-9-24 rev 2-28-25 rev

Mr. David L. Collins, P.C., RPLS, F.ASCE - FCM Engineers, PC –
3300 S. Gessner Rd., Suite 249
Houston, Texas 77063 - Tel: (713) 706-4414 - Fax: (713) 706- 4410

Re: Proposal and Letter of Agreement for: Professional Land Surveying Services for Fort Bend Mobility Program 2023 @ 23415 Bellaire Blvd @ South Mason Turn Lanes Precinct 4 2023 Bond Project

REKHA ENGINEERING, INC. ("REI") is pleased to submit the following proposal and letter of agreement to provide professional land surveying services for the referenced project. Scope of works for professional land surveying services for the intersection of 23415 Bellaire Blvd @ South Mason Turn Lanes FB Precinct 4 2023 Bond Project for Fort Bend County (Owner) (500 L.F. each way x 4 streets) for the above referenced project are listed below:

Survey Scope consist of:

2S.700 Existing Right-of-Way Maps (Cat. 1B Condition II) separate map set

- A. Provide deed and abstracting research to determine existing rights-of-ways throughout the project routes.
- B. Locate and Tie in property corners and block corners on the existing rights-of-ways
- C. Locate and Tie in property corners of estimated 6 adjacent tracts boundary to the right of way (within 500' each way of intersection – see attached exhibit map B)
- D. Balance existing property corners vs deeds and plats calculations
- E. Prepare right-of-way map of the existing right-of-way in accordance with TSPS Category 1B, Condition II standards and conform to Fort Bend County Standards.

Deliverables: Signed, sealed, and dated right-of-way map of the existing rights-of-ways at 1"= 40' on 22" x 34" sheets plus text being sized for 11"x17" sheets.

2S.701 Topographic Survey (Cat. 6 Condition II) separate map set (Survey will completed to FBCED Requirements and based on NAD 83 and NAVD 88 (2001 adj). Survey will establish horizontal and vertical control)

- A. Perform topographic survey for 500' linear feet each way on the 4 paved streets intersecting totaling 2,000 l.f
plus interior of the intersection
- B. Perform topographic survey at the following intersections for traffic signals:

23415 Bellaire Blvd @ South Mason Turn Lanes Precinct 4 2023 FB Bond Project

- C. Survey to include up to 20 feet outside of the 100' wide right-of-way if permitted by tract owners and up to 60 feet outside right- of-way for objects (obstructions), except those that are behind brick walls and buildings.
- D. Establish elevations and locations of physical features including buildings, structures, signs, power poles, curbs, driveways, water meters, manholes,

7676 HILLMONT DR., SUITE 350 - HOUSTON, TEXAS 77040

PHONE: (713) 895-8080/8081 - FAX: (713) 895-7686

Website: www.rekhaengineering.com - E-mail: jenglish@rekhaengineering.com

TBPLS FIRM No. 10133800

TBPE No. F-3712



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

- pedestals, ponds, light poles, etc. within the proposed and existing right-of-way. Overhead crossing utilities shall be limited to the low chord elevation.
- E. Provide pipe size, material and directions of all sanitary sewer lines, storm sewer lines, dry utilities and driveway. Top of rim or top of grate shall be recorded on all inlets, manholes and drainage structures.
 - F. Locate Ornamental trees or Landscape trees with a diameter of 4" and larger shall be located. Wooded/brushed areas shall be limited to an outlined area only. No Individual Trees shall be located on natural vegetation areas.
 - G. Provide SUE Level C per ASCE SUE Guidelines
 - a. Perform Texas One Call for underground utility locations to mark utilities within the existing right-of-way and existing easements within the take area.
 - b. Locate markings provided by One-Call and "visible" utilities within 25 feet of the proposed and or existing right-of-way.
 - H. Provide SUE Level D per ASCE SUE Guidelines
 - a. Obtain utility maps from Comcast, CenterPoint Energy, and AT&T.
 - b. Obtain utility maps from other utilities not limited to waterline, sewer, MUD, pipelines
 - I. Locate utility markings or test holes provided by SUE providers.
 - J. Locate soil borings.
 - K. Provide all traffic control, labor, and equipment for the Traffic Control Plan (TCP) while performing field services in compliance with the regulations of the most recent edition of the "Texas Manual on Uniform Traffic Control Devices" and FBCED Standards.(NA)
 - L. Provide utility conflict table information to EOR client , to include risers per FBCED standard (Utility Table) Templates (by Engineer)
 - M. Attend Field Topo Verification Meeting to visibly check that all topo items are currently located as per the field notes. Objectives to be achieved during the field topo verification meeting includes impacts that could affect the alignment alternatives have on the Right of Way, existing structures such as signals, utilities, and property, environmental impacts and impacts to existing and proposed improvements.
 - N. Provide/meet all railroad survey requirements needed for the railroad review of the project.(NA)
 - O. Survey datum will be coordination with client for our project.

Deliverables: CADD in AUTOCAD 19 3 d format file along with ASCII point file, DTM with 1-foot contours and TIN file and XML file with break lines; 22"x34" 1" = 20' plan sheets for the topo field walk (6 copies)

2S.702 Parcel Overall Map with Existing Adjoining Tracts W/ Proposed ROW Acquisitions not included

- A. Horizontal Survey Control shall be referenced to the Texas State Plane Coordinate System, South Central Zone, NAD83.
- B. Vertical Control shall be based on the nearest existing Harris Reference Marker, NAVD 1988, 2001 Adj.
- C. Provide adequate number of control points that are set and recoverable.
- D. Request information from FBED for directions on tying controls to adjacent projects.

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Deliverables: Survey Control Map and three-point sketches, signed and sealed by a Texas RPLS.

Surveying of Roadway - Optional Services

1. S.700C – D760C Survey Coordination (optional fee) U.V.E. – not included

Engineer shall coordinate with the survey provider for the completion of the Surveying tasks, which shall be included in the Study Phase Report or Design Plans.

Item-1: Proposed Un obstruct able Visual Easement Maps (UVE)

Boundary survey will be performed for preparing parcel plat and metes and bounds description for acquiring parcels for this project for UVE's. UVE's will be prepared, based on limited research at the time of this proposal, includes 14 parcels per Fort Bend County Appraisal District listed below:

REI has confirmed that UVE's have been dedicated by plat only for the other intersections not listed above within this scope of work. Note this does not include any tracts dedicate by deed.

Survey will comply with Category 1B, Condition 2 survey of the latest TSPS Manual and Harris County survey requirements as applicable/feasible. Horizontal and vertical controls will be established and tied to the Texas State Plane Coordinate System, South Central Zone NAD 83 (CORS 96) and datum NAVD 88. In conformance, the scope of work will include the following:

1. Prime will confirm the UVE's (size and location).
2. Review deeds, as necessary.
3. Prepare plat map drawing for each parcel.
4. Prepare metes and bound description for the parcel.
5. Map check the closure for the parcel.
6. Staking the parcel on the ground as appropriate.

The deliverables will be signed and sealed parcel plat, field notes and supporting last deed of record for each parcel.

Right of way for Improvements

- A. Provide exhibit of proposed location(s).
- B. Contact 811 prior to performing work.
- C. Perform work according to FBED guidelines and ASCE SUE Guidelines - <https://www.fhwa.dot.gov/programadmin/asce.cfm>

Deliverables: Signed, sealed, and dated Exhibit and layout.

2. S.750 Proposed Acquisition ROW Maps (Cat 1B, Cond. II) (\$/parcel) – Optional fee

Proposed Right of Way Acquisition Tracts as an optional fee for adjacent tract as referenced above and **Exhibit Map B – estimated 6 tracts**

Prepare parcel map exhibits and metes and bounds descriptions per FBED.

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REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

Deliverables: Signed, sealed, and dated Parcel Map and Metes and Bounds.

3. **Quality Level B.** QL-B involves the application of appropriate surface geophysical methods to determine the existence and horizontal position of virtually all utilities within the project limits. This activity is called "designating". The information obtained in this manner is surveyed to project control. It addresses problems caused by inaccurate utility records, abandoned or unrecorded facilities, and lost references. The proper selection and application of surface geophysical techniques for achieving QL-B data is critical. Information provided by QL-B can enable the accomplishment of preliminary engineering goals. Decisions regarding location of storm drainage systems, footers, foundations and other design features can be made to successfully avoid conflicts with existing utilities. Slight adjustments in design can produce substantial cost savings by eliminating utility relocations.

S.751 N.A. Per Exhibit C – **no pipelines** within the scope of the land survey

- 4. Construction Staking** of proposed improvements per civil plan -one time - see Effort table for services included only.

Overview

REKHA Engineering, Inc. will perform the referenced services for the referenced project
for lump sum fees of:

Right of way Map set of plans with control and a Topographic Right of way Map with benchmark map

Basic Services

2S.700	Right-of-Way Maps (Cat. 1B Condition II)	\$ 13,437.50
	(2S.700 & 2S.701) –	

2S.701	Topographic Survey (Cat. 6 Condition II) (2S.700 & 2S.701r)	\$ 18,382.50
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Construction Staking of new improvements
per civil engineering plans signalization \$ 5,190.00

Optional Services upon request

1. **Proposed Right of Way Acquisition Tracts**
 (\$ 3,542.50 ea. Tract)
 (est. 6 adjacent tract within 500' ea. way scope)
 — est. 6 tracts x 3,542.50 = \$ 21,255.00

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REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

2. New Right of Way Staking for Contractors

\$ 1,560.00 ea. time x 3 = \$ 4,680.00

Total \$ 62,945.00

Estimated time to complete services are 60calendar days or less – weather permitting for:

A. 2S.700 Right-of-Way Maps,

B. 2S.701 Topographic Survey

2S.702 Parcel Overall Map with Existing Adjoining Tracts with Proposed ROW Acquisitions

If this is acceptable to you, please sign below and return one fully executed original to us, at which time this will become a binding Agreement between us. Upon receipt thereof, we will immediately commence performance of our services. Payment will be due upon within 5 days of your payment received of the invoice based on % of completion monthly. In the event this account is placed for collection with any party or through judicial proceedings, you agreed to pay all cost incurred and/or are awarded by the court and in addition to any principal, prejudgment interest and all cost associated with the collection, including deliveries, etc... Furthermore, you agreed that all past sums bear interest of at the 1.5% per month or 18% per annum on any and all outstanding balances. Venue for any dispute under this contract is Houston, Harris County, Texas. All sums are due and payable in Houston, Harris County, Texas. Presently, RE has 2,000,000 professional liability Insurance coverage; workman compensation coverage; and \$1,000,000 umbrella liability coverage. However, it is agreed that RE will be responsible only for loss or injury caused by acts or omissions of its agents and employees, and Owner will indemnify and hold RE harmless from any and all claims or causes, of action arising, in whole or in part, from the act or omissions of Owner, Owner's agents, employees, third parties and/or consultants associated with the Owner & the herein referenced project.

REKHA ENGINEERING, INC. (REI)

AGREED AND ACCEPTED BY CLIENT:

By

John H. English, Sr. Vice President

By:

(Note: the entity that is signing this proposal is responsible for Payment)

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TBPE No. F-3712



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

EXHIBIT "A"

2024 Hourly Rates (for RE, INC. = REKHA Engineering, Inc. =REI)

10-2024

Principal	\$ 205.00 per hour
Project Manager	\$ 165.00 per hour
Surveyor (RPLS)	\$ 150.00 per hour
Technician	\$ 105.00 per hour
Sr. Technician	\$ 125.00 per hour
Secretary	\$ 65.00 per hour
Survey Crew (2-Man Crew)	\$ 195.00 per hour

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TBPLS FIRM No. 10133800

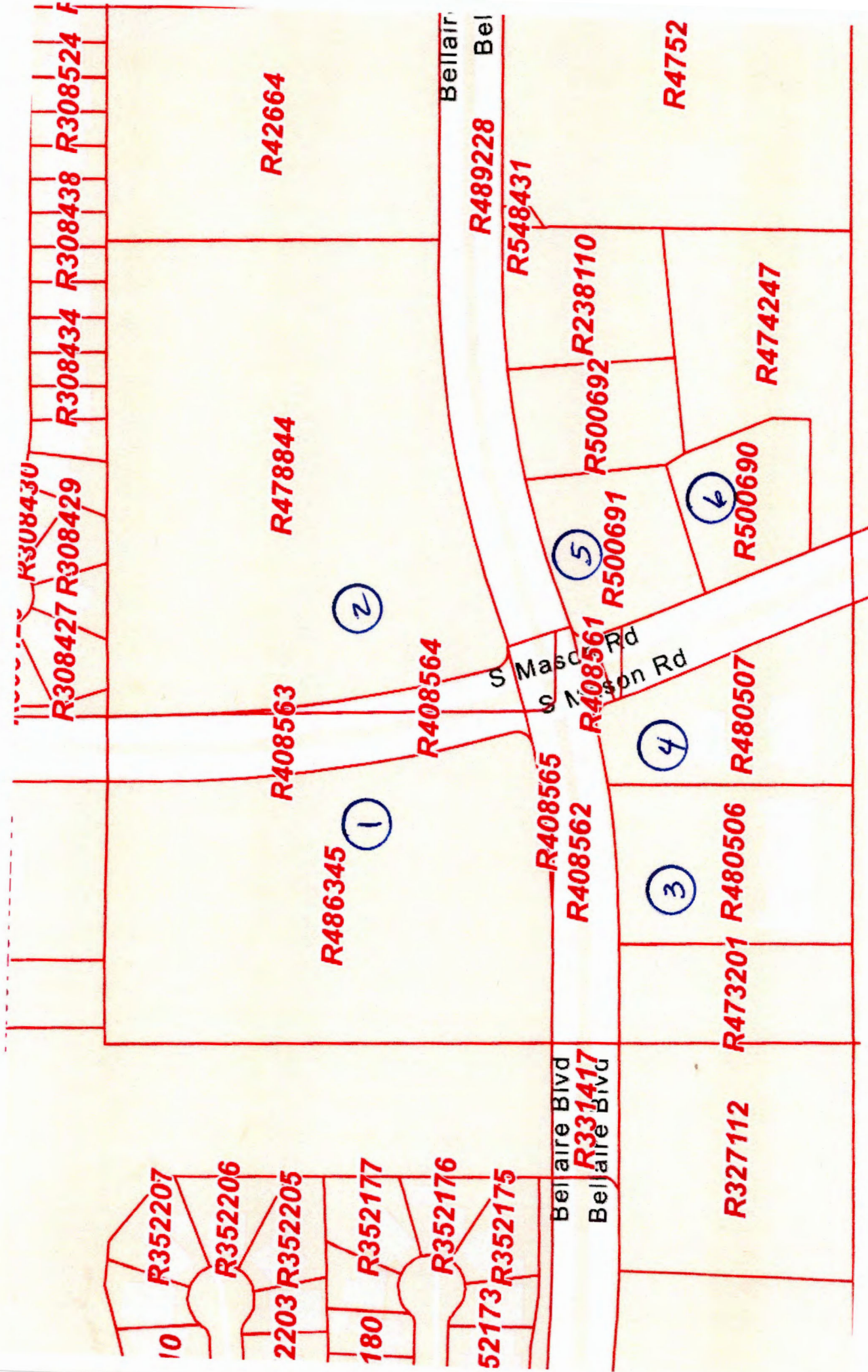
TBPE No. F-3712

BELLAIRE/MASON R.O.W.

Legend

- 7600 S Mason Rd
- Exxon
- Ivy Point Richmond
- Kush Kingdom
- NVC - Richmond
- Style12
- Style13
- Style14
- Tacos El Ranchero





Sheet 'A'

**PROJECT: Fort Bend County 2023 Mobility Projects
23415 Bellaire Blvd@S.Mason Turn Lanes Prec 4**

October 30, 2024

PROFESSIONAL LAND SURVEYING SERVICES BY:



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

**(a Certified MBE Firm)
7676 Hillmont St. Suite 350
Houston, TX 77040
713-895-8080**

jake1@pdq.net

TBPLS: 10133800, TBPE: F-3712



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

PROJECT: Fort Bend County 2023 Mobility Projects 23415 Bellaire Blvd @ S. Mason Turn Lanes Precinct 4

1. Boundary Determining Existing Right of Way Survey

10/28/2024

Description	Survey Crew	Tech	Sr. Tech	RPLS	Total
1. Investigate plats and deeds plus adjoiner deeds and plats	0	2	0	1	\$360.00
2. Utility Investigation: COH Plan, FEMA, GIS, CenterPoint, AT&T, W-S-STM, ROW	0	0	0	0	\$0.00
3. Field tie in benchmark and establish TBM	0	0	0	0	\$0.00
4. Field- Locate back corners adjoining tract and establish control	12	1	0	1	\$2,595.00
5. Right of Way street surveying	20	1	0	1	\$4,155.00
6. CAD Right of Way roadway map	0	40	1	2	\$4,625.00
7. Combine all office and fieldwork to create overall maps coordinations plus overall map	0	20	1	1	\$2,375.00
8. Professional review and issue	0	8	2	4	\$1,690.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
Total Hours	32	72	4	10	
Rate/Hr	\$195	\$105	\$125	\$150	
Total Fee	\$6,240	\$7,560	\$500	\$1,500	\$15,800.00



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

PROJECT: Fort Bend County 2023 Mobility Projects 23415 Bellaire Blvd @ S. Mason Turn Lanes Precinct 4

2. Topographic Roadway Survey

10/28/2024

Description	Survey Crew	Tech	Sr. Tech	RPLS	Total
1. Investigate plats and deeds	0	2	0	0.5	\$285.00
2. Utility Investigation: COH Plan, FEMA, GIS, CenterPoint, AT&T, W-S-STM, ROW	0	4	0	0.5	\$495.00
3. Field tie in benchmark and establish 4 TBM(s) in field	4	1	0	0.5	\$960.00
4. Field- Locate front corners and establish control	3	0.5	0	0.5	\$712.50
5. Topographic street at 300LF/ day	36	2	0	1	\$7,380.00
6. Right of entry coordination of parcels (back P.C)	0	2	0	0.5	\$285.00
7. CAD Topographic roadway design plus calculations of control	0	54	1	1	\$5,945.00
8. Coordinate utility investigation with field work plus utility conflict table	0	4	0.5	1	\$632.50
9. Combine all office and fieldwork to create overall maps coordinations	0	12	0.5	1	\$1,472.50
10. Professional review and issue	0	6	0.5	4	\$1,292.50
11. Control Map with benchmark plus TBMs	0	10	0.5	2	\$1,412.50
	0	0	0	0	\$0.00



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

	0	0	0	0	\$0.00
Total Hours	43	97.5	3	12.5	
Rate/Hr	\$195	\$105	\$125	\$150	
Total Fee	\$8,385	\$10,238	\$375	\$1,875	\$20,872.50



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

PROJECT: Fort Bend County 2023 Mobility Projects 23415 Bellaire Blvd @ S. Mason Turn Lanes Precinct 4

4. Individual meets and bound and Exhibit map of individual parcels

10/28/2024

Description	Survey Crew	Tech	Sr. Tech	RPLS	Total
1. Investigate plats and deeds	0	2	0	0.5	\$285.00
2. Existing right of way taken map with proposed right of way	0	9	1	2	\$1,370.00
3. Set property corners	5	0.5	0	1.5	\$1,252.50
4. Combine all office and fieldwork to create overall maps coordinations	0	1	0.5	1	\$317.50
5. Professional review and issue	0	1	0.5	1	\$317.50
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
Total Hours	5	13.5	2	6	
Rate/Hr	\$195	\$105	\$125	\$150	
Total Fee per parcel	\$975	\$1,418	\$250	\$900	\$3,542.50

Number of Parcels:	6
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Total Fee	\$21,255
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REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

PROJECT: Fort Bend County 2023 Mobility Projects 23415 Bellaire Blvd @ S. Mason Turn Lanes Precinct 4

5. Stake property for clearing contractors

10/28/2024

Description	Survey Crew	Tech	Sr. Tech	RPLS	Total
1. Coordinate and calculate staking of property right of way	0	4	0.5	1	\$632.50
2. Stake in field new right of way alignment per civil plans	18	2	0.5	1	\$3,932.50
3. Collect stakes and confirm complete	0	1	0	1	\$255.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
Total Hours	18	7	1	3	
Rate/Hr	\$195	\$105	\$125	\$150	
Total Fee	\$3,510	\$735	\$125	\$450	\$4,820.00



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

PROJECT: Fort Bend County 2023 Mobility Projects 23415 Bellaire Blvd @ S. Mason Turn Lanes Precinct 4

6. Construction Staking of improvements - one time

10/28/2024

Description	Survey Crew	Tech	Sr. Tech	RPLS	Total
1. Coordinate and calculate staking of improvements	0	4	0	2	\$690.00
2. Stake in field new right of way w improvements per civil engineering plans	24	4	0	1	\$4,755.00
3. Collect stakes and confirm complete	1	0	0	1	\$310.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
	0	0	0	0	\$0.00
Total Hours	25	8	0	4	
Rate/Hr	\$175	\$105	\$115	\$135	
Total Fee	\$4,375	\$840	\$0	\$540	\$5,755.00



EARTH ENGINEERING, INC.

Geotechnical, Materials Testing & Environmental Consultants
4877 Langfield Road • Houston, TX 77040 • T: (713) 681-5311 • F: (713) 681-5411 • www.eartheng.com

October 28, 2024

Dr. Frank C. Mbachu, PE, DEE
FCM Engineers, PC
3300 S. Gessner Rd., Suite 249
Houston, Texas 77063

Proposal No.: P-EE2428810-G

Sent Via E-Mail: Ambroh@mbroh.com

Tel: (713) 706-4414
Fax: (713) 706-4410

**GEOTECHNICAL EXPLORATION PROPOSAL
BELLAIRE BOULEVARD AT S. MASON
ROAD TURN LANE IN FORT BEND COUNTY,
TX. 23415-PRECINCT 4**

Dear Mr. Mbachu,

Earth Engineering, Inc. is pleased to present this proposal to perform geotechnical Investigation for the above project in Fort Bend County, Texas.

The project includes Signalized intersection at Bellaire and Mason with additional right turn lanes.

The intersection of Bellaire Boulevard is 0.8 miles south of Westpark Tollway along Mason Road.

SCOPE OF WORK

The scope of our services was specified based on Fort Bend County Infrastructure specification:

The scope of our services was specified by the client as follows:

- Cut (6) cores prior to drilling for soil samples at the intersections.
- Drilling and sampling six (6) borings to a depth of 20-feet for the roadway.
- Obtaining continuous soil samples to a depth of 20 feet, and then at five (5) foot intervals thereafter to the borings' termination depths.
- **Earth Engineering** will perform granular soil sampling utilizing the Standard Penetration Test (split spoon sampler) by driving. Blow counts will be recorded as produced by a 140-pound weight falling 30 inches (ASTM D-1558). Cohesive soils will be sampled using a thin-walled sampler (Shelby Tube) hydraulically pushed into the soil (ASTM D-1587).
- Performing laboratory tests on selected representative soil samples to develop the engineering properties of the soil. These tests may include pocket penetrometers, unconfined compression, present moisture content, percent passing 200 sieves, dry densities, Atterberg Limits, Unconsolidated-Undrained Triaxial test, California Bearing Ratio (CBR), and OMD Standard Compaction as deemed appropriate.
- Utilizing the results of observations both in the field and in limited laboratory tests, **Earth Engineering** will author a report that will include the following subjects:
 1. soil stratigraphy: soil encountered up to 20 feet
 2. groundwater conditions and groundwater control during construction
 3. borings logs information will include all laboratory test results and field observations
 4. develop design recommendations for the roadway and the underground utilities. The recommendations will include buried structures such as manhole etc.
 5. classify the soil types in accordance with OSHA requirements based on the characteristics of the soils along the alignment
 6. recommend the utility bedding in accordance with City of Houston specifications
 7. present subgrade stabilization option such as lime/fly-ash for cohesion-less soils and lime for cohesive soils



8. equivalent Single Axle Load (ESAL) calculation (Traffic counts must be provided by the client)
9. recommend construction considerations, as deemed necessary
10. recommend back-fill material specifications
11. discuss the effects of poor drainage and the presence of trees on the performance of the structures and pavement
12. incorporating all the above into a geotechnical engineering report which is performed under the direction of, and signed by, a professional engineer registered in the State of Texas.

SCHEDULING

We anticipate that we can commence the fieldwork within ten (10) business days subsequent to our receiving your formal written authorization to proceed.

We anticipate that the field exploration and limited laboratory testing will require about 15 business days. Engineering analyses and report preparation will require approximately (20) business days.

Consequently, we anticipate our final report could be submitted within approximately eight (8) weeks subsequent to successful drilling of the borings.

We will work with you to meet your deadline.



ESTIMATED FEES

The total cost for the geotechnical study is estimated to be **\$ 25,065.00.**

<i>SERVICE DESCRIPTION</i>	<i>UNIT FEE</i>	<i>AMOUNT</i>	<i>ESTIMATED COST</i>
Field Exploration	Rate	Unit	Quantities
Mobilization/Demobilization	\$746	Mob	1
Drilling and Sampling (6 borings at 20 feet)	\$27	ft	120
Concrete Coring 10"	\$150	each	6
Grouting Borings to 20 Feet Each	\$13	ft	120
Two Traffic Controllers	\$59	hours	16
Vehicle Charge	\$10	hour	8
Field Engineers	\$122.00	hour	8
		Subtotal:	\$8,446.00
Laboratory Testing			
Measuring the Length of Concrete	10		6
Atterberg Limits (LL, Pi's)	\$76.00	test	18
Moisture Contents	\$12.00	test	18
Percent Finer than No. 200 Sieve	\$59.00	test	2
Unconfined Compressive Strength	\$54.00	test	4
Unconsolidated - Undrained Triaxial	\$77.00	test	4
California Bearing Ratio CBR	\$259.00	test	2
OMD Standard Compaction	\$246.00	test	2
		Subtotal:	\$3,296.00
Engineering and Report Writing			
Principal Engineer, P.E.	\$266.00	hour	8
Project Engineer, P.E.	\$218.00	hour	50
Support Personnel	\$59.00	hour	5
		Subtotal	\$13,323.00
		TOTAL	\$25,065.00

Notes:

1. Two (2) traffic controllers are required for the field activities.
2. Additional site visits, drilling, concrete coring, engineering analysis, and/or consultation beyond the scope of work specified in this proposal will be charged as additional fees using the above rates.

INSURANCE

Earth Engineering Inc. maintains the following insurance:

- Professional Liability (errors and omissions): one **million**.
- General Liability: **two million**.
- Workman's Compensation: **one million**.
- Commercial Auto Insurance: **one million**.
- Umbrella Insurance: **five million**



CLIENT RESPONSIBILITIES

Earth Engineering, Inc. requests that you provide the following information prior to the site visit and our site activities:

- Formal written authorization.
- Name and telephone number of responsible client contact, if other than yourself.
- Any geotechnical, environmental, geologic, and hydrological report previously prepared for the study area, to which you have access, as well as information regarding any similar report currently being undertaken.
- Any restrictions or limitations to, or requirements for site access to be adhered to by Earth Engineering personnel.

Should you have any questions concerning this proposal or other services we may provide, please feel free to contact us at (713) 681-5311 or by e-mail at moes@eartheng.com. We will be pleased to discuss them with you.

Yours very truly,
EARTH ENGINEERING, INC.

Moe A. Shihadeh

Moe A. Shihadeh, P.E., D.GE
Principal - Diplomate Geotechnical Engineering





SCOPE OF WORK

October 29, 2024

Mr. David L Collins, PC, RPLS, FASCE
3300 S. Gessner Rd., Suite 249
Houston, Texas 77063

Re: Project No. 23415 Signalized Intersection at Bellaire Blvd and South Mason Rd

Mr. Collins:

Mbroh Engineering is pleased to provide a scope and fee proposal for the referenced project for your consideration.

The scope of work in support of the Mbroh team fee proposal includes the Site visits, meetings, Operational Analysis, and Final Traffic Plans to facilitate the signalization at the intersection of 23415 Bellaire Blvd and South Mason Rd in Fort Bend County, Precinct 4 in Houston.

Scope of Work:

- A. ***Traffic Data Collection (to be provided to Mbroh by Prime Consultant):*** The data shall consist of 24-hour turning movement counts at the intersection of Bellaire Boulevard and Mason Road. The traffic data will include turning movement volume in 15-minute intervals for each approach, 3-group classification (Lights, Buses, and Trucks), and bicycle and pedestrian user volumes. Any possible impacts on traffic counts will be reported (lanes closures, construction detours, maintenance, unusual traffic patterns, etc.).
- B. ***Operational Analysis:*** AM and PM peak hour analysis will be determined from the collected traffic data. Traffic data for the future design year will be designed and used for analysis. The collision data for the intersection will be obtained from Fort Bend County, PCT 4 at a minimum, for the most recent five years for which data is available. A safety analysis will be performed based on the collected collision data and methodologies from the Highway Safety Manual. A signal warrant analysis will be performed utilizing the warrants described in the Texas Manual of Uniform Traffic Control Devices (TMUTCD).

If Fort Bend County, PCT. 4, does not have the most recent five years of collision data at this intersection, the operational analysis will be developed utilizing the best available data to ensure safety.

- C. ***Final Traffic Plans:*** Upon analysis of the collected data, should a signal be warranted at Bellaire Blvd and South Mason Rd, then we can proceed with the signal design at this intersection. The signal phasing and timing plans will be incorporated into the signal design for the intersection utilizing the Synchro Studio program and following the NCHRP Report 812 (Signal Timing Manual).

Pedestrians will be accommodated in the signal timing analysis and design at the intersection. The signal poles will be placed to accommodate mast arm lengths appropriate for required signal heads that follow MUTCD guidance. Pedestrian push buttons and pedestrian heads will be placed according to the Public Right-of-Way Accessibility Guidelines (PROWAG) and



MUTCD. Coordination with CenterPoint will be conducted to determine the power service location for the proposed signal. Lighting and detection types for the intersection will be determined by Fort Bend County and included in signal design plans.

Work for signal plan will begin upon receipt of available data and design files from the Prime Consultant and is anticipated to be completed approximately 60 business days upon receipt as follows:

- Topographical survey data
- Proposed edge of pavement
- Utilities relocation information
- Ft. Bend County Approved Signal Equipment List
- Available collision data from Ft. Bend County

D. **Design Requirements:** Specific design requirements for the project shall be in accordance with Fort Bend County Engineering Department – Engineering Design Manual (latest edition) and Standards (latest edition), Texas Department of Transportation (TxDOT) Standards, TxDOT's Texas Manual on Uniform Traffic Control Devices (TMUTCD) as warranted.

Fee Proposal summary:

Operational Analysis.....	\$9,204.00
Traffic Signal Plans.....	\$31,073.00

Additional Scope of Service to be approved by Prime Consultant before beginning work:

- Intersection Modification at the intersection of Bellaire Boulevard and South Mason Road is anticipated to be completed in approximately 30 business from notice to proceed.
\$ 3,185.00

Mbroh Engineering appreciated the opportunity to provide this scope and fee proposal for your consideration and looks forward to working on this project.

Sincerely,
Ernestine Mbroh, Director of Transportation

Fort Bend County Project No. 23415 Bellaire Blvd at Mason Rd Fee Estimation
Mbroh Engineering - Traffic Signal Design

[illegible]