STATE OF TEXAS §
§
COUNTY OF FORT BEND §

AGREEMENT BETWEEN FORT BEND COUNTY AND COBB, FENDLEY & ASSOCIATES, INC.
FOR PROFESSIONAL ENGINEERING SERVICES
(Gaines Road, Seg. 1 - Mobility Bond Project No. 20428X)

This Agreement ("Agreement") is made and entered into by and between Fort Bend County, Texas ("County"), a political subdivision of the state of Texas, and Cobb, Fendley & Associates, Inc. ("Contractor"), a corporation duly authorized to conduct business in the state of Texas. County and Contractor may be referred to individually as a "Party" or collectively as the "Parties."

WHEREAS, Contractor is a professional engineering and land surveying firm which provides engineering and surveying services in the state of Texas; and

WHEREAS, County desires for Contractor to provide engineering services in connection with the reconstruction of Gaines Road, Segment 1, under Mobility Bond Project No. 20428X; and

WHEREAS, Contractor 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 Contractor 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.** Contractor shall render services to County as defined in Contractor's Proposal dated October 19, 2023 (hereinafter, the "Services") attached hereto as "Exhibit A" and incorporated by reference for all intents and purposes.

3. **Time of Performance.** Time for performance of the Scope of Services under this Agreement shall begin with Contractor's receipt of Notice to Proceed and shall end no later than December 31, 2026. Contractor 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.**

(a) Contractor's fees for the Services shall be calculated at the rate(s) set forth in Contractor's Fee Summary in Exhibit "A" attached hereto. The Maximum Compensation to Contractor for the Services performed under this Agreement is Seven Hundred Seventy Nine Thousand Forty Five and 62/100 Dollars ($779,045.62). In no event shall the amount paid by County to Contractor under this Agreement exceed said Maximum Compensation without an approved change order.

(b) Contractor 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 Attachment "A."

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

5. **Limit of Appropriation.** Contractor understands and agrees that the Maximum Compensation for the performance of the Services within the Scope of Services described in Section 2 above is Seven Hundred Seventy Nine Thousand Forty Five and 62/100 Dollars ($779,045.62). In no event shall the amount paid by County under this Agreement exceed the Maximum Compensation without a County approved change order. Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of Seven Hundred Seventy Nine Thousand Forty Five and 62/100 Dollars ($779,045.62) specifically allocated to fully discharge any and all liabilities County may incur under this Agreement. Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total Maximum Compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor under this Agreement shall not under any

conditions, circumstances, or interpretations thereof exceed Seven Hundred Seventy Nine Thousand Forty Five and 62/100 Dollars ($779,045.62).

6. **Non-appropriation.** Contractor understands and agrees that in the event no funds or insufficient funds are appropriated by the County under this Agreement, County shall immediately notify Contractor 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.** County is a body corporate and politic under the laws of the state of Texas and as such, is exempt from sales and use taxes. County shall furnish evidence of its tax-exempt status upon written request by Contractor.

8. **Insurance.** Prior to commencement of the Services, Contractor shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Contractor shall obtain such insurance written on an Occurrence form 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 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 Contractor shall contain a waiver of subrogation in favor of County.

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

Contractor shall not commence any portion of the work under this Contract 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 Contractor.

9. **Indemnity. TO THE FULLEST EXTENT PROVIDED BY APPLICABLE LAW, CONTRACTOR 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 CONTRACTOR OR CONTRACTOR'S AGENTS, EMPLOYEES, OR ANOTHER ENTITY OVER WHICH CONTRACTOR EXCERCISES CONTROL. CONTRACTOR SHALL FURTHER PROCURE AND MAINTAIN GENERAL LIABILITY INSURANCE WITH COVERAGE AS PROVIDED IN SECTION 8 OF THIS AGREEMENT AND SHALL FURNISH A CERTIFICATE OF INSURANCE FOR THE SAME SHOWING FORT BEND COUNTY, TEXAS AS AN ADDITIONAL INSURED.**

10. **Public Information Act.** Contractor 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 Contractor 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 Contractor expressly marked as proprietary or confidential. County shall not be liable to Contractor 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. Contractor further acknowledges and agrees

that the terms and conditions of this Agreement are not proprietary or confidential information.

11. **Compliance with Laws.** Contractor 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. Contractor 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, Contractor shall be deemed an independent Contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of Contractor. Contractor and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.

13. **Use of Customer Name.** Contractor may use County's name without County's prior written consent only in Contractor's customer lists. Any other use of County's name by Contractor 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.** Contractor 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 Contractor 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 Contractor shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Contractor or agent of Contractor who, in County's opinion, is incompetent or by his conduct become 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, Contractor shall comply with, and will require that all Contractor's Personnel comply with, all applicable rules, regulations and known policies of County that are communicated to Contractor 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.** Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Contractor or its employees or agents from County in the performance of this Agreement shall be deemed to be confidential information of County ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Contractor shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Contractor) publicly known or is contained in a publicly available document; (b) is rightfully in Contractor's possession without the obligation of nondisclosure prior to the time of its disclosure under this Agreement; or (c) is independently developed by employees or agents of Contractor who can be shown to have had no access to the Confidential Information.

Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Contractor shall use its best efforts to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Contractor shall advise County immediately in the event Contractor learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Contractor will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Contractor against any such person. Contractor agrees that, except as directed by County, Contractor will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Contractor will promptly turn over to County all documents, papers, and other matter in Contractor’s possession which embody Confidential Information.

Contractor acknowledges that a breach of this Section, including disclosure of any Confidential Information, or disclosure of other information that, at law or in equity, ought to remain confidential, will give rise to irreparable injury to County that is inadequately compensable in damages. Accordingly, County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Contractor acknowledges

and agrees that the covenants contained herein are necessary for the protection of the legitimate business interest of County and are reasonable in scope and content.

Contractor 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 documents, data, reports, research, graphic presentation materials, etc., developed by Contractor as a part of its work under this Agreement, shall become the property of County upon completion or termination of this Agreement. Contractor shall promptly furnish all such data and material to County on request.

18. **Inspection of Books and Records.** Contractor shall permit County, or any duly authorized agent of County, to inspect and examine the books and records of Contractor for the purpose of verifying the amount of work performed under the Scope of Services. County's right to inspect such books and records shall survive the termination of this Agreement for a period of four years. Notwithstanding the foregoing, Contractor shall bear no liability or responsibility for deliverables that have been modified post-delivery or used for a purpose other than that for which they were prepared under this Agreement.

19. **Termination.** County may terminate this Agreement at any time, with or without cause, upon thirty (30) days written notice to Contractor. Upon termination of this Agreement by County, Contractor shall be paid in accordance with Section 4, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County. Contractor's final invoice for said services will be presented to and paid by County in the same manner set forth in Section 4 above. No fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to Contractor by County.

20. **Force Majeure.** Notwithstanding anything to the contrary contained herein, neither Party shall liable to the other for any delay or inability to carry out its obligations under this Agreement if such delay or inability is the result of a Force Majeure Event. Within a reasonable time after the occurrence of such event, but no later than ten (10) calendar days after, the Party whose obligations are 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, a Force Majeure Event includes, but is not limited to: strikes or other labor disputes, severe weather disruptions, natural disasters, fire or other acts of God; riots, war, or other emergencies; failure of any governmental agency to act in a timely manner; the discovery of any hazardous substance or differing and

unforeseeable site conditions; 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.** Contractor may not assign this Agreement to another party without the prior written consent of County.

22. **Successors and Assigns Bound.** County and Contractor 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 Contractor release any material or information developed or received during the performance of Services hereunder unless Contractor 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
Attention: County Judge
401 Jackson Street, 1st Floor
Richmond, Texas 77469

If to Contractor: Cobb, Fendley & Associates, Inc.
4424 W Sam Houston Parkway N,
Suite 600
Houston, Texas 77041

25. **Performance Representation**. Contractor represents to County that Contractor has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession ("Professionals") practicing in the greater Houston metropolitan area. Contractor 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. **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.

27. **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.

28. **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.

29. **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.

30. **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.

31. **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, Contractor hereby verifies that Contractor 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, 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, Contractor 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, Contractor 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, Contractor 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.

32. **Human Trafficking.** BY ACCEPTANCE OF THIS AGREEMENT, CONTRACTOR 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.

33. **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.

34. **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.

35. **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.

{Execution Page Follows}

IN WITNESS WHEREOF, and intending to be legally bound, County and Contractor 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

APPROVED:

J. Stacy Slawinski, County Engineer

COBB, FENDLEY & ASSOCIATES, INC.

Authorized Agent – Signature

Brad Matlock

Authorized Agent- Printed Name

Vice President

Title

January 3, 2024

Date

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

(Follows Behind)

CobbFendley

October 19, 2023
Mr. Stacy Slawinski, P.E.
Fort Bend County Engineer
C/O Robert McBride, P.E.
LJA Engineering, Inc.
3600 W Sam Houston Parkway S
Suite 600
Houston, Texas 77042

Re: Gaines Road from S. of Old Richmond/Boss Gaston to
S. of Keegans Bayou Bridge Paving & Drainage Improvements
Mobility Bond Program Project No. 20428X

Subject: Proposal for PER, Final Design & Limited Construction Admin. Services

Dear Mr. Slawinski:
We are pleased to provide you with this proposal to perform professional engineering and surveying services in connection with reconstruction of Gaines Road from Old Richmond/Boss Gaston intersection to just south of the bridge over Keegans Bayou, in PCT 4, designated as the Fort Bend County Mobility Bond Program Project No. 20428x.
Enclosed please find attachments A-D for Cobb, Fendley & Associates, Inc. (CobbFendley) proposed level of efforts, and direct expense breakdown including detailed scope of services, project schedule, and probable construction cost estimate for completing preliminary engineering, final design, bidding, and limited phase III construction administration services. The proposal also includes scope and associated compensations for additional services to perform the required geotechnical investigation, topographical and abstracting surveys, subsurface utility engineering (SUE), and traffic data collection. Additionally, the proposal includes anticipated scope and budget for optional additional services determined to be necessary during the final design phase for completion of the project's construction documents for the above referenced project.
CobbFendley proposed budget are as follow:

Basic Services (CobbFendley, Prime Consultant)

Phase I – Preliminary Design Services (Lump-Sum)	$195,261.01
Phase II- Final Design Services (Lump-Sum)	$310,074.41
Subtotal Phases I & II Basic Services, Prime Fee	$505,335.42
Phase III – Limited Construction Admin. Phase Services (Time & Material)	$ 50,000.00
Subtotal Phase III Construction Admin. Services, Prime Fee (T & M)	$ 50,000.00
Subtotal Phases I & II (PER & Final Design) and limited CA, Prime	$555,335.42

CobbFendley

Additional Services (Subconsulatants)

Geotechnical HTS Inc. Houston (Lump-Sum)	$ 16,221.10
Geotechnical Subconsultant Coordination, Prime @10%	$ 1,622.10
Traffic Data Collection CJ Hinch (Lump-Sum)	$ 2,400.00
Traffic Data Collection Coordination, Prime @ 10%	$ 240.00
Subtotal Subconsultants Additional Services Subconsultants Fee	$ 20,483.10

Optional Add Services (Subconsultants) (Anticipated for budgetary purpose, if required)

Geotechnical for detention site HTS Inc. Houston (Budgeted as needed)	$ 12,511.00
Geotechnical Subconsultant Coordination, Prime @10%	$ 1,251.10
Subtotal Optional Additional Services Subconsultants Fee (If required)	$ 13,762.10

Additional Services (Prime)

Topo Survey including abstracting & existing ROW envelope (Lump-Sum)	$ 73,244.00
SUE services Level A & B (Required) (Lump-Sum)	$ 29,296.00
Subtotal CobbFendley Additional Services, Prime Fee	$102,540.00

Optional Add Services (Prime) (Anticipated for budgetary purpose, if required)

Topo Surveying for detention site, Prime (Budgeted as need)	$ 12,500.00
ROW Parcels M&B 12 @ $3,183/Each, Prime (Budgeted as needed per parcel)	$ 38,196.00
Detention & Misc. Design during Design Phases, Prime (budgeted as needed)	$ 25,000.00
SUE services Level A & B, Prime (Required) (Lump-Sum)	$ 8,800.00
Subtotal Optional Additional Services, Prime Fee (If required)	$ 84,496.00

Reimbursables & Direct Expenses (Prime)

Reimbursables & Direct Expenses	$ 2,429.00
Subtotal Reimbursables & Direct Expenses, Prime	$ 2,429.00

TOTAL PROFESSIONAL SERVICES, PRIME & SUBCONSULTANTS..... $779,045.62

We respectfully request a total budget of $779,045.62 for the abovementioned professional services. Detailed scope of services and the level of effort for the basic, additional, and optional services are attached. Also attached are the proposals from subconsultant for the geotechnical investigation services.

Please note that optional additional services & fees are for budgetary purposes for anticipated topographical and ROW mapping for required parcels, engineering design for a potential detention site, if deemed necessary, as determined by the H&H analysis at the completion of the preliminary engineering phase. The optional additional services will only be performed with prior written authorization by the Fort Bend County Engineer and/or LJA Engineering's designated project manager, the Fort Bend County Managing Consultant.

We will commence upon receipt of the written notice to proceed for the work. Please call at your earliest convenience should you have any questions, or require additional information,

Sincerely,

COBB, FENDLEY & ASSOCIATES, INC.

Mahmoud Salehi, P.E.
Vice President | Senior Project Manager

Attachments:
"A" Scope of Services
"B" Level of Efforts
"C" Project Schedule
"D" Probable Construction Cost Estimate

Attachment "A"

Gaines Road Paving & Drainage Improvements

from ~300-ft south of Old Richmond/Boss Gaston to south of the Keegans Bayou Bridge

Scope of Services

Existing Conditions

The existing Gaines Road is a 2-lane asphalt road with roadside ditches from Old Richmond/Boss Gaston north to north of the Bissonnet Street intersection for approximately 4,200 linear feet or (0.80 mile) in length. The existing right-of-way (ROW) for most of the Gaines Road appears to be 60-ft wide within the project limits.

The following intersections are within the project limits:

- Three (3) non-signalized intersecting streets with "T" configuration approaching from the west,
  - Ennis Road
  - Jessie Parker Road
  - Petitt Road
- One (1) none-signalized intersection
  - Old Richmond/Boss Gaston and,
- One (1) signalized intersection
  - Bissonnet Street
- 150-ft wide CenterPoint Energy easement for high voltage transmission lines intersecting Gaines Road ROW located approximately 2,000-ft north of Old Richmond/Boss Gaston intersection.

The posted speed limit is 35 MPH and there are 21 driveways accessing the roadway comprised of residential homesteads and commercial businesses.

There are several existing dry and wet utilities within the ROW for the entirety of the project limits. The following represent the buried and aerial utilities that are designated by markers:

1. Water main service line along the west ROW line
2. Wastewater gravity system staggered along both rights-of-ways
3. AT&T Fiber Optic buried lines along the west ROW line
4. CenterPoint Electric Power Poles staggered along east and west ROW lines

Gaines Road drains via open ditches on either side of the roadway but the west ditch is the main conveyance channel which ultimately outfalls into the existing trunk Storm system along Boss Gaston.

Proposed Scope

The proposed scope is comprised of 3 phases: Study (PER)/preliminary engineering, final design & bidding phase services in addition to phase III, limited construction administration services. The scope of services will include professional engineering, topographical surveying & ROW mapping, hydrologic & Hydraulic analysis & design, traffic engineering, sub-surface utility engineering (SUE) and, geotechnical investigation services. The project will involve reconstruction of approximately 4,200 LF of 3-Lane pavement, 2-12' lanes with a 14-ft wide 2-way center turn lane concrete curb & gutter pavement with storm sewer drainage system within proposed 70-ft ROW requiring including potential detention site(s) for drainage mitigation to be determined upon completion of the drainage analysis during the

PER/Study phase. The project will also include constructing of 6-ft sidewalk along the west ROW line. The project may also include evaluation, upgrade and/or betterment of the existing water and wastewater lines within the project limits. The proposed roadway project survey control, horizontal & vertical alignment and drainage components will be coordinated with Fort Bend County consultant designated to work on segment 2 of the Gaines Road north of the Bissonnet Street.
Final Posted speed will be determined after the completion of the project by conducting speed study analysis followed by issuance of a certified letter indicating the safe posted speed limit.

The following constitute the primary goals of the study phase:

1. Prepare proposed pavement typical section layout.
2. Determine the impacts of the proposed roadway widening on existing properties and identify number of right-of-way (ROW) parcel required for the recommended roadway expansion and drainage improvements.
3. Coordination with MUD districts for the Bissonnet intersection as well as the existing drainage, water & wastewater utilities.
4. Coordination with the City of Houston, Fort Bend County Drainage District, Homeowners Associations as needed in addition to consultants designing Evergreen and other side Roads.
5. Determine potential conflicts and provide feasible conflict resolution for existing private utilities within the corridor particularly 3 existing pipeline crossings (an active & an abandoned).
6. Early identification of critical path items such as number of ROW parcels and major utility conflicts including determination of any/all permitting & regulatory requirements if needed.
7. Prepare preliminary drainage mitigation & Identify drainage problem areas associated with the Gaines Road & provide mitigation alternatives with resolution(s),
8. Review contents & recommendations of drainage report to be prepared by the designated Fort Bend County design consultant responsible for study and design of segment 2 of the project, north of the Bissonnet intersection.
9. Prepare preliminary schematics of the proposed typical section and alignment alternatives as part of the PER to be used towards final PS&E efforts, and
10. Develop preliminary construction cost estimate for the recommended alignment & typical section alternative.

The Preliminary Engineering Report (PER)/Study Phase

The purpose of the PER/Study is to clearly depict refined horizontal and vertical alignments and to document the goals stated above. CobbFendley will prepare a PowerPoint presentation depicting the project visually for the meeting attendees to better understand the project findings & recommendations as the report will remain internal to Fort Bend County Engineering staff and the County's project management consultant. The PER/Technical Memorandum will include an executive summary, preliminary schematics of the proposed typical section alternatives, a drainage report, water & wastewater line alignments, and construction cost estimates for the proposed roadway section, and the geotechnical report as applicable. CobbFendley will deliver an electronic copy of the report in PDF

format to the County. Upon completion of the PER document and subsequent presentation to the Fort Bend County Engineering, a 30% completed plans review will be held to include any/all additional scope needed to complete the project. CobbFendley will draft a separate proposal with associated compensation for any further requirements or additional scope of work requested by Fort Bend County.

Surveying and ROW Mapping

1. Topographic survey

   Topographic survey will be performed and completed during preliminary design. Horizontal & Vertical Control and Topographical Surveying and Roadway Cross-Sections will include but are not limited to the following:

   a. Horizontal and vertical project control shall be established relative to the North American Datum of 1983 (NAD 83, 2001 adjustment) and the North American Vertical Datum of 1988 (NAVD 88, 2001 adjustment/TSARP datum).

   b. Temporary benchmarks and baseline controls will be set, both with 1,000-foot maximum spacing between points.

   c. During topographic survey, found property corners will be documented to determine the approximate location and width of the right-of-way. Visible property delineators such as fence corners and other existing monumentations will also be tied in order to evaluate alignment alternatives within project limits.

   d. The Topographical survey shall be along Gaines Road from 300-ft south of Old Richmond/Boss Gaston to just south of the existing Keegans Bayou Bridge for approximately 4,200 feet. The topographical survey will also extend along all major & minor intersecting streets for 200-ft in E-W directions.

   e. Roadway cross sections will be obtained at 100 ft. intervals. Cross-sections shall extend 25 feet beyond the existing rights-of-way lines as applicable but not behind the platted subdivision fence.

   f. Topographic survey will identify locations and elevations of physical features to include buildings, fences, walls, trees, sidewalks, driveways and driveway curbs, power poles, light poles, water meters, water wells, ponds, sprinklers, off-site drainpipes as applicable.

   g. Topographic survey of any/all existing structures in clear view and within 50 feet of the existing right-of-way.

   h. The survey data collection and survey base map will include horizontal and vertical location of existing utilities within, crossing and adjoining project limits. Utilities will be located and tied based on visual evidence and utilities based on maps and plans provided by the utility owners and marked by “One Call” within the project’s limits, Flow line elevations, sizes, material types and directions of pipes will be obtained on storm sewer lines, sanitary sewer lines and culverts. The rim (top) and flow line elevations will be obtained on inlets, manholes, and drainage structures as applicable.

   i. A 3D topographical survey base map including a digital terrain model (DTM) and triangular irregular network (TIN) will be created for the existing roadway surface features.

   j. The survey line work and surface TIN shall be provided to the Client in Microstation/Geopak CADD platform.

2. Right of Way Mapping

Existing ROW envelope Determination

The existing ROW envelope will be performed upon completion and acceptance of the study phase findings and will include the following tasks:

a. Perform abstract survey; obtain deeds of records, and plats for Gaines Road right-of way, streets intersecting Gaines Road and tracts of land adjoining Gaines Road.

b. Establish the existing right-of-way of Gaines Road and intersecting streets.

c. Prepare existing Right-of Way Map of the project.

d. Prepare Survey Control Sheet(s) for the project.

e. Establish a recoverable existing and proposed monumentation to include setting iron rods for ROW parcels and cutback corners along Gaines Road and at intersecting streets.

Proposed ROW Maps/ Meets & Bounds and Parcel Sketches

Once right-of-way needs have been determined and approved by the County. The Engineer shall provide services including surveying in accordance with Category IA Condition II Land Title Survey must be performed to produce parcel map and metes-and-bounds descriptions for any proposed parcel to be acquired in the project. These documents will be submitted separately from other design documents and will be paid for on a per-parcel basis. TCE limits will also be identified for the reconstruction of private driveways extending beyond right of way limits.

Drainage Study & Report

The drainage study report is prepared to document the existing conditions and provide basic design considerations along with estimated construction cost of drainage related items.

The following tasks will be performed and will be included in the drainage study report:

1. We will request, obtain, review, and evaluate available data for the study area including Fort Bend County and FBCDD Drainage Study(s), as-built plans, the latest version of the reference standards and criteria and other information.
   a. Obtain, review, and evaluate available existing public and private utility information relevant to the characteristic of the existing storm sewer systems and outfall drainage channels/systems for the study area.

2. We will perform field visits to the study area and vicinity to photograph and adequately document existing conditions and special concerns as necessary.
   a. Research and review the reported findings of all available, previous studies related to the study area and vicinity.

b. Gather existing roadside ditch, culvert, and overland flow information using LiDAR and collected survey data. The survey shall include the location of all drainage appurtenances (i.e., ditches, culverts, equalizers, inlets, manholes, and detention facilities) to be adequately identified to display their respective geometric positions within the right-of-way. In addition, the identification of high points in roadways and ditches shall be determined from the best management practices during the site visits.

3. Perform Existing Condition Analysis:
   a. Analyze LiDAR Data to determine existing condition overland sheet flow patterns
   b. Identify and locate existing condition outfall locations and drainage systems
   c. Analyze existing terrain for overland flow paths
   d. Determine Existing Condition drainage areas, create drainage area maps and compare to Fort Bend County Masterplan Drainage areas - modify where necessary
   e. Perform existing condition hydrologic calculations using the Rational Method based upon Fort Bend County Drainage District ("FBCDD") drainage criteria for the 2-, 10-, and 100-year storm events.
   f. Analyze conveyance capacity of existing condition roadside ditches, culverts and contributing storm sewer systems (where applicable) by creating a dynamic hydraulic model in XP-SWMM to evaluate the functionality of the existing system to provide a baseline for comparison purposes for the 2-, 10-, and 100-year storm events.

4. Perform Proposed Condition Analysis and coordinate with the Fort Bend County Drainage District in order to obtain their approval and acceptance of the project:
   a. Determine proposed condition drainage areas and create drainage area map
   b. Perform proposed condition hydrologic calculations per FBCDD drainage criteria for the 2-, 10-, and 100-year storm events.
   c. Estimate the preliminary detention volume required to offset increased impervious cover and reduced roadside ditch ("RSD") storage volume
   d. Determine necessary sizes and geometries for the roadside ditches, driveway culverts, and limited storm sewer within the corridor (where applicable) required to convey flow within the ROW utilizing static hydraulic calculations
   e. Increase estimated ditch sizes to provide additional conveyance capacity and volume to offset impervious cover and reduced RSD storage volume (where possible)
   f. Create dynamic models in XP-SWMM to calculate proposed condition flows and resultant water surface elevations for the 2-, 10-, and 100-year storm events.
   g. Develop alternative measures to mitigate increases in HGL and flow to receiving systems associated with the proposed roadway improvement project within the County ROW or on adjacent undeveloped tracts (up to 3 alternatives)
5. Prepare a report with maps, exhibits and an estimated construction cost for drainage related items (including acquisition of additional ROW). Drainage meeting will determine which option the county would like to move forward with, and report will be updated/finalized to reflect comments from meeting. The study/report will conform to FCBDD standards and approval.

Utilities

Research to determine the existence and location of underground utilities (pipelines, duct banks, etc.) is the design consultant's responsibility. A reasonable amount of research should be conducted, including but not limited to contact with companies identified on above-ground markers, Railroad Commission website research, and map requests from prominent companies (CenterPoint, AT&T, etc.). CenterPoint Energy and AT&T I.D. numbers should be obtained. An appropriate attempt must be made to depict underground utilities accurately in the plan and profile drawings, and potential conflicts between existing utilities and proposed features should be identified. Any subsurface utility investigation (SUI) should be at the expense of the utility company. Contact with utility companies (both overhead and underground) to coordinate the adjustment of existing utilities will be made by the County and/or its project management consultant.

Geotechnical Report

1. Field Investigation

   Ten (10) 15-foot soil borings will be drilled according to the Fort Bend County design criteria manual along the project alignment (Gaines Road). The boring locations will be determined in consultation with CobbFendley and soil borings will be conducted after the invert depths have been established. The borings will be sampled continuously to a depth of 15 feet, and at maximum five-foot intervals thereafter. Samples of cohesive soils will be obtained using three-inch diameter pushed tubes. Cohesionless soils (sands and gravels) will be sampled and evaluated in- situ by use of the Standard Penetration Test (SPT). The borings will be grouted at the completion of field operations. In addition, one 15-foot piezometer will be installed to monitor the groundwater conditions along the project alignment. It is important to note that additional soil borings may be required for design and construction of a detention site upon results and recommendation of H&H engineering analysis.

2. Laboratory Testing

   The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil strata. Procedural standards noted below are for reference to methodology in general. In some cases, variations to methods may be applied because of local practice or professional judgment. Standards noted below include reference to other, related standards. Such references are not necessarily applicable to describe the specific test performed. The anticipated laboratory testing may include the following:

   - ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
   - ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
   - ASTM D1140 Standard Test Methods for amount of materials in soils finer than the No. 200 Sieve
   - ASTM D2166/D2166M Standard Test Method for Unconfined Compressive Strength of Cohesive Soil
   - ASTM D7263 Standard Test Methods for Laboratory Determination of Density and Unit Weight of Soil Specimens

   The laboratory testing program includes examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we will describe and classify soil samples in

accordance with the Unified Soil Classification System (USCS)

3. Engineering & Project Delivery

   Results of our field and laboratory programs will be evaluated by a professional engineer. The engineer will develop a geotechnical site characterization, perform the engineering calculations necessary to evaluate foundation alternatives, and develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil classification
- Groundwater levels observed during drilling and sampling
- Site and boring location plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Subgrade preparation/earthwork recommendations
- Recommendations for excavations and temporary groundwater control
- Open-cut construction recommendation
- Utility bedding and backfill
- Pavement design guidelines

If the detention pond is included in our scope, the geotechnical engineering report will also include the following:

- Detention pond construction considerations
- Global stability analyses of the detention pond side slopes for a maximum of two cross-sections
- Slope protection and erosion control

Environmental Site Assessment (ESA)

The consultant that reports directly to the county will be responsible for the identification and assessment of any environmental problems associated with the project. The design consultant will be required to coordinate with the environmental consultants.

Design Reviews/Permitting/Coordination

CobbFendley will coordinate with the following entities/agencies as needed throughout the project design cycle for obtaining agency plan approval for construction permitting process:
following agencies:

- Existing MUD Districts for the subdivision plats, utility layouts & ultimately approval of the modifications or betterments.
- West Keegans Bayou Improvement District for the existing sidewalk along the Keegans Bayou
- Fort Bend County Engineering for approval of the design plans and construction administration
- Fort Bend County Drainage District for approval of the drainage study report & drainage design plans
- Potential private utility impacts as identified with utility owners
- HOA Management for surrounding neighborhoods
- HJ Consulting, Inc. (Design Consultants for Gaines Road segment 2

Traffic Engineering

Traffic Control Plans - Detailed traffic control plans (TCP) will be prepared based on the approach and the number of construction phases decided in the conceptual TCP as part of the study. TCP will be designed according to the latest edition of The Texas Manual on Uniform Traffic Control Devices.

Traffic Signal Warrant Analysis - A traffic signal warrant analysis shall be performed for the Gaines at Boss Gaston/Old Richmond intersection. The traffic signal warrant analysis will be performed based on guidelines outlined in the TMUTCD. Traffic data to be provided by Fort Bend County.

Traffic Signal Design- A traffic signal design shall be produced for the Gaines at Boss Gaston/Old Richmond and Gaines at Bissonnet intersections. Below is a summary of the design elements that shall be provided for the intersections.

- Full traffic signal design
- Mast arm pole design (no elevations)

These proposed traffic signal improvements shall be provided in a set of plans as required by the County which includes the following:

- Existing Condition Diagram
- Proposed Traffic Signal Layout
- Electrical Schedule, Sign Design, Phasing Diagram
- General Notes
- Traffic Signal Notes
- Applicable TxDOT Standards

Confirmation of Power - The proposed power location for the intersection shall be identified and followed up by coordination with CenterPoint Energy (or other responsible power company) to confirm the power location. A letter shall be obtained from CenterPoint Energy (or other responsible power company) documenting their acceptance to the power source.

Construction Estimate and Quantities - A construction estimates and quantities will be provided for the traffic signal design to be included in the overall project package.

Traffic Signal Timings - Utilizing Synchro software, projected volumes will be inputted, and proposed AM Peak, PM Peak & Off-peak signal timings will be developed for implementation. Traffic counts to be provided by Fort Bend County.

SWPPP

Storm water pollution prevention plans (SWPPP) will be prepared and included in the construction documents and project manual based on FBC and/or HCFCD criteria.

Schedule

CobbFendley anticipates concluding the phase I, PER, in 270 days and phase II, final design, of construction documents in 180 days from the notice to proceed dates respectively. It must be noted that abovementioned durations for document delivery do not include the project management consultant (PMC), Harris County, and Fort Bend County's intermediate reviews in addition to an acceptance of the PER by the Fort Bend County Commissioner's Court.

Compensations

It is mutually agreed that the fee for the preliminary and final design efforts will be paid in lump-sum basis to be billed monthly on a percent complete basis by respective tasks performed. The invoices to the County will also accompany itemized major tasks for preliminary design, final design, survey, geotechnical, etc. performed within each billing cycle.

Design Criteria

Applicable design criteria include, in order of priority, (1) Fort Bend County Design Guidelines and construction standards (2) *Fort Bend County Drainage Criteria Manual* (Fort Bend County Drainage District, November 1987, revised April 1999), (3) Municipal design criteria if the project is located within the limits of a municipality and/or ETJ that has design criteria, (4) The City of Houston *Infrastructure Design Manual* (IDM). Current version of IDM used for infrastructure for which design criteria do not exist in the preceding documents/guidelines, (5) Fort Bend County Fresh Water District #1, (6) *Guidelines for Engineers Having Contracts with Harris County, Texas*, (7) applicable Texas Department of Transportation design criteria.

Final Design Deliverables (70%, 95%, and Final Submittal)

CobbFendley will deliver 70%, 95%, 100% completed plans, and the final bid ready submittal at the scheduled milestones.

The **70%** submittal will include the following deliverables:

1. 30% Comments addressed.
2. Cover Sheet.
3. Index of Drawings.
4. General notes.
5. Existing and proposed typical sections with station limits for each section; show pavement/subgrade material and thickness, ROW & roadway width, applicable dimensions, profile grade line, and general location of existing and proposed utilities)
6. Overall project layout sheet
7. Survey control map
8. Right-Of-Way (ROW) existing & proposed.
9. Horizontal Alignment Data.
10. Plan and profile sheets (1" = 20' plan scale (full size) but printed half-size at a 1" = 40' scale; all existing and proposed facilities correctly shown in plan and profile; separate drawings for water and sanitary to be produced if needed; Check for potential design issues.
11. Drainage area map & Hydraulic calculations.

12. Traffic control plan (phasing and traffic control; avoid detours unless approved by the County; use of construction zone standards is encouraged).
13. Signage and pavement marking plans (use of pavement marking standards is encouraged)
14. Storm Water Pollution Prevention Plan (drawings and text including details)
15. Cross Sections (100-foot intervals with earthwork calculations).
16. Specification table of contents.
17. Construction Cost Estimate in PDF & Excel format.
18. Bid form in PDF & Excel format.
19. 70% plans in PDF format and a KMZ file depicting the current design with proposed ROW.
20. Regulatory permitting if applicable for TxDOT access (Driveway).
21. Private and public utility submitted separately for review with the following:
    a. Updated utility table identifying utilities in ROW and conflict
    b. City of Houston Public Works & Engineering for design of the proposed 8" WM
    c. FBCFWD#1 for design of the proposed 8" WM
    d. Private utilities including CenterPoint, AT&T & pipelines
    e. Public utilities including MUD and privately owned utilities

The **95%** submittal deliverables will encompass the following:

2. 70% Comments addressed.
3. 95% Bid Ready Plans (Not Sealed) in PDF format in addition to a KMZ file of the current design with proposed ROW.
4. Verify earthwork quantities with cross sections at 100-ft intervals which will be incorporated into the final plans for contractor's information.
5. Standard construction details for the following:
    a. Roadway, Pavement, Curb
    b. Driveway, sidewalk & Ramps
    c. Drainage, Manholes, inlets & outfalls
    d. Signing & striping
    e. Retaining wall, slope paving
    f. Storm Water Pollution Prevention
    g. Project Sign
6. Construction Cost Estimate in PDF & Excel format.
7. Project manual:
    a. bid form in PDF & Excel format
    b. Specification table of contents
    c. Special specifications, or conditions
    d. Contract documents excluded)
8. CobbFendley will address the 70% comments and submit an electronic copy of the 95% completed plans in PDF format to the PMC for review & comments.

The final **100%** deliverable will encompass the following:

1. 95% Comments addressed.
2. Bid Ready Plans (Sealed) in PDF format & a KMZ file of current design with proposed ROW
3. Construction Cost Estimate in PDF & Excel format.
4. Project manual:
    a. bid form in PDF & Excel format
    b. Specification table of contents
    c. Special specifications, or conditions
    d. Contract documents excluded)

Bidding and Limited Construction Administration Phase Services

Upon completion of final design services, the County will determine an advertisement and bid opening schedule. All administrative project manual documents (cover page, Notice to Bidders, etc.) will be prepared by the County and CobbFendley will be provided with the document in PDF format.

A single project manual file in Adobe Acrobat format will be prepared which will include the following:

(1) Administrative documents,
(2) The bid form to be prepared by CobbFendley in Microsoft Excel format with requirement set forth by Fort Bend County,
(3) A sealed specification table of contents, and
(4) Applicable specifications and documents.

CobbFendley will prepare and provide to the County with a single file in Adobe Acrobat format for the entire drawing set excluding the cover sheet, which contains approval signature(s), all drawings will be printed directly to Adobe Acrobat format with electronic seal and signature.

CobbFendley will provide the following services during the Bid phase services:

1. Prepare an electronic PDF document containing the project manual file and the entire plan set to be uploaded onto the FBC engineering purchasing and the County's project management consultant. Additionally, 2 USB memory sticks will be delivered to the County Engineer's office and Purchasing Agent for advertising.
2. Attend a pre-bid meeting at the County Purchasing Office.
3. Briefly describe the project and will not prepare meeting minutes.
4. Receive bidder questions and clarifications from the County's Purchasing Agent.
5. Answers to questions and clarifications as well as any other required changes and prepare an addendum to include the responses and changes. The addendum will be distributed by the County's Purchasing Agent.

After the bid, the County's project management consultant will prepare a bid tabulation and provide a copy to the design consultant for filing.

Prior to the meeting, the project management consultant will inform CobbFendley of how many drawing and project manual sets are required, and the design consultant will provide these documents at the pre-construction meeting.

The following services will be performed by CobbFendley during the construction phase services:

1. Attend a pre-construction meeting with the County, project management consultant, general contractor, and construction materials testing contractor. Review Shop Drawings (including detailed structural components)
2. Review contractor submittals and responding to Requests for Information (RFI)
3. Respond to contractors RFI's (justifiable number of RFI's)
4. Participate in a substantial completion walkthrough
5. Prepare record drawings after project completion based on contractor as-built markups, the record drawings will be printed on paper and delivered to the County
6. Field visits and progress meetings will not be required unless requested by the County as an additional service.

The construction duration for this project is estimated to take 15 months. It is our mutual understanding that the construction phase services will be paid on a time-and-materials basis. The not-to-exceed fee for these services will be determined by the County and/or its project management consultant and CobbFendley. The construction phase services will be performed and continued with prior Fort Bend County authorization. Monthly billing will include a breakdown of hours spent by personnel in the various employee categories, at billing rates agreed to by the County and the design consultant. Reimbursable expenses, such as scanning and reproduction, will be billed at actual cost (no markup).

Fee Summary
Fort Bend County Mobility Program
Gaines Road from 300' South of Old Richmond/Boss Gaston to S. of Keegans Bayou Bridge
Fort Bend County Project No. 20428x

Sponsor: Fort Bend County
Description: Reconstruction of existing 2-lane roadway with open ditch to a 3-Lane concrete C&G section with with storm sewer and a 6' sidewalk
Date: 10/19/2023

Basic Services (Prime)		
Phase I PER	$	195,261.01
Phase II Final Design (including Bidding)	$	310,074.41
Subtotal Phases I & II (PER, Final Design & Bidding), Prime Consultant	$	505,335.42
Phases III limited CA Services* (Time & Material)*	$	50,000.00
Subtotal Phases III limited CA, Prime Consultant	$	50,000.00
* *As instructed by the County $25K (Budgeted T&M)*		
Subtotal Phases I & II (PER & Final Design) and limited CA, Prime	$	555,335.42
Additional Services (Subconsulatants)		
Geotechnical HTS Inc. Houston (Lump-Sum)		$16,221.10
Geotechnical Subconsultant Coordination, Prime @10%		$1,622.10
Traffic Data Collection CJ Hinch (Lump-Sum)		$2,400.00
Traffic Data Collection Coordination, Prime @ 10%		$240.00
Subtotal Subconsultants Additional Services, Subconsultants Fee		$20,483.10
Optional Add Services (Subconsultants) (Anticipated for budgetary purpose, if required)		
Geotechnical for detention site HTS Inc. Houston (Budgeted as needed)		$12,511.00
Geotechnical Subconsultant Coordination, Prime @10%		$1,251.10
Subtotal Optional Additional Services, Subconsultants Fee (If required)		$13,762.10
Additional Services (Prime)		
Topo Survey including abstracting & existing ROW envelope (Lump-Sum)		$73,244.00
Subsurface Utility Engineering (SUE) services (Leve "B" & Level "A" for 6 Test Holes)		$29,296.00
Subtotal CobbFendley Additional Services, Prime Fee		$102,540.00
Optional Additional Services (Prime)		
Additional Topographical Surveying for Detention Pond (Budgeted as needed)	$	12,500.00
Prop. Parcels M&B and sketches 12 @ $3,183/Each (Budgeted as needed)	$	38,196.00
Detention & Misc. Design during Design Phase Services (Budgeted as needed)	$	25,000.00
Subsurface Utility Engineering (SUE) (Level "A" for 4 Test Holes) (Budgeted as needed)	$	8,800.00
Subtotal Optional Additional Services, Prime Fee (If required)		$84,496.00
Reimbursables (Prime)		
Reimbursable Expenses	$	2,429.00
Subtotal Reimbursable Expenses, Prime	$	2,429.00
GRAND TOTAL PROFESSIONAL SERVICES, PRIME & SUBCONSULTANTS	$	**779,045.62**

Cobb Fendley Fee Summary

Fort Bend County Mobility Program

Gaines Road from 300' South of Old Richmond/Boss Gaston to S. of Keegans Bayou Bridge

Sponsor: Fort Bend County

Date: 10/19/2023

OVERALL BASIC SERVICES

Classification	Hours	Rate	Labor Cost
Principal	40	$110.00	$4,400.00
Project Manager	268	$102.33	$27,445.80
Senior Hydrologist Engineer	136	$91.67	$12,466.67
Project Engineer III	407	$66.33	$26,997.67
Project Engineer I	660	$47.33	$31,240.00
Senior Technician III	592	$54.67	$32,362.67
CAD Operator	459	$40.33	$18,513.00
RPLS	8	$66.33	$530.67
3-Man Crew	0	$64.67	$0.00
Survey Tech I	0	$37.00	$0.00
Utility Specialist	40	$54.67	$2,186.67
Clerical	20	$39.67	$793.33
Total Labor	2,630		$156,936.47
OVERHEAD	180.00%		$282,485.64
OPERATING MARGIN	15%		$65,913.32
SUBTOTAL CFA BASIC SERVICES PHASES I&II			**$505,335.42**

PER (PHASE I)

Classification	Hours	Rate	Labor Cost
Principal	8	$110.00	$880.00
Project Manager	86	$102.33	$8,759.73
Senior Hydrologist Engineer	81	$91.67	$7,388.33
Project Engineer III	172	$66.33	$11,435.87
Project Engineer I	292	$47.33	$13,802.40
Senior Technician	198	$54.67	$10,824.00
CAD Operator	146	$40.33	$5,888.67
RPLS	0	$66.33	$0.00
3-Man Crew	0	$64.67	$0.00
Survey Tech I	0	$37.00	$0.00
Utility Specialist	24	$54.67	$1,312.00
Clerical	9	$39.67	$349.07
Total Labor	1,015		$60,640.07
OVERHEAD	180.00%		$109,152.12
OPERATING MARGIN	15%		$25,468.83
SUBTOTAL CFA PHASE I PER			**$195,261.01**

FINAL DESIGN SERVICES (PHASE II) INCLUDING BIDDING

Classification	Hours	Rate	Labor Cost
Principal	32	$110.00	$3,520.00
Project Manager	183	$102.33	$18,686.07
Senior Hydrologist Engineer	55	$91.67	$5,078.33
Project Engineer III	235	$66.33	$15,561.80
Project Engineer I	368	$47.33	$17,437.60
Senior Technician	394	$54.67	$21,538.67
CAD Operator	313	$40.33	$12,624.33
RPLS	8	$66.33	$530.67
3-Man Crew	0	$64.67	$0.00
Survey Tech I	0	$37.00	$0.00
Utility Specialist	16	$54.67	$874.67
Clerical	11	$39.67	$444.27
Total Labor	1,615		$96,296.40
OVERHEAD	180.00%		$173,333.52
OPERATING MARGIN	15%		$40,444.49
SUBTOTAL CFA PHASE II DESIGN SERVICES			**$310,074.41**

Fort Bend County Mobility Program

Fort Bend County Project No. 20428x

Sponsor: Fort Bend County

Gaines Road from 300' South of Old Richmond/Boss Gaston to S. of Keegans Bayou Bridge

Consultant: Cobb, Fendley & Associates, Inc.

Manhour Estimate

Task	Principal	Project Manager	Senior Hydrologist Engineer	Project Engineer III	Project Engineer I	Senior Technician III	CAD Operator	RPLS	3-Man Crew	Survey Tech I	Utility Specialist	Clerical	Total Hours
Project Management													
Project kick-off meeting (1)	0	1	1	1	0	0	0	0	0	0	0	0	3
Attend status meetings (6)	0	8	8	8	8	0	0	0	0	0	0	0	32
Prepare invoice (monthly) (9)	0	4	0	0	0	0	0	0	0	0	0	4	8
Project coordination (FBC Eng., Subs, FBC GEC, West Kegans Bayou Imp. District & Subs)	0	80	24	48	0	0	0	0	0	0	0	0	152
Total Project Management*	0	93	33	57	8	0	0	0	0	0	0	4	195
**** THE PROJECT MANAGEMENT HOURS ARE DISTRIBUTED AT 20% TOWARDS EACH SUBMITTAL/PHASES***													
PRELIMINARY ENGINEERING REPORT - PER (30%)													
Drainage/Existing Condition Analysos													
Meetings/Coordination with FBC Drainage District and affilitated managing consultants	0	0	8	8	4	0	0	0	0	0	0	0	20
Analyze LiDAR Data to determine existing condition overland sheet flow patterns	0	0	2	0	8	8	0	0	0	0	0	0	18
Identify and locate existing condition outfall locations and drainage systems	0	0	1	0	2	0	0	0	0	0	0	0	3
Analyze existing terrain for overland flowpaths	0	0	2	4	8	0	0	0	0	0	0	0	14
Determine Existing Condition drainage areas and create drainage area map	0	0	2	8	8	0	0	0	0	0	0	0	18
Perform existing condition hydrologic calculations	0	0	4	0	8	0	0	0	0	0	0	0	12
Analyze conveyance capacity of existing condition roadside ditches and culverts to determine existing	0	0	8	16	40	0	0	0	0	0	0	0	64
Proposed Condition Analysis													
Perform proposed condition hydrologic calculations	0	0	1	8	8	0	0	0	0	0	0	0	17
Perform comparison between existing and proposed condition hydrology to determine mitigation stor	0	0	2	2	4	0	0	0	0	0	0	0	8
Create alternatives for proposed condition drainage systems to convey design storm using FBCDD dr	0	0	8	8	24	0	0	0	0	0	0	0	40
Create dynamic models to verify flows and computed water surface elevations for complex drainage	0	0	8	16	40	0	0	0	0	0	0	0	64
Determine/Locate potential areas for detention to mitigate impacts (up to 3 alternatives)	0	0	4	4	0	0	0	0	0	0	0	0	8
Create and compile documents for the Report/Exhibits/Charts	0	0	8	8	24	24	0	0	0	0	0	0	64
Traffic Signal Warrant Analysis	0	4	0	6	0	4	4	0	0	0	0	0	18
Agency Coordination	0	1	0	1	0	0	0	0	0	0	0	0	2
Technical Memo (with exhibits, pictures, etc)	0	2	0	4	2	2	2	0	0	0	0	0	12
Existing Condition Diagram (Bissonnet & Boss Gaston) intersection	0	2	0	2	4	8	8	0	0	0	0	0	24
Traffic Signal Plan Layout (Mast Arm, No Elevations)	0	2	0	2	4	16	16	0	0	0	0	0	40
Traffic Signal Timings (Based on Counts Provided by FBC)	0	2	0	2	4	8	0	0	0	0	0	0	16
Preliminary Traffic Engineering (TCP phasing & construction sequencing))	0	2	0	2	4	4	8	0	0	0	0	0	20
Data collection	0	4	0	4	4	0	0	0	0	0	0	0	12
Conduct field visits	0	4	0	4	4	0	0	0	0	0	0	0	12
Typical sections	0	2	0	0	2	0	4	0	0	0	0	0	8
Horz/Vert alignments	0	8	8	16	16	16	16	0	0	0	0	0	80
Public & Private Utility coordination	0	4	0	4	8	8	8	0	0	0	8	0	40
Water Line Preliminary Design	0	2	0	2	4	8	8	0	0	0	0	0	24
Wastewater Line Preliminary Design	0	2	0	2	4	8	8	0	0	0	0	0	24
Plan & profiles (Water & Wastewater Lines) (13 sheets)	0	2	0	2	4	8	16	0	0	0	0	0	32
Schematic Layout/ 30% Plan production	0	2	0	2	4	16	16	0	0	0	0	0	40
Cross sections to check the pavement horizontal, drainage, and cut & fill quantities	0	0	0	0	8	24	8	0	0	0	0	0	40
Utility research, adjustment, relocation	0	4	0	8	8	8	4	0	0	0	8	0	40
Public & Private Utility coordination	0	2	0	2	4	0	0	0	0	0	0	0	8
Water and Wastewater analysis for conflicts, relocation	0	2	0	2	4	4	4	0	0	0	0	0	16
Quantity Take-Off	0	0	0	0	8	8	0	0	0	0	8	0	24
Construction cost estimate	0	2	0	4	4	0	0	0	0	0	0	0	10
Compile the Updated Report/Exhibits/Charts	0	4	0	4	4	16	16	0	0	0	0	8	52
QA/QC	8	0	0	0	0	0	0	0	0	0	0	0	8
PowerPoint Presentation of the PER Report	0	8	8	4	4	0	0	0	0	0	0	0	24
Subtotal PER/30% Submittal	8	86	81	172	292	198	146	0	0	0	24	9	976

Fort Bend County Mobility Program

Fort Bend County Project No. 20428x

Sponsor: Fort Bend County

Gaines Road from 300' South of Old Richmond/Boss Gaston to S. of Keegans Bayou Bridge

Consultant: Cobb, Fendley & Associates, Inc.

Final Design - 70% submittal													
Refine horz/vert alignments	0	2	2	4	8	8	0	0	0	0	0	0	24
Drainage design, Drainage Area Map	0	2	2	4	8	8	8	0	0	0	0	0	32
Utility research, adjustment, relocation	0	0	0	8	8	16	8	0	0	0	8	0	48
Cover sheet/Index Sheet (2 Sheets)	0	0	0	0	2	0	4	0	0	0	0	0	6
Typical sections (1 Sheets)	0	1	0	0	0	1	4	0	0	0	0	0	6
Layout sheet (2 Sheets)	0	1	0	0	0	1	4	0	0	0	0	0	6
Plan & profiles sheets Street(13) (Roadway)	0	8	0	24	24	32	40	0	0	0	0	0	128
Plan & profiles sheets Street(13) (W & WW)	0	4	0	4	8	16	16	0	0	0	0	0	48
Intersection Grading and detail sheets (5)	0	2	0	2	8	8	8	0	0	0	0	0	28
Refine Existing Condition Diagram (Bissonnet & Boss Gaston) intersection	0	1	0	1	2	2	2	0	0	0	0	0	8
Traffic Signal Plan Layout (Proposed Condition for Bissonnet & Boss Gaston) intersection	0	4	0	2	4	4	8	0	0	0	0	0	22
Electrical Schedule, Sign Design, Phasing Diagram	0	2	0	8	8	0	0	0	0	0	0	0	18
Traffic Signal Notes & Applicable Standards	0	2	0	4	4	4	0	0	0	0	0	0	14
Traffic Signal Timings (Based on Counts Provided by FBC)	0	2	0	8	8	8	0	0	0	0	0	0	26
Electrical Schedule, Sign Design, Phasing Diagram	0	4	0	8	4	8	0	0	0	0	0	0	24
Traffic Engineering Plans (TCP detail design)	0	2	0	2	8	16	16	0	0	0	0	0	44
Cross sections	0	0	0	4	16	16	0	0	0	0	0	0	36
Signing & Pavement Marking	0	1	0	3	8	8	8	0	0	0	0	0	28
Misc.Details	0	4	0	8	4	8	0	0	0	0	0	0	24
Quantities	0	0	0	0	8	8	0	0	0	0	0	0	16
Cost Estimates	0	2	0	4	4	0	0	0	0	0	0	0	10
QA/QC	8	0	8	0	0	0	0	0	0	0	0	0	16
Subtotal 70% Submittal	8	63	19	109	146	172	126	0	0	0	8	1	612
Final Design - 95% submittal													
Cover sheet/Index Sheet (2 Sheets)	0	0	0	0	0	0	1	0	0	0	0	0	1
General notes/Special Provisions Specifications (2 Sheets)	0	1	0	1	0	0	1	0	0	0	0	0	3
Typical sections (1 Sheets)	0	0	0	0	0	0	2	0	0	0	0	0	2
Layout sheet (1 Sheets)	0	0	0	0	2	0	2	0	0	0	0	0	4
Drainage design, Drainage Area Map	0	0	0	0	2	4	0	0	0	0	0	0	6
Plan & profiles sheets (11) (Roadway)	0	2	0	2	4	16	24	0	0	0	0	0	48
Plan & profiles sheets (13) (W & WW)	0	2	0	2	4	16	16	0	0	0	0	0	40
Intersection Grading Layout & detailing (5) Intersections	0	2	0	2	8	8	8	0	0	0	0	0	28
Traffic Signal Plan Layout (Proposed Condition for Bissonnet & Boss Gaston) intersection	0	1	0	2	2	4	4	0	0	0	0	0	13
Electrical Schedule, Sign Design, Phasing Diagram	0	2	0	2	2	0	0	0	0	0	0	0	6
Traffic Signal Notes & Applicable Standards	0	2	0	4	4	0	0	0	0	0	0	0	10
Confirmation of Power	0	0	0	0	4	0	0	0	0	0	0	0	4
Traffic Signal Timings (Based on Counts Provided by FBC)	0	2	0	4	8	0	0	0	0	0	0	0	14
Electrical Schedule, Sign Design, Phasing Diagram	0	4	0	4	8	8	0	0	0	0	0	0	24
Traffic Engineering Plans (TCP detail design & narrative)	0	2	0	2	4	16	16	8	0	0	0	0	48
Cross sections	0	0	0	0	16	24	0	0	0	0	0	0	40
Stormwater pollution prevention plans	0	0	0	2	2	4	8	0	0	0	0	0	16
Signing & pavement markings (7 sheets)	0	0	0	4	4	8	8	0	0	0	0	0	24
Misc.Details	0	2	0	2	4	8	8	0	0	0	0	0	24
Quantities	0	0	0	0	8	8	0	0	0	0	0	0	16
Cost Estimates	0	2	0	0	8	0	0	0	0	0	0	0	10
Prepare project manual (specifications, bid forms)	0	8	0	16	24	0	0	0	0	0	0	0	48
QA/QC	8	0	8	0	0	0	0	0	0	0	0	0	16
Subtotal 95% Design Phase Submittal	8	51	15	60	120	124	98	8	0	0	0	1	445

Fort Bend County Mobility Program

Fort Bend County Project No. 20428x

Sponsor: Fort Bend County

Gaines Road from 300' South of Old Richmond/Boss Gaston to S. of Keegans Bayou Bridge

Consultant: Cobb, Fendley & Associates, Inc.

Bid-Ready 100% - Final Submittal													
Cover sheet/Index Sheet (2 Sheets)	0	0	0	0	0	0	1	0	0	0	0	0	1
General notes/Special Specifications & Special Provisions (3 Sheets)	0	0	0	0	0	0	1	0	0	0	0	0	1
Typical sections (1 Sheets)	0	0	0	0	0	0	1	0	0	0	0	0	1
Layout sheet (2 Sheets)	0	0	0	0	0	0	2	0	0	0	0	0	2
Drainage Comments	0	2	0	2	4	0	8	0	0	0	0	0	16
Plan & profiles (Roadway) (13)	0	1	0	1	4	8	16	0	0	0	0	0	30
Intersection Grading Layout & detailing (5) Intersections	0	1	0	1	6	8	8	0	0	0	0	0	24
Utility adjustment, relocation Design	0	1	0	0	4	4	4	0	0	0	8	0	21
Plan & profiles sheets (13) (W & WW)	0	1	0	1	8	8	8	0	0	0	0	0	26
Approving Agency Comments on Existing Condition Diagram	0	2	0	2	4	4	4	0	0	0	0	0	16
Traffic Signal Plan Layout (Proposed Condition for Bissonnet & Boss Gaston) intersection	0	1	0	1	2	2	0	0	0	0	0	0	6
Electrical Schedule, Sign Design, Phasing Diagram	0	1	0	1	1	0	0	0	0	0	0	0	3
Traffic Signal Notes & Applicable Standards	0	1	0	2	2	0	0	0	0	0	0	0	5
Finalize Confirmation of Power	0	0	0	0	1	0	0	0	0	0	0	0	1
Comments and Finalize Traffic Signal Timings	0	1	0	4	4	0	0	0	0	0	0	0	9
Electrical Schedule, Sign Design, Phasing Diagram	0	1	0	2	2	0	0	0	0	0	0	0	5
Traffic Engineering Plans (TCP detail design & narrative)	0	2	0	2	4	8	8	0	0	0	0	0	24
Cross sections	0	0	0	0	16	24	0	0	0	0	0	0	40
Stormwater pollution prevention plans	0	0	0	2	2	2	8	0	0	0	0	0	14
Signing & pavement markings (8 sheets)	0	1	0	1	4	4	8	0	0	0	0	0	18
Details/Misc.	0	2	0	2	4	4	8	0	0	0	0	0	20
Compile standard Details	0	0	0	0	2	2	2	0	0	0	0	0	6
Agency approvals (MUD Districts, WKBID, FBC Drainage District)	0	1	0	2	2	0	0	0	0	0	0	0	5
Quantities	0	0	0	2	4	4	0	0	0	0	0	0	10
Cost Estimates	0	1	0	0	8	0	0	0	0	0	0	0	9
Prepare complete project manual (specs, bid forms)	0	2	0	8	0	0	0	0	0	0	0	8	18
100% Sign & Sealed Bid ready Package	0	2	0	2	0	0	2	0	0	0	0	0	6
QA/QC	16	0	8	0	0	0	0	0	0	0	0	0	24
Subtotal 100% Bid Ready Plans - Final Submittal	16	43	15	49	90	82	89	0	0	0	8	9	400
Contract/Bidding													
Attend Pre-Bid & Pre-Con Meeting	0	2	0	0	2	0	0	0	0	0	0	0	4
Questions & Addenda	0	4	1	4	8	16	0	0	0	0	0	0	33
Tabulation & Recommendation of Bid	0	2	0	0	2	0	0	0	0	0	0	0	4
Subtotal Contract/Bid	0	27	8	15	14	16	0	0	0	0	0	1	80
TOTAL HOURS PER, FINAL DESIGN & BIDDING	40	268	136	407	660	592	459	8	0	0	40	20	2630

Fort Bend County Mobility Program

Fort Bend County Project No. 20428x
Sponsor: Fort Bend County
Gaines Road from 300' South of Old Richmond/Boss Gaston to S. of Keegans Bayou Bridge
Consultant: Cobb, Fendley & Associates, Inc.

Expense Estimate

Task	Deliveries	Miles	Mileage ($0.655	Reproduction	Review Fees	Total
Project Management						
Project kick-off meeting (1)	$0	300	$197	$0	$0	$197
Attend status meetings (6)	$0	300	$197	$0	$0	$197
Prepare invoice (monthly) (12)	$0		$0	$0	$0	$0
Update project status (12)	$0		$0	$0	$0	$0
Project coordination (project staff & subs)	$0		$0	$0	$0	$0
Preliminary Engineering Report						
Traffic Data collection	$0		$0	$0	$0	$0
Conduct field visits	$0	300	$197	$0	$0	$197
Typical sections	$0		$0	$0	$0	$0
Horz/Vert alignments	$0		$0	$0	$0	$0
Alternatives analysis	$0		$0	$0	$0	$0
Traffic studies	$0		$0	$0	$0	$0
Drainage studies	$0		$0	$0	$0	$0
Construction sequencing/TCP	$0		$0	$0	$0	$0
Utility coordination	$0		$0	$0	$0	$0
Right-of-Way requirements	$0		$0	$0	$0	$0
Construction cost estimate	$0		$0	$0	$0	$0
Interagency coordination	$0		$0	$0	$0	$0
Prepare draft PER	$0		$0	$0	$0	$0
Prepare final PER	$0		$0	$750	$0	$750
QA/QC	$0		$0	$0	$0	$0
Final Design						
Revise horz/vert alignments	$0		$0	$0	$0	$0
Drainage design	$0	300	$197	$0	$0	$197
Utility coordination	$0	400	$262	$0	$0	$262
Agency approvals (TxDOT, Drainage District, TDLR)	$0		$0	$0	$0	$0
Prepare 50% submittal						
Cover sheet	$0		$0	$0	$0	$0
Typical sections	$0		$0	$0	$0	$0
Layout sheet	$0		$0	$0	$0	$0
Drainage area map	$0		$0	$0	$0	$0
Plan & profiles	$0		$0	$0	$0	$0
Traffic control plan	$0		$0	$0	$0	$0
Stormwater pollution prevention plans	$0		$0	$0	$0	$0
Traffic signals	$0		$0	$0	$0	$0
Illumination	$0		$0	$0	$0	$0
Bridges	$0		$0	$0	$0	$0
Details	$0		$0	$0	$0	$0
Quantities	$0		$0	$0	$0	$0
Cost Estimates	$0		$0	$0	$0	$0
Technical specifications	$0		$0	$0	$0	$0
QA/QC	$0		$0	$0	$0	$0
Prepare 100% submittal						
Cover sheet	$0		$0	$0	$0	$0
General notes	$0		$0	$0	$0	$0
Typical sections	$0		$0	$0	$0	$0
Layout sheet	$0		$0	$0	$0	$0
Drainage area map	$0		$0	$0	$0	$0
Plan & profiles	$0		$0	$0	$0	$0
Traffic control plan	$0		$0	$0	$0	$0
Cross sections	$0		$0	$0	$0	$0
Stormwater pollution prevention plans	$0		$0	$0	$0	$0
Traffic signals	$0		$0	$0	$0	$0
Signing & pavement markings	$0		$0	$0	$0	$0
Illumination	$0		$0	$0	$0	$0
Bridges	$0		$0	$0	$0	$0
Details	$0		$0	$0	$0	$0
Quantities	$0		$0	$0	$0	$0
Cost Estimates	$0		$0	$0	$0	$0
Prepare project manual (specifications, bid forms)	$0		$0	$0	$0	$0
QA/QC	$0		$0	$0	$0	$0
Prepare final submittal						
Cover sheet	$0		$0	$0	$0	$0
General notes	$0		$0	$0	$0	$0
Typical sections	$0		$0	$0	$0	$0
Layout sheet	$0		$0	$0	$0	$0
Drainage area map	$0		$0	$0	$0	$0
Plan & profiles	$0		$0	$0	$0	$0
Traffic control plan	$0		$0	$0	$0	$0
Cross sections	$0		$0	$0	$0	$0
Stormwater pollution prevention plans	$0		$0	$0	$0	$0
Traffic signals	$0		$0	$0	$0	$0
Signing & pavement markings	$0		$0	$0	$0	$0
Illumination	$0		$0	$0	$0	$0
Bridges	$0		$0	$0	$0	$0
Details	$0		$0	$0	$0	$0
Quantities	$0		$0	$0	$0	$0
Cost Estimates	$0		$0	$0	$0	$0
Prepare complete project manual (specs, bid forms and front end docs)	$0		$0	$500	$0	$500
QA/QC	$0		$0	$0	$0	$0
Bid Phase						
Attend Pre-Bid Meeting	$0	200	$131	$0	$0	$131
Questions & Addenda	$0		$0	$0	$0	$0
Tabulation & Recommendation of Bid	$0		$0	$0	$0	$0
Total Cost=	$0		$1,179	$1,250	$0	$2,429

PRILIMINARY CONSTRUCTION COST ESTIMATE

Project: Gaines Road Segment 1
Limit From: 300' S of Old Richmond Road
Limit To: South of Keegans Bayou Bridge

Proj Length: 4,600 ft (Including Boss Gaston & Bissonnet intersections)
Project No:
CFA Job No:
Prepared By: CobbFendley
Date: 08/16/23

Summary of Estimate		
Stage:		1st Submittal
Total Amount for Roadway:		$7,091,238.00
Total Real Estate Acquisition		$1,650,000.00
Contingencies:	15%	$1,063,685.70
Grand Total Project:		$9,804,923.70

	ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT	
	A		SITE PREPARATION AND EARTHWORK					
	1	102	Clearing And Grubbing	STA	48	$ 2,500.00	$ 120,000.00	
	2	110	Roadway and Ditch Excavation Including 3" Stripping	CY	600	$ 23.00	$ 13,800.00	
	3	465	Remove and Dispose Existing Concrete or Metal Pipe (All Sizes)	LF	600	$ 30.00	$ 18,000.00	
	4	495	Remove Old Structures, Inlets	EA	10	$ 500.00	$ 5,000.00	
	5	495	Remove Old Structures, Manholes	EA	4	$ 700.00	$ 2,800.00	
	6	540	Remove existing concrete Pavement (Bissonnet intersection)	SY	3,000	$ 20.00	$ 60,000.00	0.2
	7	540	Removing and Disposing of Existing Asphaltic Surface and Base Material (All Depths)	SY	8,160	$ 15.00	$ 122,400.00	
1						Subtotal of Item A	$ 342,000.00	
	B		DRAINAGE MITIGATION (DETENTION SITE)					
	8	120	Detention site Excavation (5 AC-FT)(4' deep)	CY	33,333	$ 20.00	$ 666,660.00	
	9	120	Detention Site Trash Rack, Back Swale Interceptors & Pilot Channels (all inclusive)	LS	1	$ 100,000.00	$ 100,000.00	
						Subtotal of Item B	$ 766,660.00	
	C		DRAINAGE (STORM SEWER)					
	10	429	Trench Safety System (Depth Varies)	LF	5,000	$ 2.00	$ 10,000.00	
	11	460	Reinforced Concrete Pipe, C76, Class III, Rubber Gasket (24")	LF	1,440	$ 165.00	$ 237,600.00	
	12	460	Reinforced Concrete Pipe, C76, Class III, Rubber Gasket (36")	LF	600	$ 350.00	$ 210,000.00	
	13	460	Reinforced Concrete Pipe, C76, Class III, Rubber Gasket (48")	LF	400	$ 400.00	$ 160,000.00	
	14	460	Reinforced Concrete Pipe, C76, Class III, Rubber Gasket (54")	LF	600	$ 500.00	$ 300,000.00	
	15	460	Reinforced Concrete Pipe, C76, Class III, Rubber Gasket (60")	LF	600	$ 550.00	$ 330,000.00	
	16	460	Reinforced Concrete Pipe, C76, Class III, Rubber Gasket (66")	LF	400	$ 600.00	$ 240,000.00	
	17	471	10'X10' Precast Concrete Junction Box	EA	2	$ 40,000.00	$ 80,000.00	
	18	471	Precast Concrete Manhole	EA	10	$ 9,650.00	$ 96,500.00	
	19	472	Type "A" Inlet	EA	6	$ 4,500.00	$ 27,000.00	
	20	472	Type "C" Inlet	EA	16	$ 6,500.00	$ 104,000.00	
	21	472	Type "E" Inlet	EA	2	$ 6,800.00	$ 13,600.00	
2						Subtotal of Item C	$ 1,853,700.00	
	D		SUBGRADE & PAVING					
	22	220	Lime Stabilized Subgrade (8" Depth)	SY	16,650	$ 6.50	$ 108,225.00	
	23	221	Hydrated Lime (Slurry) Or Commercial Lime Slurry (8% By Dry Weight)	TON	468	$ 330.00	$ 154,440.00	
	24	221	8" thick Cement Stabilized Sand subgrade for the intersections	SY	4,375	$ 25.00	$ 109,375.00	
	25	360	8" Reinforced Concrete Pavement	SY	16,656	$ 83.00	$ 1,382,448.00	30480.3778
	26	360	8" Reinforced Conc. Pavement (High Early Strength for Old Richmond & Bissonnet)	SY	4,200	$ 95.00	$ 399,000.00	
	27	360	6' Wide Reinforced Concrete Sidewalk, 4.5" Thick	SY	2,400	$ 65.00	$ 156,000.00	
	28	530	Reinforced 6" Concrete Curb	LF	8,400	$ 4.50	$ 37,800.00	
	29	530	Reinforced Concrete Sidewalk (6' Width) (4-1/2" Thick)	SY	3,000	$ 60.00	$ 180,000.00	11221.1811
	30	530	ADA Ramp (Type 7)	EA	10	$ 1,850.00	$ 18,500.00	
	31	530	ADA Ramp (Type 1)	EA	5	$ 2,000.00	$ 10,000.00	
	32	530	ADA Ramp (Modified Type 7)	EA	5	$ 2,500.00	$ 12,500.00	
3						Subtotal of Item D	$ 2,568,288.00	
	E		TRAFFIC SIGNALIZATION & TRAFFIC CONTROL					
	33	671	Traffic Signal at Bissonnet intersection (All inclusive)	EA	1	$ 400,000.00	$ 400,000.00	
	34	671	Traffic Signal at Old Richmond intersection (All inclusive)	EA	1	$ 350,000.00	$ 350,000.00	
	35	671	Temporary Traffic Signal at Bissonnet intersection	EA	1	$ 60,000.00	$ 60,000.00	
	36	671	Implement Temporary Traffic Control Plan (all inclusive)	MO	18	$ 10,000.00	$ 180,000.00	
4						Subtotal of Item E	$990,000.00	
	F		SIGNING AND PAVEMENT MARKINGS					
	37	624	Aluminum Signs (Ground Mounted)	EA	24	$ 350.00	$ 8,400.00	
	38	660	Type I Pavement Markings (4" Yellow Solid)	LF	5,000	$ 0.75	$ 3,750.00	
	39	660	Type I Pavement Markings (8" White Solid)	LF	1,000	$ 2.00	$ 2,000.00	
	40	660	Type I Pavement Markings (12" White Solid)	LF	1,000	$ 3.25	$ 3,250.00	652
	41	660	Type I Pavement Markings (24" White Solid)	LF	500	$ 6.50	$ 3,250.00	156
	42	660	Type I Pavement Marking (Arrows)	EA	16	$ 160.00	$ 2,560.00	
	43	660	Type I Pavement Marking (Only)	EA	8	$ 170.00	$ 1,360.00	
	44	663	Raised Reflectorized Pavement Markers (Type II-C-R)	EA	250	$ 5.50	$ 1,375.00	
	45	663	Raised Non-Reflectorized Pavement Markers (White)	EA	250	$ 5.00	$ 1,250.00	
5						Subtotal of Item F	$ 27,195.00	

Vendor Initials_____

PRILIMINARY CONSTRUCTION COST ESTIMATE

Project: Gaines Road Segment 1
Limit From: 300' S of Old Richmond Road
Limit To: South of Keegans Bayou Bridge

Proj Length: 4,600 ft (Including Boss Gaston & Bissonnet intersections)
Project No:
CFA Job No:
Prepared By: CobbFendley
Date: 08/16/23

Summary of Estimate		
Stage:		1st Submittal
Total Amount for Roadway:		$7,091,238.00
Total Real Estate Acquisition		$1,650,000.00
Contingencies:	15%	$1,063,685.70
Grand Total Project:		$9,804,923.70

	ITEM NO.	SPEC NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
	G	STORM WATER POLLUTION PREVENTION PLAN					
	46	162	Sodding for Erosion Control and Stabilization	LF	2,000	$ 5.00	$ 10,000.00
	47	165	Hydro-Mulch Seeding Of All Disturbed Areas	AC	1.00	$ 3,500.00	$ 3,500.00
	48	700	TPDES General Permit No. TRX15000; Notice of Intent (NOI) Application Fee	EA	1	$ 325.00	$ 325.00
	49	708	Reinforced Filter Fabric Fence (60% of unit cost for furnish and installation and 40% of unit cost for removal)	LF	5,000	$ 3.00	$ 15,000.00
	50	719	Inlet Protection Barrier (Stage 1 Inlets, With Reinforced Filter Fabric Fence, Installation, Removal and Relocation)	EA	6	$ 140.00	$ 840.00
	51	724	Stabilized Construction Access (Type 1-Rock; 60% of unit cost for furnish and installation, and 40% of unit cost for removal)	SY	400	$ 15.00	$ 6,000.00
	52	741	Inlet Protection Barrier (Stage 2 Inlets, With Gravel Bags, Installation, Removal and Relocation)	EA	6	$ 80.00	$ 480.00
6						Subtotal of Item G	$ 36,145.00
	H	WATERLINE					
	53	429	Trench Safety System (Depth Varies)	LF	1,500	$ 1.50	$ 2,250.00
	54	429	6" WATERLINE OPEN CUT COMPLETE IN PLACE	LF	1,500	$ 110.00	$ 165,000.00
	55	429	Reconnect Existing Service Long Side	EA	10	$ 3,200.00	$ 32,000.00
	56	429	Reconnect Existing Service Short Side	EA	5	$ 2,000.00	$ 10,000.00
	57	429	6" WET CONNECTION	EA	2	$ 2,500.00	$ 5,000.00
	58	429	Remove and salvage Fire Hydrant	EA	3	$ 2,000.00	$ 6,000.00
	59	429	FIRE HYDRANT	EA	4	$ 8,000.00	$ 32,000.00
7						Subtotal of Item H	$ 252,250.00
	I	SANITARY SEWER					
	60	429	Trench Safety System (Depth Varies)	LF	1,500	$ 1.50	$ 2,250.00
	61	429	12" PVC SANITARY SEWER	LF	1,500	$ 150.00	$ 225,000.00
	62	429	SANITARY MANHOLE	EA	6	$ 5,000.00	$ 30,000.00
	63	429	ADJUST MANHOLE RIM TO GRADE	EA	4	$ 1,000.00	$ 4,000.00
						Subtotal of Item I	$ 255,000.00
	J	ANCILLIARY ITEMS (REAL ESTATE)					
	64		Real Estate/ROW Acquisition for Detention Site (Per Acre, all inclusive)	AC	5	$ 150,000.00	$ 750,000.00
	65		Real Estate/ROW Acquisition for Roadway (Per Parcel, all inclusive)	Parcel	12	$ 75,000.00	$ 900,000.00
8						Subtotal of Item J	$ 1,650,000.00

Vendor Initials_____

HTS, Inc. Consultants
416 Pickering Street, Houston, TX 77091
www.htshouston.com

Phone: 713-692-8373
Fax: 713-692-8502
Toll Free: 1-800-692-TEST

Excellence in Engineering, Consulting, Testing and Inspection

August 2, 2023

CobbFendley and Associates
22316 Grand Corner Drive, Suite 100
Katy, Texas 77494

Attn: Mr. Mahmoud Salehi

Re: Proposed Work Scope, Budget, and Schedule
Geotechnical Investigation
Proposed Gaines Road Segment 1 and Detention Basin
from 300 feet South of Old Richmond Road
up to South of Existing Bridge over Keegans Bayou
Fort Bend County, Texas

HTS Proposal No.: 23-00148 Revision 1

Dear Mr. Salehi:

1.0 INTRODUCTION

In response to your request, HTS, Inc. Consultants (HTS) is pleased to submit this proposal to CobbFendley to perform a geotechnical investigation pertaining to the proposed roadway reconstruction to a portion of Gaines Road starting 300 feet south of Old Richmond Road up to South of Existing Bridge over Keegans Bayou (excluding bridge) for a length of approximately 4,500 linear feet in Fort Bend County, Texas.

Based on the information provided, HTS understands that the typical section will be a 3-Lane configuration with 2 travel lanes and a 2-way center lane within a proposed 70' ROW. The roadway will be concrete curb and gutter with storm sewer and a potential detention basin. HTS also understands that the maximum depth of the proposed storm sewer will be 10 feet below ground surface. The potential detention basin will have a depth of about 10 feet for an approximate area of 4 to 5-acres. The proposed paving and drainage improvements will be constructed as per Fort Bend County (FBC) standards.

The remaining portions of this proposal present the proposed work scope, estimated costs, and an estimated schedule to complete the geotechnical investigation.

2.0 SCOPE OF WORK

Task 1 – Geotechnical Scope for Roadway Reconstruction
Based upon our understanding of the project requirements, it is proposed that the scope of work for the geotechnical investigation consist of the following:

- **Core the existing pavement and drill and sample 10 geotechnical borings (at approximately 500 l.f. spacing) at the core locations to a depth of 15 feet beneath the surface where the construction is to be performed and measure the existing pavement thickness.**

- **Obtain both disturbed and relatively undisturbed soil samples continuously to a depth of 15 feet and intermittently thereafter.**

- **Measure the groundwater depth during drilling and after the completion of drilling.**

- **Mark the boring locations and obtain GPS coordinates for the surveyor's use in obtaining the boring locations, offsets, and elevations.**

- **Backfill the boreholes with grout after the completion of the groundwater level measurements.**

- **Perform moisture content, Atterberg limits, percent soil particles passing a No. 200 sieve, and dry density of soils in order to define subgrade soil classifications and physical soil properties.**

- **Characterize the site subsoil and groundwater conditions and provide the results on the boring logs (using "gINT" LogWriter software).**

- **Perform pavement design analysis for concrete pavement as per AASHTO and Fort Bend County guidelines.**

- **Develop/provide recommendations concerning the site preparation and stabilization requirements for the pavement subgrade soils.**

- **Perform engineering analyses as necessary to develop recommendations pertaining to roadside ditch safe side slopes, lateral earth pressures on underground structures, dewatering requirements for excavations, utility trench shoring and bracing requirements, OSHA soil type classifications pertinent to trench shoring and bracing design, excavation/backfill requirements, and utility bedding requirements.**

- **Submit a pdf file of the final report that presents the results of the geotechnical investigation.**

<u>Task 2 – Geotechnical Scope for Detention Basin</u>

Based upon our understanding of the project requirements, it is proposed that the scope of work for the geotechnical services regarding the construction of proposed detention basin consist of the following:

- **Drill and sample a total of 5 geotechnical borings to a depth of 15 feet beneath the surface**

within the area of the proposed detention basin that will be determined during the PER phase.

- **Obtain both disturbed and relatively undisturbed soil samples continuously to a depth of 15 feet.**

- **Measure the depth to groundwater during drilling and after the completion of drilling.**

- **Backfill the boreholes with soil cuttings after the completion of drilling.**

- **Perform laboratory soil tests on samples obtained during the drilling of the borings in order to determine the engineering properties of the soil.**

- **Characterize the site subsoil and groundwater conditions and provide the results on the boring logs (using "gINT" LogWriter software).**

- **Perform engineering analyses in order to develop data, parameters, and recommendations that may be used for the design and construction of the proposed detention basin. Engineering analyses will include the following items:**

  - **slope stability analyses to provide safe side slopes for the proposed detention basin,**
  - **OSHA requirements for trenches and bracing,**
  - **groundwater control and dewatering requirements during construction,**
  - **erosion control requirements, and**
  - **suitability concerning the use of excavated soils.**

- **Submit a pdf file of a report which presents the results of the geotechnical investigation.**

  Note: Hard copies of the report will be provided upon request at an additional cost of $30.00 per report.

HTS understands that the geotechnical scope presented in this Task 2 will be utilized when approved by Fort Bend County Engineer and Program Engineer.

3.0 ESTIMATED COST AND SCHEDULE

HTS' estimated cost to complete the scope of work for Task 1, as defined in Section 2.0 above, is $16,221.00 for the proposed roadway reconstruction. The estimated cost is itemized in the attached Cost Estimate for Task 1.

HTS' estimated cost to complete the scope of work for Task 2, as defined in Section 2.0 above, is $12,511.00 for the proposed detention basin. The estimated cost is itemized in the attached Cost Estimate for Task 2.

We estimate that about 4 to 5 weeks after receipt of the notice to proceed will be required to complete the geotechnical investigation and submit the report if no delays are encountered with respect to weather conditions. Once the boring locations are staked, Texas One-Call (Texas 811) will be notified for utilities clearance prior to our drilling activities, typically 48 hours after applying for utilities clearance verification. Interim data, engineering analyses, and recommendations will be provided as necessary for the client's use in the design of the proposed roadway and drainage improvements.

4.0 CLOSING REMARKS

We appreciate the opportunity to offer our services to your project. Should you desire that we revise any portion of this proposal, we will be pleased to meet with you to discuss the revisions. We look forward to being of service to you.

Respectfully submitted,

HTS, Inc. Consultants

Jubair Hossain, Ph.D., P.E.
President

Attachments: Proposed Boring Location
Cost Estimate (Task 1)
Cost Estimate (Task 2)

AGREED TO THIS ____ DAY OF _____, 2023_____

FIRM: _____TITLE: _____

SIGNATURE: _____

PRINTED NAME: _____

JH/rg

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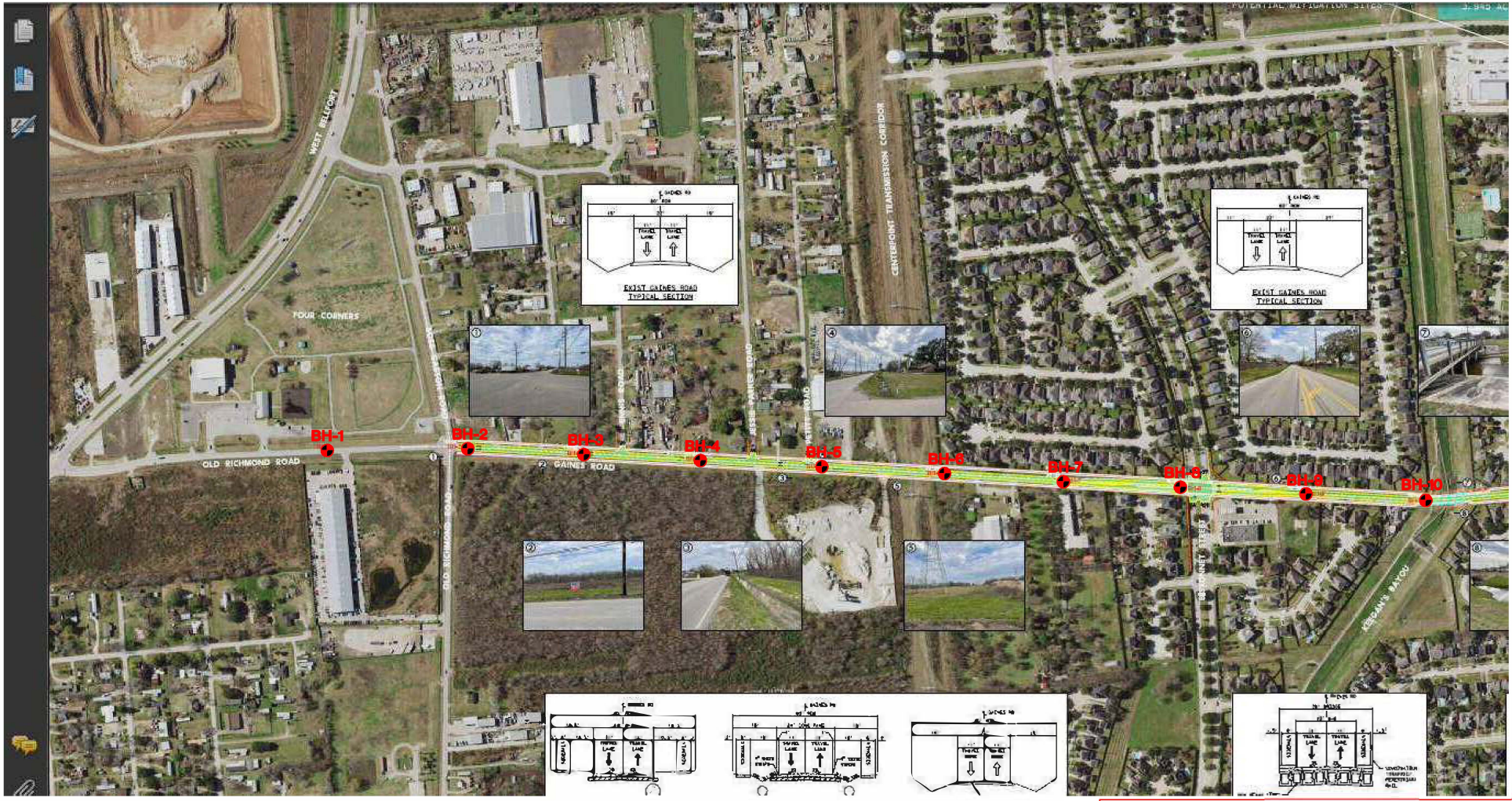

Legend

- Proposed Geotechical Borings

HTS, Inc. Consultants

Geotechnical Investigation
Proposed Gaines Road Segment 1
and Detention Basin
from 800 feet North of Old Richmond Road
up to South of Existing Bridge over Keegans Bayou
Fort Bend County, Texas

DRAWN BY:	IAT	DATE:	08-02-23	SCALE: NTS
CHECKED BY:	JH	DATE:	08-02-23	
HTS PROPOSAL NO.:	23-00148			FIGURE: 1
Boring Locations				

HTS CONSULTANTS	PROJECT :				PROPOSAL NO. :
416 Pickering Street Houston, Texas	**Proposed Gaines Road Segment 1**				**23-00148 Rev 1**
	CALC. BY: JH	DATE : 8/2/2023	CHECKED BY: RG	DATE : 8/2/2023	PAGE NO.: 1 of 2

COST ESTIMATE - TASK 1

		Quantity		Unit Price	Estimated Cost
A)	**Field Activities:**				
	- Mobilization/demobilization of drill rig	Lump Sum		$ 750.00	$ 750.00
	- Drill/sample 10 borings (15' below base)	150	feet	$ 21.00	$ 3,150.00
	- Layout borings in the field by technician	4	hours	$ 50.00	$ 200.00
	- Asphalt coring (4" diam to 6" thickness)	10	each	$ 93.00	$ 930.00
	- Traffic control (tech as flagman - coring)	8	hours	$ 50.00	$ 400.00
	- Traffic control (tech as flagman - drilling)	16	hours	$ 50.00	$ 800.00
	- Grout borings/coring after drilling (10 @ 15')	150	feet	$ 10.00	$ 1,500.00
				Subtotal:	**$ 7,730.00**
B)	**Laboratory Testing:**				
	- Atterberg limits (ASTM D-4138)	20	each	$ 62.00	$ 1,240.00
	- Water content (ASTM D-2216)	23	each	$ 10.00	$ 230.00
	- Unconfined compression test (ASTM D-2166)	20	each	$ 50.00	$ 1,000.00
	- % passing No. 200 sieve (ASTM D-1140)	18	each	$ 55.00	$ 990.00
	- CBR of soils (ASTM D-1883) - 3 points/set	3	each	$ 215.00	$ 645.00
	- Standard proctor (ASTM D-698)	1	each	$ 204.00	$ 204.00
				Subtotal:	**$ 4,309.00**
C)	**Engineering, Supervision, Analysis, and Draft/Final Report Preparation:**				
	- Senior engineer, P.E.	2	hours	$ 183.00	$ 366.00
	- Project engineer, P.E.	24	hours	$ 149.00	$ 3,576.00
	- Engineering assistant	4	hours	$ 60.00	$ 240.00
				Subtotal:	**$ 4,182.00**

TOTAL FOR ROADWAY = **$ 16,221.00**

HTS CONSULTANTS

HTS CONSULTANTS 416 Pickering Street Houston, Texas	PROJECT : Propsoed Gaines Road - Detention Basin				PROPOSAL NO. : 23-00148 Rev 1	
	CALC. BY: JH	DATE : 8/2/2023	CHECKED BY: RG	DATE : 8/2/2023	PAGE NO.: 2	of 2

COST ESTIMATE - TASK 2

		Quantity		Unit Price	Estimated Cost
A)	**Field Activities:**				
	- Mobilization/demobilization of drill rig	Lump Sum		$ 750.00	$ 750.00
	- Drill/sample 5 borings @ 15' deep	75	feet	$ 21.00	$ 1,575.00
	- Layout borings in the field by technician	4	hours	$ 50.00	$ 200.00
				Subtotal:	**$ 2,525.00**
B)	**Laboratory Testing:**				
	- Atterberg limits (ASTM D-4138)	10	each	$ 62.00	$ 620.00
	- Water content (ASTM D-2216)	12	each	$ 10.00	$ 120.00
	- Unconfined compression test (ASTM D-2166)	12	each	$ 50.00	$ 600.00
	- Triaxial CU compression test (ASTM D-4767)	2	each	$ 1,500.00	$ 3,000.00
	- Pinhole dispersion test (ASTM D-4647)	2	each	$ 286.00	$ 572.00
	- Crumb test (ASTM D-6572)	2	each	$ 43.00	$ 86.00
	- Particle size analysis with hydrometer (ASTM D-7928)	2	each	$ 128.00	$ 256.00
	- % passing No. 200 sieve (ASTM D-1140)	10	each	$ 55.00	$ 550.00
				Subtotal:	**$ 5,804.00**
C)	**Engineering, Supervision, Analysis, and Draft/Final Report Preparation:**				
	- Senior engineer, P.E.	2	hours	$ 183.00	$ 366.00
	- Project engineer, P.E.	24	hours	$ 149.00	$ 3,576.00
	- Engineering assistant	4	hours	$ 60.00	$ 240.00
				Subtotal:	**$ 4,182.00**

TOTAL FOR DETENTION BASIN = **$ 12,511.00**

HTS CONSULTANTS

Gaines Road Paving & Drainage Improvements
from ~300-ft south of Old Richmond/Boss Gaston to south of the Keegans Bayou Bridge Street
Scope of Services

Subsurface Utility Engineering (SUE)

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

1. Locating and identifying all existing utilities/pipelines including casings and vent pipes within the existing and proposed rights-of-way, including obtaining information from utility owners record drawings and site reconnaissance, as well as shooting elevations marked or uncovered by others, and providing Subsurface Utility Engineering Level B effort to locate all subsurface utilities within the existing and proposed ROW from Old Richmond/Boss Gaston to just north of Bissonnet Street..

2. The Engineer, upon prior written authorization from the County Engineer, shall furnish the following services in accordance with the applicable guidelines as set forth below:

   Level A Subsurface Utility Engineering (SUE)
   The Engineer shall perform quality level A subsurface utility engineering services for test hole(s) within the project limits as designated by the design engineer, generally from Old Richmond/Boss Gaston to just north of Bissonnet Street.
   a. Quality Level A
   Subsurface Utility Locate (Test Hole) Quality Level A locate means to obtain precise horizontal and vertical position, material type, condition, size and other data that may be obtainable about the utility facility and its surrounding environment through exposure by non-destructive excavation techniques that ensures the integrity of the utility facility.

Subsurface Utility Locate (Test Hole) Services (Quality Level A) are inclusive of Quality Levels B, C, and D. The utilities shall be referenced by the type of utility, utility company or agency name, telephone number and contact person and color coded to American Public Works Association standards. These services include meeting and contact with all utilities on the project.

3. Meeting with the utility companies and to provide information and schematics • as necessary.
4. Identifying major utilities (i.e. pipelines, concrete incased conduits, water, sanitary sewer, storm sewer, or other utilities of this nature) that may require relocation.
5. Identifying any utilities that are within dedicated easement that will be within the proposed right—of-way (i.e. utilities for which the County may be responsible for the cost of any adjustments and/or relocations).
6. Providing a table listing each utility identified with an ID number for, station number (at the left right-of-way, centerline, and right right-of-way), utility owner, contact person (name, address, phone number, and email address), notes in regard to potential conflict, and notes in regard to making recommendations for addressing potential conflicts.

Project Name	**Gaines Rd**
Consultant	**SUE - COBBFENDLEY**
Date	**2023-07-28**

OPTIONAL ADDITIONAL SERVICES

SUBSURFACE UTILITY ENGINEERING: HOURLY COSTS

TASK DESCRIPTION	Senior Engineer I HR	Engineer I HR	Senior Technician II HR	Two-Man Designating Crew HR	TOTAL LABOR HRS. & COSTS
CF 2023 RATES	$ 250.00	$ 142.00	$ 164.00	$ 194.00	
811 Call, Utility Record Research, Utility Contact List	2	8			$ 1,636.00
SUE Quality Level B Designation/Cadd	4	8	16	50	$ 14,460.00
SUBTOTAL	6	16	16	50	$ 16,096.00

SUBSURFACE UTILITY ENGINEERING: UNIT COSTS

	QTY	UNIT	RATE	COST
QL A Test Holes (including SUE, TCP, survey, reports)	10	each	$ 2,200.00	$ 22,000.00
SUBTOTAL				$ 22,000.00

OPTIONAL ADDITIONAL SERVICES: TOTAL $ 38,096.00

Survey Dept. Budget Proposal (2023 Rate Schedule)

Date/Prepared B	8/16/2023			
Project:	Existing (See Right)	D\cfa	Note:	
Location:		Gaines Road		
Client:		FBC - Mahmoud	10 HOUR DAYS FOR FIELD TIME	
Proposal #			8 HOUR DAYS FOR OFFICE TIME	

CobbFendley

		STAFF TYPE HOURLY RATE	RPLS $199.00	Sr. Tech II $164.00	Sr. Tech I $142.00	Tech III $121.00	Tech II $102.00	3-M FC $184.00	2-M FC $156.00	RESEARCH $142.00	CLERICAL $91.00	GPS TCH $0.00	GPS $0.00	TOTALS
Task 1	Topographic Survey 4,200LF (Two Intersections, Partial Channel Topo)		2	8	24	80	20	0	104	0	10	0	0	248
			$398.00	$1,312.00	$3,408.00	$9,680.00	$2,040.00	$0.00	$16,224.00	$0.00	$910.00	$0.00	$0.00	$33,972.00
Task	Boundary (Determine Existing RIGHT-OF-WAY)		6	16	80	0	0	0	36	0	0	0	0	138
			$1,194.00	$2,624.00	$11,360.00	$0.00	$0.00	$0.00	$5,616.00	$0.00	$0.00	$0.00	$0.00	$20,794.00
Task	Abstracting/Research		0	0	0	0	0	0	0	60	0	0	0	60
			$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$8,520.00	$0.00	$0.00	$0.00	$8,520.00
Task	Right of Entry (As needed)		1	0	0	8	0	0	0	0	16	0	0	25
			$199.00	$0.00	$0.00	$968.00	$0.00	$0.00	$0.00	$0.00	$1,456.00	$0.00	$0.00	$2,623.00
Task	Control Layout Sheet(s)		1	4	0	16	0	0	0	0	0	0	0	21
			$199.00	$656.00	$0.00	$1,936.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$2,791.00
Task	DTM/TIN (Microstation)		0	0	32	0	0	0	0	0	0	0	0	32
			$0.00	$0.00	$4,544.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$4,544.00
	REIMBURSABLE ESTIMATE													$0.00
	TOTAL HOURS PER STAFF TYPE		10	28	136	104	20	0	140	60	26	0	0	524
	TOTAL COST PER STAFF TYPE		$1,990.00	$4,592.00	$19,312.00	$12,584.00	$2,040.00	$0.00	$21,840.00	$8,520.00	$2,366.00	$0.00	$0.00	$73,244.00

Boundary survey amount shown is subject to state sales tax, and is NOT included in the totals listed hereon.

Option	Parcel Acquisition (Each)		2	4	0	10	2	0	4	0	1	0	0	23
			$398.00	$656.00	$0.00	$1,210.00	$204.00	$0.00	$624.00	$0.00	$91.00	$0.00	$0.00	$3,183.00