PROFESSIONAL SERVICES AGREEMENT

STATE OF TEXAS §

COUNTY OF BRAZORIA §

This Agreement for professional services ("Agreement") is made and entered into by and between **BRAZORIA COUNTY**, a political subdivision of the State of Texas, hereinafter referred to as the "County" and IEA, Inc., a Texas Corporation, hereinafter referred to as "Consultant".

RECITALS

The County intends to reconstruct or replace a structurally deficient bridge, hereinafter called the "Project"

The County desires that Consultant perform certain professional engineering and related services in connection with the Project; and

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

In consideration of the mutual covenants, agreements and benefits to the Parties hereto, it is agreed as follows:

TERMS

Article 1
Scope of Agreement

1.01 The Consultant agrees to perform professional engineering services as set forth in the Exhibits attached hereto and incorporated herein.

Article 2
Character and Extent of Services

201 The Consultant shall perform its obligations under this Contract in accordance with the Scope of Work within the Consultant's proposal attached hereto as **Exhibit "A."** County and Consultant may agree to amend this contract. All amendments to this contract will be added as **"Exhibit F-*"** (F-1, F-2, etc.).

202 The Consultant and County agree and acknowledge that the County is entering into this Contract in reliance on the Consultant's competence and qualifications, as those were presented to County by Consultant with respect to professional services. The Consultant, in consideration for the compensation set forth expressly herein, shall at all times utilize its skill and attention to fully, timely, and properly render professional services for the development of the Project to final completion as set out in, or reasonably inferred from, the Scope of Work. This shall be done in a

manner utilizing the degree of care ordinarily used by Consultants performing similar services on projects of a similar nature and scope within the State of Texas.

2.03 The Consultant shall be represented by a professional engineer, who has been assigned by Consultant to manage the Project, licensed to practice in the State of Texas, at meetings of any official nature concerning the Project, including, but not limited to, scope meetings, status meetings, pre-bid meetings, pre-construction meetings and construction meetings with County and staff and/or its contractors, unless otherwise set forth in the Scope of Work or approved in writing by the County.

2.04 Work, labor, services, and materials to be furnished by Consultant shall fully comply with applicable Federal, state and local laws, rules, regulations, statutes, ordinances and directives related to the Consultant and/or the Work. In the event of any change in the applicable Federal, state and local laws, rules, regulations, statutes, ordinances and directives related to the Consultant and/or the Work for the Project, which occur after the Effective Date of the Contract, and which Consultant was not and should not reasonably have been aware of, which require changes to the Work that has already been completed by the Consultant, or require work outside the Scope of Work, then the Consultant and the County shall attempt to agree in writing on the required modifications to the Scope of Work and an equitable fee and time adjustment resulting from such additional Scope of Work. Conflicts between any applicable Federal, state and local laws, rules, regulations, statutes, ordinances and directives related to the Consultant and/or the Work shall be brought to the attention of the County by Consultant.

2.05 Consultant shall comply with all Federal laws, including but not limited to, the specific laws identified and attached hereto as **Exhibit "C"** and incorporated herein and made part of this contract. The Consultant shall require and ensure that its contractors and subcontractors comply with all applicable laws.

2.06 All work provided under this Agreement shall conform to and be in the format required by Federal and state funding agencies. Guidelines and requirements of the Federal Transit Administration, the Federal Highways Administration, the Federal Emergency Management Agency, the Environmental Protection Agency, the Texas Commission on Environmental Quality, and the Texas Department of Transportation as applicable to the project. Other Federal and local funding sources may impose additional and/or differing requirements. The project may utilize funding from the following: grants, ad valorem taxes; general obligation bonds, which all requirements for this contract must adhere to the requirements.

2.07 Effective January 1, 2020, the requirements of Subchapter J, Chapter 552, Texas Government Code, may apply to this contract and the Consultant agrees that the contract can be terminated if the Consultant knowingly or intentionally fails to comply with a requirement of that subchapter.

Article 3
Time for Performance

3.01 The Consultant shall complete the services called for in this Agreement as set forth in schedule specified in **Exhibit "A"** or as further modified in **Exhibit "F-*."** Consultant understands that time is of the essence to complete the services by the scheduled deadlines.

Article 4
Consultant Compensation

4.01 For and in consideration of the services rendered by the Consultant under Article 2, the County shall pay to the Consultant in accordance with its Fee Schedule in **Exhibit "A"** or as further modified in **Exhibit "F-*."**

Article 5
Time of Payment

5.01 Monthly payments shall be made based upon that portion of the work which has been completed. Consultant shall provide, no later than the last day of each calendar month a sworn statement to the County Engineer, setting forth the percentage of the services provided which were completed during such calendar month, the compensation due, Consultant's hourly rates, if applicable, subcontractor invoices and the respective backup documentation, and any other documentation required to support compensation due. Said statement shall be accompanied by an affidavit signed by an officer or principal of the Consultant certifying that the work was performed, it was authorized by the County Engineer and that all information contained in the invoice being submitted is true and correct.

5.02 Consultant agrees to maintain, for a period of five (5) years, detailed time records identifying each person performing the services, the date or dates that the services were performed, the applicable hourly rates, the total amount billed for each person and the total amount billed for all persons, and shall provide such other details as may be requested by the County Auditor for verification purposes. The Consultant shall retain its records and shall keep same available for inspection during regular business hours by County officials.

5.03 The Consultant's statement becomes due and payable within thirty (30) days after receipt and approval by County. The approval or payment shall not be considered to be evidence of performance by the Consultant to the point indicated by such statement or of receipt or acceptance by the County of the work covered by such statement.

Article 6
Compliance Standards

6.01 The Consultant agrees to perform the work hereunder in accordance with County's road and bridge specifications or Texas Department of Transportation road and bridge specifications, Brazoria County Drainage Criteria Manual and other generally accepted standards applicable

thereto, and shall use that degree of care and skill commensurate with the Consultants profession to comply with all applicable state, Federal and local laws, ordinances, rules and regulations relating to the work to be performed hereunder and Consultant's performance.

Article 7
Procurement, Suspension and Debarment

7.01 The Consultant certifies by execution of this Agreement or Contract that it is not ineligible for such participation in Federal or state assistance programs. The Consultant further agrees to include this certification in all Agreements or Contracts between itself and any subcontractor in connection with the services performed under this Agreement or Contract. The Consultant also certifies that it will notify the County in writing if it is not in compliance with Federal or State assistance programs at any time during the term of this Agreement or Contract. The Consultant agrees to refund Brazoria County for any payments made to the Consultant that would have been properly payable or reimbursable from Federal or state funds but for the fact that such payment failed to comply with Federal or state assistance programs.

Article 8
Ownership of Documents, Copyright

8.01 The County shall be the absolute and unqualified owner of all drawings, preliminary layouts, electronic documents and drawings, record drawings, sketches, reports, and other documents completed or partially completed, mylar reproducibles, preliminary layouts, created, produced, developed, or prepared, pursuant to this Agreement, by the Consultant or its approved outside advisory or support consultants (collectively the "Documents") with the same force and effect as if the County prepared same.

8.02 Consultant shall deliver all Documents to County within thirty (30) days of the termination or upon completion of this Agreement, whichever occurs first.

8.03 The Consultant may retain one (1) set of reproducible copies of such documents and such copies shall be for the Consultant's sole use in preparation of studies or reports for Brazoria County only. The Consultant is expressly prohibited from selling, licensing or otherwise marketing or donating such documents, or using such documents in the preparation of other work for any other client, without the prior express written permission of the County.

8.04 County shall be the owner of all intellectual property rights of the services rendered hereunder including all rights of copyright therein.

Article 9
Public Contact

9.01 Contact with the news media, citizens of Brazoria County, the State of Texas or other governmental agencies shall be the responsibility of the County. Under no circumstances shall the Consultant release any material or information developed in the performance of its services hereunder without the express prior written permission of the County.

Article 10
Consultant's Insurance Requirements

10.01 Prior to commencement of the Services, Consultant shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Consultant shall provide certified copies of insurance endorsements and/or policies if requested by County. Consultant shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Consultant shall obtain such insurance written on an Occurrence form (except Professional Liability which is on a Claims Made policy) from such companies having Best rating of V/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 set forth on **Exhibit "B."**

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

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

Article 11
Indemnification

11.01 THE CONSULTANT SHALL INDEMNIFY THE COUNTY FROM AND AGAINST CLAIMS AND LIABILITY, PERFORMED UNDER THIS CONTRACT WHICH RESULT FROM NEGLIGENT ACT, ERROR, OR OMISSION OF THE CONSULTANT OR OF ANY PERSON EMPLOYED BY THE CONSULTANT. THE CONSULTANT SHALL IN PROPORTION OF CONSULTANT'S LIABILITY BE RESPONSIBLE TO REIMBURSE THE COUNTY FOR REASONABLE EXPENSES, INCLUDING BUT NOT LIMITED TO REASONABLE ATTORNEY'S FEES, TO THE EXTENT ARISING OUT OF THE NEGLIGENT ACTS, ERRORS OR OMISSIONS OF THE CONSULTANT, ITS AGENTS, OR EMPLOYEES.

11.02 CONSULTANTS DUTY TO INDEMNIFY COUNTY SHALL AS DESCRIBED ABOVE BE ABSOLUTE. IT SHALL NOT ABATE OR END BY REASON OF THE EXPIRATION OR TERMINATION OF THIS AGREEMENT UNLESS OTHERWISE AGREED BY COUNTY IN WRITING. THE PROVISIONS OF THIS SECTION SHALL SURVIVE THE TERMINATION OF THE AGREEMENT AND SHALL REMAIN IN FULL FORCE AND EFFECT WITH RESPECT TO ALL SUCH MATTERS NO MATTER WHEN THEY ARISE.

Article 12
Dispute Resolution

12.01 In the event of a dispute related to the breach of this Agreement that cannot be settled through negotiation, County and Consultant agree to submit the dispute to mediation.

12.02 All expenses associated with mediation shall be shared fifty (50) percent by each party.

12.03 The requirement to seek mediation shall be a condition required before filing an action at law or in equity, unless to do so would prevent either party from seeking relief in a court of law in equity under any applicable statutes of limitation.

Article 13
Termination

13.01 The County may terminate this Agreement at any time by notice in writing to the Consultant. Upon receipt of such notice, the Consultant shall discontinue all services in connection with the performance of this Agreement and shall proceed to promptly cancel all existing orders and contracts insofar as such orders or contracts are chargeable to this Agreement. As soon as practicable after receipt of notice of termination, the Consultant shall submit a statement, showing in detail the services performed under this Agreement to the date of termination. The County shall then pay the Consultant that proportion of the prescribed charges which the services actually performed under this Agreement bear to the total services called for under this Agreement, less such payments on account of the charges as have been previously made. Copies of all completed or partially completed designs, electronic data files, drawings and specifications of any kind prepared under this Agreement shall be delivered to the County when and if this Agreement is terminated.

Article 14
Notice

14.01 Any notice permitted or required to be given to the County hereunder may be given by hand-delivery or certified United States mail, postage prepaid, return receipt requested addressed to:

County:	**Consultant:**
Brazoria County Engineer	IEA, Inc.
451 N. Velasco, Suite 230	13501 Katy Fwy, Suite 3425
Angleton, Texas 77515	Houston, Texas 77079
ATTN: Matthew Hanks, JD, PE	ATTN: Wilson Wong, P.E.
Email: matth@brazoria-county.com	Email: wwong@ieaworld.com
Phone: 979-864-1265	Phone: 832-275-5037

14.02 Such notice shall be deemed given upon receipt of hand-delivery or, if mailed, three days after the date of deposit of the notice in the United States mail as aforesaid.

Article 15
Successors and Assigns

15.01 Neither the County nor the Consultant shall assign, sublet, or transfer its or his interest in this Agreement without the prior written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be a party hereto.

Article 16
Applicable Law

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

Article 17
Modifications

17.01 This instrument contains the entire Agreement between the parties related to the rights herein granted and obligations herein assumed. Any oral or written representations or modifications concerning this instrument shall be of no force and effect excepting a subsequent modification in writing signed by both parties.

Article 18
Authority of County Engineer

18.01 The County Engineer shall decide any and all questions which may arise as to the interpretation of this Agreement and all questions as to the acceptable fulfillment of this Agreement by the Consultant. His decision shall be final. It is mutually agreed by both parties that the County Engineer shall act as referee in all questions arising under the terms of this Agreement between the parties hereto and that the decisions of the County Engineer in such shall be final and binding alike on both parties hereto. But, nothing contained in this Article shall be construed to authorize the County Engineer to alter, vary or amend any of the terms or provisions of this Agreement.

Article 19
Severability

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

Article 20
Merger

20.01 The Parties agree that this Agreement contains all of the terms and conditions of the understanding of the parties relating to the subject matter hereof. All prior negotiations, discussions, correspondence and preliminary understandings between the parties and others relating hereto are superseded by this Agreement.

Article 21
Boycott Verification

21.01 This verification is required pursuant to Sections 808, 809, 2271, and 2274 (87(R) Senate Bill 13 and 19 versions) of the Texas Government Code:

Definitions:

1. Per Government Code Chapter 808, "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purpose

2. Per Government Code Chapter 809, "Boycott energy company" means, without an ordinary business purpose, refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company:
   (A) engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law; or
   (B) does business with a company described by Paragraph (A).

3. Per Government Code Chapter 2274 (87(R) Senate Bill 19), "Discriminate against a firearm entity or firearm trade association":
   (A) means, with respect to the entity or association, to:
      (i) refuse to engage in the trade of any goods or services with the entity or association based solely on its status as a firearm entity or firearm trade association;
      (ii) refrain from continuing an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; or
      (iii) terminate an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association;

4. "Company" has the meaning assigned by Texas Government Code Sections 808.001(2), 809.001(2), and 2274.001(2) (87(R) Senate Bill 19).

This verification is only required for a contract that is between a governmental entity and a company with 10 or more full-time employees; and has a value of $100,000 or more that is to be

paid wholly or partly from public funds of the governmental entity. If your contract value or number of employees does not reach that threshold, please provide a written certification of the contract amount and number of employees.

By signing this contract consultant agrees to the following:

(A) does not boycott Israel currently;
(B) will not boycott Israel during the term of the contract the named Company, business or individual with Brazoria County Texas, Texas;
(C) does not boycott energy companies currently;
(D) will not boycott energy companies during the term of the contract the named Company, business or individual with Brazoria County, Texas;
(E) does not discriminate against a firearm entity of firearm trade association currently; and
(F) will not discriminate against a firearm entity of firearm trade association during the term of the contract the named Company, business or individual with Brazoria County, Texas

21.02 All requirements of Subtitle A, Title 8 Government Code Chapter 808, apply to this contract and the Consultant, by signing below, hereby verifies its understanding of the exemptions contained therein.

21.03 Consultant agrees that the contract can be terminated if the Consultant knowingly or intentionally fails to comply with a requirement of this subchapter.

Article 22
Attachments

22.01 The following attachments are a part of this Agreement:

Exhibit A	Scope of Work, Fee Schedule and Project Schedule
Exhibit B	County's minimum insurance requirements
Exhibit C	Compliance with Laws
Exhibit D	Certificate of Interested Parties
Exhibit E	Conflict of Interest Disclosure
Exhibit F	Contract Amendments (As Needed)

Article 22
Execution

23.01 The County executes this Agreement by and through the County Judge acting pursuant to Order of the Commissioners Court of Brazoria County, Texas, so authorizing. This Agreement shall not become effective until executed by all Parties hereto.

Brazoria County, Texas

By: _____

L.M. (Matt) Sebesta, Jr

County Judge

Date: _____

IEA, Inc

a Texas company

By: Wilson Wong, PE

Name: **Wilson Wong, P.E.**

Title: **Houston Office Director**

Date: 07/24/25

EXHIBIT "A"
SCOPE OF WORK, FEE SCHEDULE AND PROJECT SCHEDULE

INSERT PROPOSAL AND SCHEDULE

IEA, Inc.
13501 Katy Fwy, Suite 3425
Houston, Texas 77079
832-888-4989
Fax: 844-888-4989

July 24, 2025

Ms. Barbara Martinez, PE,
Staff Engineer
Brazoria County Engineering
451 N. Velasco, Suite 230
Angleton, Texas 77515

Subject: **Proposal for Professional Services**
CR 676 at Varner Creek Tributary Bridge Replacement

Dear Ms. Martinez:

IEA Inc. (IEA) is pleased to submit this proposal to provide professional engineering services for CR 676 at Varner Creek Tributary Bridge Replacement.

SCOPE OF SERVICES can be found in Exhibit A and Attachments 1, 2, & 3.

DESIGN SCHEDULE can be found in Exhibit B.

PROPOSED COMPENSATION for both Basic Services and Additional Services can be found in Exhibit C and attachments 1, 2, & 3.

We appreciate and look forward to the opportunity to work with you again. Should you have any questions or require additional information, please do not hesitate to contact me at (832) 694-0628.

Sincerely,

Joseph Lopez, P.E.
Senior Bridge Engineer

Wilson Wong, PE

Wilson Wong, P.E.
Houston Office Director

EXHIBIT A
SERVICES TO BE PROVIDED BY THE ENGINEER

Project Name: CR 676 at Varner Creek Tributary BridgeReplacement
County: Brazoria

The work to be performed by the Engineer shall consist of providing engineering services required for the preparation of plans, specifications and estimates (PS&E) and related documents, for a bridge replacement alternative. These services may include preparing roadway and bridge design and hydrologic and hydraulic design necessary to support the design process as well as environmental, survey, geotechnical, and construction phase services.

Location

Limits:
CR 676 at Varner Creek Tributary
Description:
Replace existing CMP's with new bridge structure and approaches
Work to be Performed:
PS&E Preparation

GENERAL REQUIREMENTS

1.1. Design Criteria. The Engineer shall prepare all work in accordance with the latest version of applicable County's procedures, specifications, manuals, guidelines, standard drawings, standard specifications or previously approved special provisions and special specifications. The Engineer shall prepare each Plan, Specification, and Estimate (PS&E) package in a form suitable for letting through the County's construction contract bidding and awarding process.

1.2. Right-of-Entry and Coordination. The Engineer shall notify the County and secure permission to enter private property to perform any surveying, engineering or geotechnical activities needed off-County right-of- way. In pursuance of the County's policy with the public, the Engineer shall not commit acts which would result in damages to private property and shall make every effort to comply with the wishes and address the concerns of affected private property owners. The Engineer shall contact each property owner prior to any entry onto the owner's property and shall request concurrence from the County prior to each entry.

1.3. Progress Reporting and Invoicing. The Engineer shall invoice according to Function Code breakdowns shown in Attachment "C" of the Contract for Engineering Services and Exhibit "C" - *Fee Schedule*. The Engineer shall submit each invoice in a format acceptable to the County.

Once the project goes to letting, all electronic files shall be delivered within 30 days of written request.

Final payment is contingent upon the County's receipt and confirmation by the County's Project Manager that the electronic files run and all review comments are addressed.

The Engineer shall prepare a letter of transmittal to accompany each document submittal to the County. At a minimum, the letter of transmittal shall include the roadway name, County, project limits and contract number.

1.4. Coordination. The Engineer shall coordinate issues and communications with the County's internal resource areas through the County's Project Manager. The County will communicate the resolution of issues and provide the Engineer direction through the County's Project Manager.

FEASIBILITY STUDIES: FUNCTION CODE 102

110.1 Data collection. The Engineer shall:

Collect, review, and evaluate data described below. The Engineer shall notify the County in writing whenever the Engineer finds disagreement with the information or documents:

1. Data from the County, include, but are not be limited to, "as-built plans", existing schematics, right-of-way maps, utility engineering investigation mapping, and previous corridor studies, reports, and plans conducted by other agencies and groups, environmental documents, existing channel and drainage easement data, existing traffic counts, accident data, Bridge Inspection records, Project Management Information system (PMIS) data, identified endangered species, identified hazardous material sites, current unit bid price information, current special provisions, special specifications, and standard drawings, if available.
2. Utility plans and documents from appropriate municipalities and utility companies
3. Floodplain information and studies from the Federal Emergency Management Agency (FEMA), the United States Army Corps of Engineers (USACE), local municipalities, and other governmental agencies.
4. Obtain graphics files, plans, documents, and other pertinent data for existing and proposed improvements along the proposed corridor. Review collected information and process the data into MicroStation reference files and organize it into project reference notebooks
5. Conduct field reconnaissance and collect data including a photographic record of notable existing features.

ROADWAY DESIGN CONTROLS: FUNCTION CODE 160

160.1. Geometric Design. The Engineer shall:

Develop a preliminary geometric project layout (Layout) for the full length of the project to be reviewed and approved by the County at the 50 percent milestone submittal package. The Layout shall consist of a planimetric file of existing features and the proposed improvements within the existing and any proposed ROW.

The Layout shall also include the following features: existing/Proposed ROW, existing/proposed horizontal and vertical alignment and profile grade line, cross culverts, lane widths, cross slopes, ditch slopes, retaining walls (if applicable), guard rail (if applicable), and water surface elevations for various rainfall frequencies, etc. Existing major subsurface and surface utilities shall be shown. The proposed alignment shall avoid the relocation of existing utilities as much as possible. The Layout shall be prepared in accordance with the current Roadway Design Manual. Minor alignment alternatives will be considered to provide for an optimal design. The Engineer shall also provide proposed and existing typical sections with the profile grade line (PGL), lane widths, cross slopes, ROW lines, ditch shapes, pavement structures and clear zones depicted, etc.

160.2. Roadway Design. The Engineer shall provide roadway plan and profile drawings using CADD standards as required by the County. The drawings shall consist of a planimetric file of existing features and files of the proposed improvements. Existing major subsurface and surface utilities shall be shown. Existing and proposed right-of-way lines shall be shown.

The plan view shall contain the following design elements:

1. Calculated roadway centerlines as applicable. Horizontal control points shall be shown. The alignments shall be calculated using GEOPAK.
2. Pavement edges for all improvements.
3. Lane and pavement width dimensions.
4. Proposed structure locations, lengths and widths.
5. Direction of traffic flow on all roadways. Lane lines and arrows indicating the number of lanes shall also be shown.
6. Drawing scale shall be 1" = 50'

7. ROW lines and easements.
8. Limits of rip rap, block sod, and seeding.
9. Existing utilities and structures.
10. Benchmark information.
11. Radii call outs, curb location, Concrete Traffic Barrier (CTB), guard fence, crash safety items and American with Disabilities Act Accessibility Guidelines (ADAAG) compliance items.
12. The profile view shall contain the following design elements:
    a. Calculated profile grade for proposed roadway. Vertical curve data shall be shown.
    b. Water surface elevations at major stream crossing for Design and 100-year storms.
    c. Drawing vertical scale to be 1" =10'.

160.3. Typical Sections. Typical sections shall be required for all proposed and existing roadways and structures. Typical sections shall include the width of travel lanes and shoulders. The typical section shall also include PGL, centerline, pavement design, side slopes, sodding/seeding limits, traffic barriers and sidewalks, if required, station limits, common proposed/existing structures including retaining walls, existing pavement removal (pavement coring shall be performed by the Engineer to determine existing pavement structure for removal items only) riprap, limits of embankment/excavation, etc.

160.4. Cut and Fill Quantities. The Engineer shall develop an earthwork analysis to determine cut and fill quantities and provide final design cross sections at 50 feet intervals. Cross sections shall be delivered in standard Bentley OpenRoads format on 11"x17" sheets and electronic files. The Engineer shall provide all criteria and input files used to generate the design cross sections. Cross sections and quantities shall consider existing pavement removals. Annotation shall include at a minimum existing/proposed right of way, side slopes (front & back), profiles, etc.

Two sets of drawings shall be submitted by the Engineer at the 50%, 95%, and final submittals, respectively.

160.5. Plan Preparation. The Engineer shall prepare roadway plans, profiles and typical sections for the proposed improvements. After the 50% submittal the Engineer shall schedule a meeting to review the roadway plans, profiles and cross-sections with the County. The profile and cross sections shall depict the Design and 100-year water surface elevations. The drawings will provide an overall view of the roadway and existing ground elevations with respect to the various storm design frequencies for the length of the project.

DRAINAGE: FUNCTION CODE 161

Task 1: Collect and Review Data

1.1 Collect Survey and Floodplain Data: This task will include collecting survey data to delineate offsite drainage areas. Floodplain data will be collected and analyzed to examine if there will be any reduction of storage within 100-year floodplain. Exhibits will be prepared showing the project area floodplain map and associated streams.

1.2 Review As-Builts, Plan Sets and Previous Drainage Reports: The review of as-built plan sets will assist in verifying existing drainage structure capacity and in developing hydraulic models. The review of plan sets for adjacent projects (if there is any) and review of previous drainage reports will assist in delineating drainage areas.

1.3 Review of Proposed Roadway and Bridge Plan and Profile: The proposed roadway plan and profile will be utilized to delineate onsite drainage area, and to develop hydraulic models for proposed conditions.

Task 2: Hydrologic and Hydraulic Analysis

2.1 Delineation of Existing Drainage Area: This task will include delineation of off-site and on-site drainage areas for the existing conditions. Drainage area maps will be prepared.

2.2 Develop Hydrologic Model for Existing Condition: This task will include developing hydrologic models (e.g. HEC-HMS) to estimate runoff for design and check storm events. Estimating runoff will require

computation of time of concentration and other hydrologic parameters. Depending on the drainage area size, peak runoff flows will be estimated using Rational Method.

2.3 Develop Hydraulic Model for Existing Condition: This task will include developing hydraulic models (e.g., HEC-RAS) to analyze cross drainage structure (i.e., bridge/culvert). The peak flows from HEC-HMS will be utilized for the corresponding HEC-RAS model. The results from the hydraulic models will be used to estimate water surface elevations at the crossing stream.

2.4 Delineation of Proposed Drainage Area: This task will include delineation of off-site and on-site drainage areas and preparing drainage area maps for the proposed conditions.

2.5 Develop Hydrologic Model for the Proposed Condition: This task will include developing hydrologic models (such as HEC-HMS) to estimate peak runoff for the proposed conditions.

2.6 Develop Hydraulic Model for the Proposed Condition: This task will include developing 2 hydraulic models (HEC-RAS) to analyze cross drainage structure (i.e., bridge/culvert) for the proposed condition; 1 model for each option. The peak flows from HEC-HMS will be utilized for the corresponding HEC-RAS model. The results from the hydraulic models will be used to estimate water surface elevations at the crossing stream.

2.7 Compare Water Surface Elevations and Design Impact Mitigation: The purpose of this analysis will be to compare water surface elevations for existing and proposed conditions to examine if the proposed condition will have any negative impact on the crossing stream. Mitigation measures will be designed to minimize impact.

2.8 Cut and Fill Analysis: Floodplain analysis will be conducted to examine if there will be any reduction of storage within 100-year floodplain, if necessary. The analysis includes an estimate of cut and fill volumes within the floodplain for the crossing stream.

2.9 Scour: Perform scour evaluations for both the design and check flood (i.e. 2 times the check flood) frequencies.

Task 3: Project Documentation

3.1 Prepare Draft Report: The results of the hydrologic and hydraulic analyses will be prepared in a report format. This report will document project description, data, methodology, exhibits and appendices.

3.2 Prepare Final Report: We will incorporate comments by Brazoria County Drainage District to prepare a final report.

3.3 FEMA: Prepare a LOMR (if required).

ROADWAY DESIGN: FUNCTION CODE 162

SIGNING, PAVEMENT MARKINGS AND SIGNALIZATION (PERMANENT)

162.1. Signing. The Engineer shall prepare drawings, specifications and details for all signs. The Engineer shall coordinate with the County for overall temporary, interim, and final signing strategies and placement of signs outside contract limits. The Engineer shall:

1. Prepare sign detail sheets and shall provide a summary of small signs to be removed, relocated, or replaced.

2. Illustrate and number the proposed signs on plan sheets.

162.2. Pavement Marking. The Engineer shall detail both permanent and temporary pavement markings and channelization devices on plan sheets. The Engineer shall coordinate with the county for overall temporary, interim, and final pavement marking strategies. The Engineer shall select Pavement markings from the latest State standards.

The Engineer shall provide the following information on sign and pavement marking layouts:

- Roadway layout.
- Center line with station numbering.
- Culverts and other structures that present a hazard to traffic.
- Location of utilities.
- Existing signs to remain, to be removed, to be relocated orreplaced.
- Proposed signs (illustrated, numbered and size).
- Proposed markings (illustrated and quantified) which include pavement markings, object markings and delineation.
- Quantities of existing pavement markings to be removed.
- Proposed delineators, and object markers.
- The number of lanes in each section of proposed highway and the location of changes in numbers of lanes.
- Right-of-way limits.
- Direction of traffic flow on all roadways.

MISCELLANEOUS (ROADWAY): FUNCTION CODE 163

The Engineer shall provide the following services:

163.1. Traffic Control Plan, Detours, Sequence of Construction. The Engineer shall develop a sequence of construction and method of handling traffic during each phase. The Engineer shall provide a written narrative of the construction sequencing and work activities per phase and determine the existing and proposed traffic control devices (regulatory signs, warning signs, guide signs, route markers, construction pavement markings, barricades, flag person, etc.) to be used to handle traffic including intersections during each construction sequence. The Engineer shall develop typical sections, calculate quantities, and show horizontal and vertical alignment information for required detours, crossovers and temporary shoring. The Engineer shall design temporary drainage to replace existing drainage disturbed by construction activities or to drain detour pavement. Show horizontal and vertical location of culverts and required cross sectional area of culverts to handle the desired storm frequency.

Develop each TCP to provide continuous, safe access to each adjacent property during all phases of construction and to preserve existing access. The Engineer shall notify the County if existing access must be eliminated and must receive approval from the County prior to elimination of existing access.

Make every effort to prevent detours and utility relocations from extending beyond the proposed Right-of-way lines. If it is necessary to obtain additional permanent or temporary easements and Right-of-Entry, the Engineer shall notify the County in writing of the need and justification for such action.

163.2. Utility Engineering Investigation. The Engineer shall contact Texas One Call at each site requiring Design Survey. Horizontal locations of delineated utilities will be included in the design survey.

163.3. Storm Water Pollution Prevention Plans (SW3P). The Engineer shall develop SW3P, on separate sheets from (but in conformance with) the TCP, to minimize potential impact to receiving waterways. The SW3P shall include text describing the plan, quantities, type, phase and locations of erosion control devices and any required permanent erosion control.

163.4. Compute and Tabulate Quantities. The Engineer shall provide the summaries and quantities at 90% and final submittals.

163.5. Miscellaneous Details. The Engineer shall provide necessary details required to supplement standard details and other miscellaneous sheets to complete the PS&E package.

163.6. Estimate. The Engineer shall independently develop and report quantities necessary to construct contract in standard County bid format at the specified milestones and Final PS&E submittals. The Engineer shall prepare each construction estimate at the 90% and Final PS&E submittals.

163.7. Specifications and General Notes. The Engineer shall identify necessary standard specifications, special specifications, special provisions and the appropriate reference items. The Engineer shall prepare General Notes, Special Specifications and Special Provisions for inclusion in the plans and bidding documents.

CONTRACT MANAGEMENT AND ADMINISTRATION: FUNCTION CODE 164:

The ENGINEER shall:

a. Perform all work in accordance with the County's latest practices, criteria, specifications, policies, procedures and Standards of Uniformity (SOU). All documents shall be sufficient to satisfy the current SOUs available from the County.

b. Notify the County of its schedule, in advance, for all field activities.

c. When specified, seek right of entry from public or private land owners to perform field services. Right of entry permission shall be written and signed by the land owner. Develop letters or other materials for seeking right of entry. Letters or other materials seeking right of entry shall not be distributed without prior approval of the County. Letters or other materials seeking right of entry shall contain explicit reference to the kinds of activities for which right of entry is requested and an indication of the impacts (if any) that will result from performance of environmental services.

d. Prepare monthly written progress reports for each project.

e. Develop and maintain a detailed project schedule to track project conformance to Exhibit C, Work Schedule, for each work authorization. The schedule submittals shall be electronic format.

BRIDGE DESIGN: FUNCTION CODE 170

170.1. Evaluate Up to 2 Alternatives. The Engineer shall evaluate up to two alternatives that are practicable and reasonable to identify the most feasible structure. For each alternative, the Engineer shall prepare a preliminary design, cost estimate, and exhibit to determine the preferred alternative.

170.2. Bridge Layout. The Engineer shall prepare the bridge layout plan sheet. The Engineer shall determine the location of each soil boring needed for foundation design as per the 2024 TxDOT *Geotechnical Manual*.

The Engineer shall submit each bridge layout early in the plan preparation process to obtain approval from the County. Each bridge layout sheet shall include typical sections, structural dimensions, abutment and bent locations, superstructure and substructure types, if applicable. The Engineer shall locate and plot all soil borings and utilities, show proposed retaining walls, and, for staged construction, indicate limits of existing bridge for removal and reconstruction.

Description	Approx Length	Approx Width	Comments
CR 676 at Varner Creek Tributary	110 ft	24 ft	Phased Construction

170.3. Bridge Detail Summary. The Engineer shall prepare bridge or culvert quantities, estimates and specifications in accordance to the above-listed manuals.

170.4. Bridge Structural Details. The Engineer shall prepare each structural design and develop detailed structural drawings of all required details.

GEOTECHNICAL SERVICES – See Attachment 1.

SURVEY SERVICES – See Attachment 2.

ENVIRONMENTAL SERVICES – See Attachment 3.

CONSTRUCTION ENGINEERING: FUNCTION CODE 351

The Engineer shall provide Construction Phase Services at the written request of the County's Project Manager. The written request must include a description of the work requested, a mutually agreed upon time limit, and any special instructions for coordination and submittal. These services shall include, but are not limited to the following:

a. Attend preconstruction meeting
b. Attend field meetings and make visits to site
c. Calculate quantities and assist the County in preparing change orders
d. Review and approval of shop drawings
e. Review and approval of forming details
f. Responding to requests for information (RFIs)
g. Answering general questions
h. Providing clarification
i. Other project related tasks in support of the County during construction

Deliverables

Plans

The Engineer shall provide the following information at each submittal:

1. Alternatives analysis (15%)
   - 1.1. Roadway Typicals for each alternative
   - 1.2. Bridge Typicals for each alternative
   - 1.3. Bridge layouts for each alternative
     - Bridge type alternative analysis memo – pros and cons of each option
     - Cost estimate for each alternative
     - Cross sections
2. District Review Submittal (50%):
   - 2.1. 1 PDF set by FTP
   - 2.2. General Notes
   - 2.3. Plans Estimate
   - 2.4. Engineer's internal QA/QC marked-up set
   - 2.5. Other supporting documents
3. District Review Submittal (95%):
   - 3.1. 1 PDF set by FTP
   - 3.2. List of governing Specifications and Special Provisions in addition to those required.
   - 3.3. General notes.
   - 3.4. Plans estimate.
   - 3.5. Engineer's internal QA/QC marked-up set.
   - 3.6. Submit Drainage Final Report for Review
   - 3.7. Other supporting documents
4. Final submittal (100%).
   - 4.1. 1 PDF set by FTP

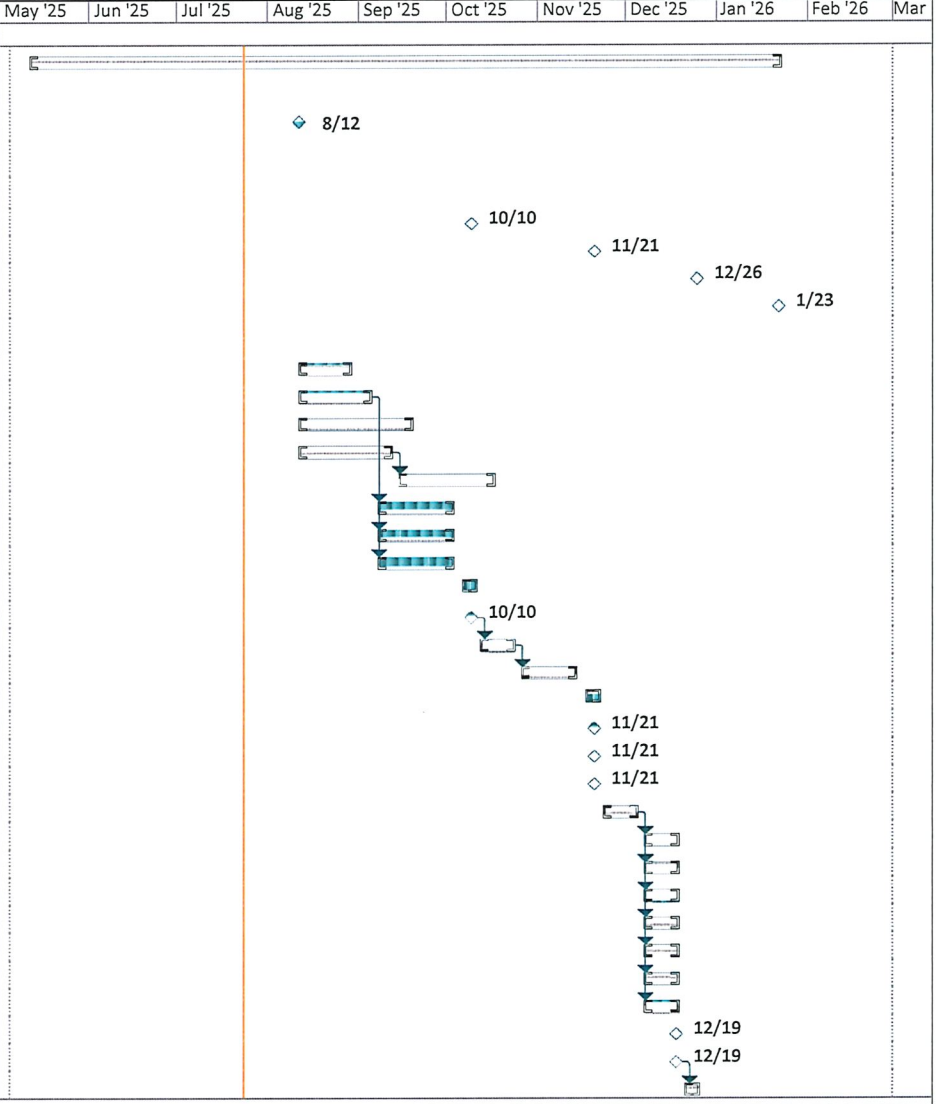
4.2. 1 PDF set on CD

Electronic Copies

The Engineer shall furnish the County with a CD/DVD of the final plans in the current CADD system used by the COUNTY and .pdf format.

Exhibit B

ID	Task Mode	Task Name	Duration	Start	Finish
1		**CR 676 @ Varner Creek "Tributary"**	185 days	Mon 5/12/25	Fri 1/23/26
2		Contract Execution	0 days	Tue 8/12/25	Tue 8/12/25
3		**Design Engineering (Bridge/Roadway/Drainage)**			
4		15% Bridge Type Alternative Plans Submittal	0 days	Fri 10/10/25	Fri 10/10/25
5		50% Plans Submittal	0 days	Fri 11/21/25	Fri 11/21/25
6		95% Plans Submittal	0 days	Fri 12/26/25	Fri 12/26/25
7		Final (Signed & Sealed) Plans Submittal	0 days	Fri 1/23/26	Fri 1/23/26
8		**Design Schedule**			
9		Utility Investigation	14 days	Tue 8/12/25	Fri 8/29/25
10		Surveying	19 days	Tue 8/12/25	Fri 9/5/25
11		Environmental	29 days	Tue 8/12/25	Fri 9/19/25
12		Geotechnical Investigation	24 days	Tue 8/12/25	Fri 9/12/25
13		Geotechnical Lab Work	25 days	Mon 9/15/25	Fri 10/17/25
14		Roadway Deign	20 days	Mon 9/8/25	Fri 10/3/25
15		Drainage Design	20 days	Mon 9/8/25	Fri 10/3/25
16		Bridge Type Analysis	20 days	Mon 9/8/25	Fri 10/3/25
17		Internal QAQC 15% Plans	5 days	Mon 10/6/25	Fri 10/10/25
18		***Submit 15% Bridge Type Alternative Plans***	***0 days***	***Fri 10/10/25***	***Fri 10/10/25***
19		County Review	10 days	Mon 10/13/25	Fri 10/24/25
20		Address County 15% Comments	15 days	Mon 10/27/25	Fri 11/14/25
21		Internal QAQC 50% Plans	5 days	Mon 11/17/25	Fri 11/21/25
22		***Submit 50% Plans***	**0 days**	**Fri 11/21/25**	**Fri 11/21/25**
23		Submit Preliminary Drainage Report	0 days	Fri 11/21/25	Fri 11/21/25
24		Submit Preliminary Geotechnical Report	0 days	Fri 11/21/25	Fri 11/21/25
25		County Review	10 days	Mon 11/24/25	Fri 12/5/25
26		Address County 50% Comments	10 days	Mon 12/8/25	Fri 12/19/25
27		Roadway Design	10 days	Mon 12/8/25	Fri 12/19/25
28		TCP Design	10 days	Mon 12/8/25	Fri 12/19/25
29		Bridge Design	10 days	Mon 12/8/25	Fri 12/19/25
30		TCP Design	10 days	Mon 12/8/25	Fri 12/19/25
31		SW3P Design	10 days	Mon 12/8/25	Fri 12/19/25
32		Signing & Pavement Marking Design	10 days	Mon 12/8/25	Fri 12/19/25
33		Submit Final Drainage Report	0 days	Fri 12/19/25	Fri 12/19/25
34		Submit Final Geotechnical Report	0 days	Fri 12/19/25	Fri 12/19/25
35		Internal QAQC 95% Plans	5 days	Mon 12/22/25	Fri 12/26/25

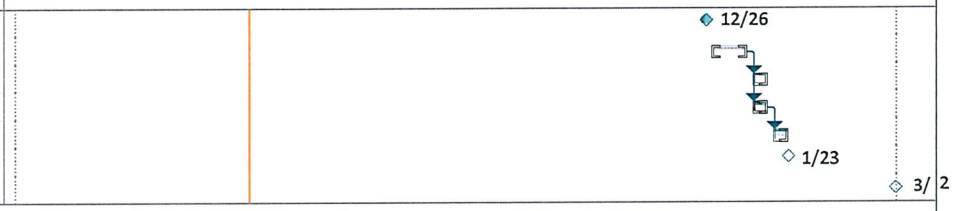


Project: CR 676 Design Schedule
Date: Thu 7/24/25

Task	External Tasks	Manual Task	Finish-only		
Split	External Milestone	Duration-only	Deadline		
Milestone	Inactive Task	Manual Summary Rollup	Progress		
Summary	Inactive Milestone	Manual Summary			
Project Summary	Inactive Summary	Start-only			

Exhibit B

ID	Task Mode	Task Name	Duration	Start	Finish
36		***Submit 95% Plans***	***0 days***	***Fri 12/26/25***	***Fri 12/26/25***
37		County Review	10 days	Mon 12/29/25	Fri 1/9/26
38		Address County 95% Comments	5 days	Mon 1/12/26	Fri 1/16/26
39		Cost Estimates, Quantities, Specs	5 days	Mon 1/12/26	Fri 1/16/26
40		Internal QAQC 100% Plans	5 days	Mon 1/19/26	Fri 1/23/26
41		***Submit 100% Final Plans***	***0 days***	***Fri 1/23/26***	***Fri 1/23/26***
42		Letting	0 days	Mon 3/2/26	Mon 3/2/26



Project: CR 676 Design Schedule
Date: Thu 7/24/25

Task	External Tasks	Manual Task	Finish-only		
Split	External Milestone	Duration-only	Deadline		
Milestone	Inactive Task	Manual Summary Rollup	Progress		
Summary	Inactive Milestone	Manual Summary			
Project Summary	Inactive Summary	Start-only			

EXHIBIT C - FEE SCHEDULE

PRIME PROVIDER NAME: IEA, INC.
PROJECT NAME: CR 676 AT VARNER CREEK BRIDGE
LIMITS: CR 676 AT VARNER CREEK TRIBUTARY

SUMMARY OF FEE SCHEDULE					
	IEA, INC.	WEISSER ENGINEERING & SURVEYING	HOLLAWAY ENVIRONMENTAL	AVILES ENGINEERING CORP.	TOTAL
BASIC SERVICES (LUMP SUM)	$258,649.00	$20,860.00	$15,877.00	$33,939.00	$329,325.00
CONSTRUCTION PHASE SERVICES (T&M)	$11,884.50				$11,884.50
TOTAL	**$270,533.50**	**$20,860.00**	**$15,877.00**	**$33,939.00**	**$341,209.50**
OPTIONAL SERVICES (LUMP SUM)			$13,390.00		$13,390.00
TOTAL W/ OPTIONS	**$270,533.50**	**$20,860.00**	**$29,267.00**	**$33,939.00**	**$354,599.50**

EXHIBIT C - FEE SCHEDULE (IEA, INC.)

PRIME PROVIDER NAME: IEA, Inc
PROJECT NAME: CR 676 AT VARNER CREEK BRIDGE
LIMITS: CR 676 AT VARNER CREEK TRIBUTARY

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	EIT	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS
DRAINAGE (FC 161)							
COLLECT SURVEY, AND FLOODPLAIN DATA		4	8	16			28
REVIEW AS-BUILTS, PLAN SETS AND PREVIOUS DRAINAGE REPORTS		4	4	4			12
REVIEW OF PROPOSED ROADWAY PLAN AND PROFILE	2	4	8	12			26
DELINEATION OF EXISTING DRAINAGE AREA		4	8	30	8		50
DEVELOP HYDROLOGIC MODEL FOR EXISTING CONDITION (1)		4	8	25			37
DEVELOP HYDRAULIC MODEL FOR EXISTING CONDITION (1)		4	8	40			52
DELINEATION OF PROPOSED DRAINAGE AREA		4	8	20	8		40
DEVELOP HYDROLOGIC MODEL FOR THE PROPOSED CONDITION (1)		4	8	30			42
DEVELOP HYDRAULIC MODELS FOR THE PROPOSED CONDITION (2)		4	8	45			57
COMPARE WATER SURFACE ELEVATIONS AND DESIGN IMPACT MITIGATION		4	8	18			30
FLOODPLAIN CUT AND FILL ANALYSIS		4	8	18			30
PREPARE DRAFT REPORT	2	4	24	40			70
PREPARE FINAL REPORT	2	4	24	40			70
HOURS SUB-TOTALS	6	52	132	338	16	0	544
CONTRACT RATE PER HOUR	$215.00	$210.00	$150.00	$123.00	$114.00	$93.00	
TOTAL LABOR COSTS	$1,290.00	$10,920.00	$19,800.00	$41,574.00	$1,824.00	$0.00	$75,408.00
% DISTRIBUTION OF STAFFING	1.10%	9.56%	24.26%	62.13%	2.94%	0.00%	
SUBTOTAL (FC 161)							**$75,408.00**

EXHIBIT C - FEE SCHEDULE (IEA, INC.)

PRIME PROVIDER NAME: IEA, Inc
PROJECT NAME: CR 676 AT VARNER CREEK BRIDGE
LIMITS: CR 676 AT VARNER CREEK TRIBUTARY

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	EIT	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS
ROADWAY DESIGN (FC 162)							
SIGNING			1	2	3		6
PREPARE SIGN DETAILS SHEETS		1	1	1	4		7
PROVIDE SUMMARY OF SMALL SIGNS TO BE REMOVED OR REPLACED			1	1	4		6
ILLUSTRATE AND NUMBER THE PROPOSED SIGNS ON PLAN SHEETS			1	1	4		6
PAVEMENT MARKINGS			1	1	4		6
DETAIL PAVEMENT MARKINGS & CHANNELIZATION DEVICES ON SHEETS			1	1	4		6
SELECT PAVEMENT MARKINGS FROM STATE STANDARDS			1	1	4		6
DEVELOP SIGN AND PAVEMENT MARKING LAYOUTS		1	1	1	4		7
HOURS SUB-TOTALS	0	2	8	9	31	0	50
CONTRACT RATE PER HOUR	$215.00	$210.00	$150.00	$123.00	$114.00	$93.00	
TOTAL LABOR COSTS	$0.00	$420.00	$1,200.00	$1,107.00	$3,534.00	$0.00	$6,261.00
% DISTRIBUTION OF STAFFING	0.00%	4.00%	16.00%	18.00%	62.00%	0.00%	
SUBTOTAL (FC 162)							**$6,261.00**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	EIT	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS
MISCELLANEOUS (ROADWAY) (FC 163							
ADVANCE WARNING, DETOUR PLAN, SEQUENCE	2	2	16	40	40		100
UTILITY ENGINEERING INVESTIGATION			4	6	4		14
SW3P SHEET	2		8	8	4		22
COMPUTE & TABULATE QUANTITIES	4		8	24			36
MISCELLANEOUS DETAILS	2		4	12	8		26
EROSION CONTROL SHEET	2		2	8	8		20
EROSION CONTROL SUMMARY SHEET	2		2	8	2		14
MISCELLANEOUS EROSION DETAILS	2		8	8	8		26
ESTIMATE	2	1	4	6			13
SPECIFICATIONS AND GENERAL NOTES	2	1	8	8			19
HOURS SUB-TOTALS	20	4	64	128	74	0	290
CONTRACT RATE PER HOUR	$215.00	$210.00	$150.00	$123.00	$114.00	$93.00	
TOTAL LABOR COSTS	$4,300.00	$840.00	$9,600.00	$15,744.00	$8,436.00	$0.00	$38,920.00
% DISTRIBUTION OF STAFFING	6.90%	1.38%	22.07%	44.14%	25.52%	0.00%	
SUBTOTAL (FC 163)							**$38,920.00**

TASK DESCRIPTION	PROJECT	SENIOR	PROJECT	EIT	CADD	ADMIN/	TOTAL

EXHIBIT C - FEE SCHEDULE (IEA, INC.)

PRIME PROVIDER NAME: IEA, Inc
PROJECT NAME: CR 676 AT VARNER CREEK BRIDGE
LIMITS: CR 676 AT VARNER CREEK TRIBUTARY

	MANAGER	ENGINEER	ENGINEER		OPERATOR	CLERICAL	LABOR HRS. & COSTS
PROJECT MANAGEMENT (FC 164)							
COORDINATE WITH SUBCONSULTANTS	8		20				28
REVIEW GEOTECHNICAL, ENVIRONMENTAL, AND SURVEY DATA			20				20
PROGRESS MEETINGS AND REPORTING		8					8
CONTRACT MANAGEMENT (INVOICES, PROGRESS REPORTS)		8				40	48
HOURS SUB-TOTALS	8	16	40	0	0	40	104
CONTRACT RATE PER HOUR	$215.00	$210.00	$150.00	$123.00	$114.00	$93.00	
TOTAL LABOR COSTS	$1,720.00	$3,360.00	$6,000.00	$0.00	$0.00	$3,720.00	$14,800.00
% DISTRIBUTION OF STAFFING	7.69%	15.38%	38.46%	0.00%	0.00%	38.46%	
SUBTOTAL (FC 164)							$14,800.00

EXHIBIT C - FEE SCHEDULE (IEA, INC.)

PRIME PROVIDER NAME: IEA, Inc
PROJECT NAME: CR 676 AT VARNER CREEK BRIDGE
LIMITS: CR 676 AT VARNER CREEK TRIBUTARY

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	EIT	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS
BRIDGE DESIGN (FC 170)							
EVALUATE UP TO 2 ALTERNATIVES							
(1) PREPARE PRELIMINARY DESIGN	1	12	24	32			69
(2) PREPARE COST ESTIMATE	1	4	12	12			29
(3) PREPARE EXHIBITS	1	8	8	30	40		87
BRIDGE LAYOUT	2	4	10	30	30		76
BRIDGE TYPICAL SECTION	1	8	10	16	16		51
BORING LOGS		2	2	8	8		20
FOUNDATION DESIGN	2	8	8	24	8		50
MISCELLANEOUS BRIDGE DETAILS		8	16	30	30		84
SUMMARY OF BRIDGE QUANTITIES & ELEVATIONS		2	8	24	8		42
BRIDGE STANDARDS		2	2	8	8		20
HOURS SUB-TOTALS	8	58	100	214	148	0	528
CONTRACT RATE PER HOUR	$215.00	$210.00	$150.00	$123.00	$114.00	$93.00	
TOTAL LABOR COSTS	$1,720.00	$12,180.00	$15,000.00	$26,322.00	$16,872.00	$0.00	$72,094.00
% DISTRIBUTION OF STAFFING	1.52%	10.98%	18.94%	40.53%	28.03%	0.00%	
SUBTOTAL (FC 170)							**$72,094.00**

DIRECT EXPENSES (BASIC SERVICES)	QUANTITY	UNIT	RATE				TOTAL
MILEAGE	50	MI	$ 0.700				$35.00
PHOTOCOPIES B/W (8 1/2" x 11")	20	EA	$ 0.15				$3.00
PHOTOCOPIES B/W (11" X 17")	100	EA	$ 0.30				$30.00
PHOTOCOPIES COLOR (8 1/2" X 11")	20	EA	$ 1.00				$20.00
PHOTOCOPIES COLOR (11" X 17")	20	EA	$ 1.50				$30.00
SUBTOTAL DIRECT EXPENSES (BASIC SERVICES)							**$118.00**

EXHIBIT C - FEE SCHEDULE (IEA, INC.)

PRIME PROVIDER NAME: IEA, Inc
PROJECT NAME: CR 676 AT VARNER CREEK BRIDGE
LIMITS: CR 676 AT VARNER CREEK TRIBUTARY

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	EIT	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS
CONSTRUCTION ENGINEERING (FC 351)							
ATTEND PRE-BID / PRE-CONSTRUCTION MEETING	4						4
ATTEND FIELD MEETINGS/ CONDUCT SITE VISITS							0
CALCULATE QUANTITIES AND ASSIST IN PREPARING CHANGE ORDERS	1						1
REVIEW AND APPROVE SHOP DRAWINGS	2		5	35			42
RESPOND TO REQUEST-FOR-INFORMATION (RFI)	1		5	35			41
HOURS SUB-TOTALS	8	0	10	70			88
CONTRACT RATE PER HOUR	$215.00	$210.00	$150.00	$123.00	$114.00	$93.00	
TOTAL LABOR COSTS	$1,720.00	$0.00	$1,500.00	$8,610.00	$0.00	$0.00	$11,830.00
% DISTRIBUTION OF STAFFING	9.09%	0.00%	11.36%	79.55%	0.00%	0.00%	
SUBTOTAL (FC 351)							**$11,830.00**

DIRECT EXPENSES (FC 351)	**QUANTITY**	**UNIT**	**RATE**				TOTAL
MILEAGE	100	MI	$ 0.545				$54.50
PHOTOCOPIES B/W (8 1/2" x 11")	0	EA	$ 0.15				$0.00
PHOTOCOPIES B/W (11" X 17")	0	EA	$ 0.30				$0.00
SUBTOTAL DIRECT EXPENSES (FC 351)							**$54.50**

SUMMARY BY FUNCTION CODE (BASIC SERVICES)	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	EIT	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL COSTS BY FC
ROUTE AND DESIGN STUDIES (FC110)	3	3	6	6	4	0	$3,369.00
ROADWAY DESIGN CONTROLS (FC160)	9	16	81	142	112	0	$47,679.00
DRAINAGE (FC 161)	6	52	132	338	16	0	$75,408.00
SIGNING, PAVEMENT MARKINGS, SIGNALIZATION (FC 162)	0	2	8	9	31	0	$6,261.00
MISCELLANEOUS (ROADWAY) (FC 163)	20	4	64	128	74	0	$38,920.00
PROJECT MANAGEMENT (FC 164)	8	16	40	0	0	40	$14,800.00
BRIDGE DESIGN (FC 170)	8	58	100	214	148	0	$72,094.00
SUBTOTAL LABOR EXPENSES	54	151	431	837	385	40	**$258,531.00**
SUBTOTAL DIRECT EXPENSES							**$118.00**
						TOTAL	**$258,649.00**

EXHIBIT C - FEE SCHEDULE (IEA, INC.)

PRIME PROVIDER NAME: IEA, Inc
PROJECT NAME: CR 676 AT VARNER CREEK BRIDGE
LIMITS: CR 676 AT VARNER CREEK TRIBUTARY

SUMMARY BY FUNCTION CODE (ADDITIONAL SERVICES)							TOTAL COSTS BY FC
CONSTRUCTION ENGINEERING (FC 351)	8	0	10	70	0	0	$11,830.00
SUBTOTAL LABOR EXPENSES							$11,830.00
SUBTOTAL DIRECT EXPENSES							$54.50
						TOTAL	$11,884.50

AVILES
ENGINEERING CORP.

June 12, 2025

Mr. Joseph Lopez, P.E.
IEA, Inc.
13501 Katy Freeway, Suite 3425
Houston, Texas 77079

Re: Revised Geotechnical Investigation Proposal
CR 676 Bridge Replacement at Varner Creek Tributary
Brazoria County, Texas
AEC Proposal No. G2025-05-01R3

Dear Mr. Lopez,

Aviles Engineering Corporation (AEC) is pleased to present this revised geotechnical investigation proposal for the proposed CR 676 Bridge Replacement at Varner Creek Tributary project in Brazoria County, Texas. Based on the information provided by IEA, Inc. (IEA), AEC understands that the proposed improvements include replacing two existing Corrugated Metal Pipes (CMPs) at Varner Creek Tributary with a new bridge along the CR 676 alignment. The proposed bridge will be approximately 120 feet long with a single span and will either be an arch bridge or a conventional bridge. According to the information provided by IEA, the creek at the crossing is approximately 15 to 20 feet deep.

AEC proposes to drill two soil borings (B-1 and B-2) each to a depth of 100 feet below existing grade for the proposed CR 676 bridge at Varner Creek Tributary. One boring will be performed for each abutment as shown on the attached boring location plan. Total drilling footage is 200 feet. We will perform a site reconnaissance prior to drilling and mark the boring locations. We will contact the Texas 811 System to confirm utility locations; however, Texas 811 does not locate water, sanitary, or storm sewer lines. AEC requests that drawings showing existing utilities be provided before mobilization of the drilling rig.

According to the information provided by IEA, the existing pavement along CR 676 consists of crushed gravel. Based on Google Earth, AEC anticipates that Borings B-1 and B-2 will be located on the existing roadway and can be accessed by a truck-mounted drilling rig. According to the information provided by IEA, traffic control at the site will not be required. Soil samples will be obtained continuously at intervals of 2 feet in the top 20 feet of the borings, then at 5 feet intervals thereafter to the boring termination depth of 100 feet below grade. As directed by IEA, AEC will perform the geotechnical investigation in accordance with the requirements of the 2024 Texas Department of Transportation (TxDOT) Geotechnical Manual. As required by the 2024 TxDOT Geotechnical Manual, the sample collected at every 5-foot interval will be taken with a split spoon sampler with a Standard Penetration Test (SPT). Undisturbed samples will be obtained from cohesive soils by pushing a Shelby tube sampler (ASTM D-1587). SPT samples will be obtained of granular soils (ASTM D-1586), and every 5-foot interval (see above). Representative portions of all soil samples will be sealed, packaged, and transported to our laboratory. We will note any visual evidence or odor indicating hazardous materials if encountered in the samples. Water level readings will be noted during drilling and obtained upon completion of drilling. Upon completion of drilling, the boreholes will be backfilled with bentonite chips.

Laboratory testing may consist of moisture contents, Atterberg limits, percentage passing a No. 200 sieve, sieve and hydrometer analysis, unconfined compression (UC), and unconsolidated-undrained (UU) triaxial tests depending on the soil types encountered. One consolidated-undrained (CU) triaxial test and two crumb dispersion tests will be performed depending on the soil types encountered.

We will analyze the field and laboratory data to develop geotechnical engineering recommendations for: (i) boring logs showing existing pavement and base thicknesses, subsurface soils and groundwater levels encountered in the borings; (ii) determine d_{50} of soils at the creek crossing to be used for scour analyses (performed by others); (iii) recommendations for feasible bridge foundations, including LRFD axial capacity and LPile soil parameters; (iv) slope stability analyses at the creek crossing (limited to one cross section analyzed), including retaining walls, if necessary; (v) evaluation if the onsite soils at the creek crossing are dispersive; (vi) criteria for riprap if it is to be used for erosion protection; (vii) gravel and/or asphalt roadway pavement thickness design, including subgrade preparation; and (viii) construction recommendations and groundwater control guidelines for the proposed improvements.

The lump sum fee for the services described in this proposal is **$33,939.00** as presented on the Itemized Fee Estimates in the Attachments. The fees are based on the following assumptions: (1) the field personnel will use Level D protection during the field exploration; (2) no standby time (weather-related or incurred due to reasons beyond our control) is included; and (3) buggy-rig mobilization, surveying, fault study, environmental testing and evaluation, restoration of the site to its original condition, and construction document review are not included.

After receiving notice to proceed, AEC will perform a site reconnaissance within 1 week and contact Texas 811 to clear utilities at the boring locations. Weather permitting, and assuming no field delays, we plan to start the field exploration about 1 to 2 weeks after all utilities are cleared. The field exploration will take approximately three days to complete. Laboratory soil testing will require six to seven weeks to complete (due to CU triaxial tests) after completion of the drilling, and the draft geotechnical report will take two to three weeks after laboratory testing is completed. We will submit the final geotechnical report two weeks after we receive review comments on the draft report. The time frame provided is an estimate based on AEC's current schedule at the time this proposal was written and will remain valid for 60 days from the date of the proposal. If project authorization is received after 60 days, then the schedule estimated herein may be subject to change.

If any of the project details described in this proposal are incorrect or the scope described or the assumptions listed need to be revised, please inform us immediately so we can revise the proposal as necessary. Please issue AEC a Master Subcontract Agreement (referencing this proposal) to authorize AEC to proceed with the services.

We appreciate the opportunity to present this proposal and look forward to working with you.

Respectfully Submitted,
AVILES ENGINEERING CORPORATION
(TBPELS FIRM REGISTRATION NO. 42)

Wilber L Wang, P.E.
Senior Engineer

Hanie Joodat, Ph.D., P.E.
Project Engineer

Attachments: Itemized Fee Estimate, Proposed Boring Location Plan

Geotechnical Investigation
CR 676 Bridge Replacement at Varner Creek Tributary
Brazoria County, Texas
AEC Proposal No. G2025-05-01R3
6/12/2025

AVLES ENGINEERING CORP.

ITEMIZED FEE ESTIMATE

2 Borings @ 100'

A. FIELD EXPLORATION	QTY	UNIT		RATE	AMOUNT
Mobilization/Demobilization (Truck-Mounted Rig and Water Support Truck)	1	LS	@	$746.00	$746.00
Drilling Crew Daily Travel (every day after first, from hotel)	2	day	@	$125.00	$250.00
Drilling Crew Per Diem and Overnight Stay (Lodging/Meals)	2	day	@	$450.00	$900.00
Fieldwork Coordination (Project Geologist)	6	hrs.	@	$176.00	$1,056.00
Obtain Lane Closure Permits (Project Geologist)	0	hrs.	@	$176.00	$0.00
Utility Clearance (Project Geologist)	2	hrs.	@	$176.00	$352.00
Boring Layout & Site Reconnaissance (Project Geologist)	8	hrs.	@	$176.00	$1,408.00
Boring Logging and Field Supervising (Senior Technician)	32	hrs.	@	$96.00	$3,072.00
Soil Boring, Continuous 3-in. (0'-20')	40	ft.	@	$24.00	$960.00
Soil Boring, Intermittent 3-in. (20'-50')	60	ft.	@	$20.00	$1,200.00
Soil Boring, Intermittent 3-in. (50'-75')	50	ft.	@	$22.00	$1,100.00
Soil Boring, Intermittent 3-in. (75'-100')	50	ft.	@	$24.00	$1,200.00
Soil Boring over 100' (Surcharge)	0	ft.	@	$12.00	$0.00
Grouting of Completed Boring (Bentonite Chips)	200	ft.	@	$10.00	$2,000.00
Metal Cover for Piezometers	0	ea.	@	$100.00	$0.00
Piezometer Installation	0	ft.	@	$26.00	$0.00
Groundwater Monitoring (Senior Technician)	0	hrs.	@	$96.00	$0.00
Piezometer Abandonment	0	ft.	@	$21.00	$0.00
Standby (Crew of Two)	0	hrs.	@	$320.00	$0.00
Vehicle Charge	40	hrs.	@	$13.00	$520.00
	SUBTOTAL				**$14,764.00**
B. TRAFFIC CONTROL					
Coordination of Traffic Control (Project Geologist)	0	hrs.	@	$176.00	$0.00
Traffic Control (LEO)	0	day	@	$525.00	$0.00
	SUBTOTAL				**$0.00**
C. GEOTECHNICAL LABORATORY TESTING					
Liquid and Plastic Limits (ASTM D-4318)	13	ea.	@	$76.00	$988.00
Moisture Content of Soils by Mass (ASTM D-2216)	52	ea.	@	$12.00	$624.00
Sieve Analysis (ASTM D-422)	3	ea.	@	$69.00	$207.00
Sieve Analysis w/ Hydrometer (ASTM D-422 & D-7928)	2	ea.	@	$164.00	$328.00
Percent Passing #200 Sieve (ASTM D-1140)	8	ea.	@	$59.00	$472.00
Unconfined Compressive Strength (ASTM D-2166)	7	ea.	@	$54.00	$378.00
Unconsolidated-Undrained Triaxial Compression (ASTM D-2850)	6	ea.	@	$77.00	$462.00
Dispersive Characteristic by Crumb Test (ASTM D-6572)	2	ea.	@	$46.00	$92.00
Double Hydrometer (ASTM D-4221)	0	ea.	@	$266.00	$0.00
Consolidated-Undrained Triaxial & Spec. Gravity) (ASTM D-4767 & D-854)	1	ea.	@	$1,850.00	$1,850.00
	SUBTOTAL				**$5,401.00**
D. SLOPE STABILITY ANALYSIS					
Senior Engineer, P.E.	3	hrs.	@	$218.00	$654.00
Project Engineer, P.E.	24	hrs.	@	$176.00	$4,224.00
	SUBTOTAL				**$4,878.00**
E. ENGINEERING ANALYSIS & REPORT PREPARATION					
Principal Engineer, P.E.	0	hrs.	@	$266.00	$0.00
Senior Engineer, P.E.	4	hrs.	@	$218.00	$872.00
Project Engineer, P.E.	24	hrs.	@	$176.00	$4,224.00
Graduate Engineer, EIT	28	hrs.	@	$122.00	$3,416.00
Engineering Assistant - CADD	4	hrs.	@	$96.00	$384.00
Report Reproduction (electronic copies only)	0	copies	@	$50.00	$0.00
	SUBTOTAL				**$8,896.00**
	TOTAL ESTIMATED FEE				**$33,939.00**

LEGEND:

B-# (X') — *PROPOSED BORING AND (DEPTH IN FEET)*

Note:
1) Boring locations may be adjusted in the field as necessary for drill rig access or to avoid utility conflicts.

AVILES ENGINEERING CORPORATION

PROPOSED BORING LOCATION PLAN
CR 676 BRIDGE REPLACEMENT
AT VARNER CREEK TRIBUTARY
BRAZORIA COUNTY, TEXAS

AEC PROPOSAL NO.	DATE	SOURCE DRAWING PROVIDED BY
G2025-05-01R2	6-10-2025	GOOGLE EARTH
APPROX. SCALE	DRAFTED BY	PLATE NO.
1" = 100'	HJ	PLATE 1

PROPOSAL AGREEMENT FOR PROFESSIONAL SERVICES
Effective Date: June 9, 2025

Joseph Lopez, Senior Bridge Engineer
IEA Inc.
13501 Katy Freeway, Suite 3425
Houston, TX 77079
832-494-3800
jlopez@ieaworld.com

Proposal for Professional Services in Connection With: County Road 676 at Varner Creek Tributary (as shown on the attached aerial images), Brazoria County, Texas

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

I. BASE SCOPE OF SERVICES

Surveying and Mapping

The survey limits an approximate 600-foot by 600-foot envelope and shown more specific on the attached Aerial Images.

1. **Survey Control**
   a. Horizontal and Vertical Survey Control for the site shall be referenced to the nearest NGS Survey Control Monument, or the CORS Network if Monuments are not available.
   b. Survey Control Points will be established intervisible intervals and tied to the Calculated Alignment for the site.
   c. Deliverable will be Signed and Sealed Survey Control Maps per County standards with Detail Sketches in PDF format and CAD Files.

COST: $3,475.00

2-Person Survey Crew	8 hrs @ $155/hr	$1,240.00
Survey Technician	8 hrs @ $125/hr	$1,000.00
CADD Technician	8 hrs @ $100/hr	$ 800.00
Clerical	2 hrs @ $75/hr	$ 150.00
Field Coordinator	1 hrs @ $110/hr	$ 110.00
RPLS	1 hrs @ $175/hr	$ 175.00

2. **Existing Right of Way Mapping (Cat. 1B, Cond. 3)**
   a. Perform abstract survey; obtain deeds of record, and plats for the right-of-way, streets intersecting and tracts of land adjoining the project limits.
   b. Establish the existing right-of-way and boundary lines of the project and adjoining the project limits.

c. Deliverable will be Signed and Sealed existing Right-of-Way Map Sheets in PDF format per County standards and CAD Files.

COST: $7,455.00

2-Person Survey Crew	20 hrs @ $155/hr	$3,100.00
Survey Technician	20 hrs @ $125/hr	$2,500.00
CADD Technician	12 hrs @ $100/hr	$1,200.00
Clerical	2 hrs @ $75/hr	$ 150.00
Field Coordinator	3 hrs @ $110/hr	$ 330.00
RPLS	1 hrs @ $175/hr	$ 175.00

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

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

a. For the roadway and tributary, obtain cross-sections at 50-foot intervals with grade breaks. Cross-sections shall cover a minimum of a 100-foot wide swath in areas with no existing roadway. Topographic Survey will include the following: Identify locations and elevations of physical features to include edges or curbs and gutters of pavement, parking lanes, center of the median, fences, walls, sidewalks, driveways and driveway curbs, power poles, light poles, water meters, water wells, ponds, sprinklers, off-site drain pipe, elevations at ditch banks, toe, flow line, and side slope, etc. Horizontally and vertically locate available existing utilities within, crossing, and adjoining project limits. Utilities will be located and tied based on visual evidence and marked by "One Call" within the project limits. The rim (top) and flow line elevations will be obtained on inlets, manholes (sanitary and storm), and drainage structures, including culverts, SETs, etc. The rise, width, flowlines, etc. of the drainage elements will be obtained where accessible.

b. Prepare existing Signed and Sealed Topographic Survey Map of the Project to be delivered in PDF per County standards and CAD Files.

COST: $9,930.00

2-Person Survey Crew	30 hrs @ $155/hr	$4,650.00
Survey Technician	8 hrs @ $125/hr	$1,000.00
CADD Technician	24 hrs @ $100/hr	$2,400.00
Clerical	2 hrs @ $75/hr	$ 150.00
Field Coordinator	3 hrs @ $110/hr	$ 330.00
RPLS	8 hrs @ $175/hr	$5,120.00

TOTAL COST FOR BASE SERVICES: $20,860.00 (non-taxable)

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

CLIENT
IEA Inc.

WEISSER ENGINEERING & SURVEYING

By:_____ By: Taylor R. Sass

Printed Name:_____ Printed Name: Taylor R. Sass

Title:_____ Title: President & CEO

Date of Acceptance:_____ Date of Acceptance: 06/09/2025

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

_____

HOLLAWAY
ENVIRONMENTAL + COMMUNICATIONS

July 22, 2025

Joseph Lopez
Senior Bridge Engineer
IEA, Inc.
13501 Katy Freeway, Suite 3425
Houston, Texas 77079

RE: Environmental Services Proposal
County Road 676 at Varner Creek Tributary
Brazoria County
County Road 676 at Old Nash Road, Brazoria County, Texas
29.150291°, -95.610821°

Dear Mr. Lopez:

Thank you for allowing Hollaway Environmental + Communications Services, Inc. (Hollaway) to submit this proposal to IEA, Inc. (herein referred to as the Client) on behalf of Brazoria County for Environmental Services for the County Road 676 at Varner Creek Tributary (Project). The Project Area is approximately 0.11 acres and consists of a tributary of Varner Creek and sections of County Road 676 (Farrer Road) and Old Nash Road in Brazoria County, Texas (**Project Area Map**). This scope of work is based on email correspondence received on May 1, 2025, and a virtual meeting with the Client on May 2, 2025.

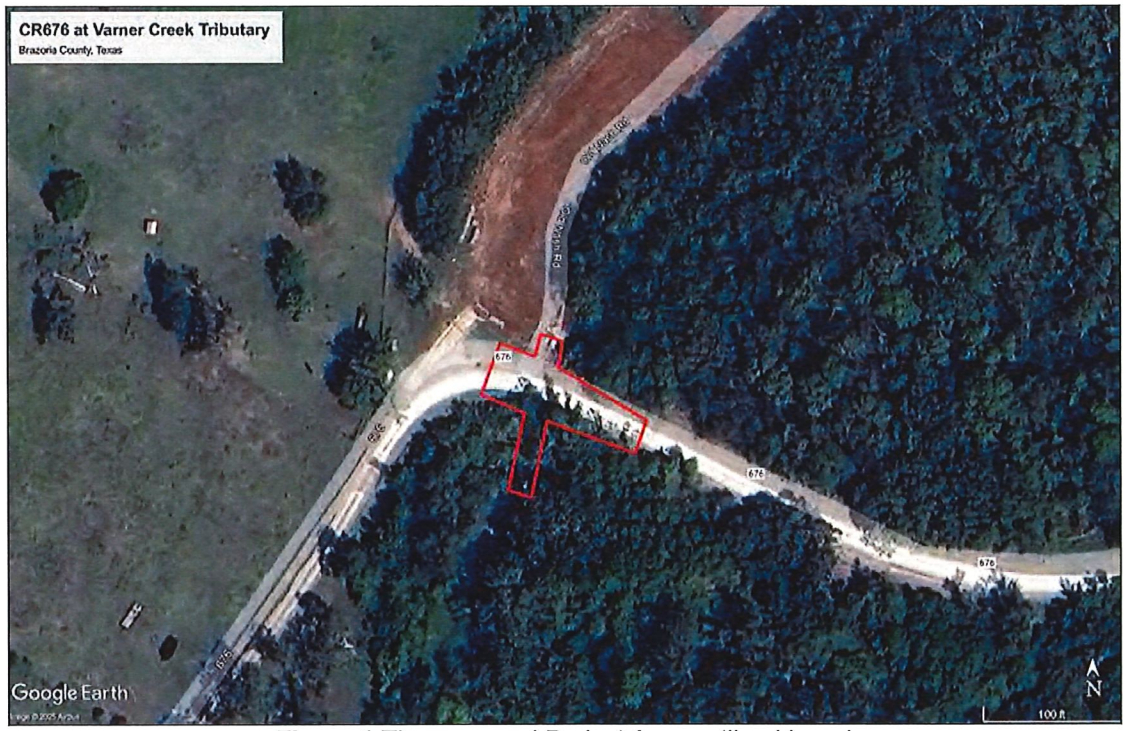


Figure 1.*The proposed Project Area outlined in red.*

This letter constitutes our proposed scope and cost for the Project and includes the following tasks:

Scope of Work

Basic Services

Task 1.0 Environmental Suite
- Task 1.1 Waters of the United States (WOTUS) Delineation and Jurisdictional Determination (JD)
- Task 1.2 Phase I Environmental Site Assessment (ESA)
- Task 1.3 Cultural Resources Desktop Analysis (subcontractor)

Optional Services, if required/requested

Task 2.0 Threatened and Endangered (T&E) Species Habitat Assessment

Task 3.0 Clean Water Act (CWA) Permitting with Pre-Construction Notification (PCN)

Task 1.0 Environmental Suite

Task 1.1. Waters of the United States (WOTUS) Delineation and Jurisdictional Determination (JD)

To determine if any potentially jurisdictional aquatic features exist on the Project Area, qualified Hollaway environmental scientists will delineate the boundaries of all aquatic features and determine their potential jurisdictional status through records and literature review, intensive field surveys, and coordination with the United States Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA).

All aquatic features will be delineated in accordance with the procedures mandated in the USACE 1987 Wetland Delineation Manual and November 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain (Version 2.0). The Ordinary High Water Mark of all waterbodies will be delineated in accordance with standard procedures set forth by the USACE. The delineation will adhere to industry standards utilized on similar projects in similar areas by qualified wetland scientists. All boundaries shall be surveyed with sub-meter Global Positioning System technologies that are consistent with the methodologies generally accepted by the USACE.

Hollaway will draft a report discussing the aquatic resources found on the Project Area, including vegetation, hydrology, and soils, along with the results of the field investigation for potential WOTUS. Hollaway will submit a draft WOTUS Report and Jurisdictional Determination to the Client for review. Hollaway will address revisions and resubmit the final report in an electronic format.

After the report is finalized, Hollaway will coordinate with the Client to submit to the USACE and/or EPA for review and verification. Hollaway assumes that the verification will consist of a one-day field inspection. Hollaway will accompany a USACE representative in the field during the verification process. If additional field inspections are required, Hollaway will provide a change order for additional scope and fee.

Task 1.2. Phase I Environmental Site Assessment (ESA)

Hollaway will conduct a Phase I ESA on the Project Area in accordance with the specifications listed in the latest American Society for Testing and Materials Standard Practice E1527-21 including a historic records review of publicly available information and databases and a site reconnaissance.

Hollaway will prepare one Phase I ESA report that includes a discussion of the results of the historic records review, interviews, and site inspection with recommendations for further investigation, if needed, as well as recommendations for Phase II ESA Subcontractors. Hollaway will submit a draft Phase I ESA to the Client for review. Hollaway will address revisions and resubmit the final report in an electronic format.

It is assumed that chain-of-title and/or current property ownership research is not required for this Project and is not included in this Scope of Work.

Task 1.3. Cultural Resources Desktop Analysis (Subcontractor)
Hollaway will coordinate with a qualified archeological subcontractor to determine cultural and historical resources on the Project Area. See attached **Cultural Resources Proposal (Adams Environmental, Inc.)** for a detailed description of this task.

Task 2.0 Threatened and Endangered (T&E) Species Habitat Assessment
A Memorandum of Agreement between United States Fish and Wildlife Service (USFWS), EPA, and National Oceanic and Atmospheric Administration requires an assessment of potential affect to state and federally listed species protected under the Endangered Species Act, Migratory Bird Treaty Act (MBTA), and the Bald and Golden Eagle Protection Act (BGEPA). To comply with federal and state regulations and to support the USACE permitting process, Hollaway will conduct a protected species and habitat assessment.

Qualified Hollaway biologists will perform a pedestrian survey to verify the presence or absence of suitable habitat for state or federally listed T&E, MBTA, and/or BGEPA species on or adjacent to the Project Area. Habitat types and current land use will be documented and photographed. The T&E Species Habitat Assessment Report will identify the presence or absence of suitable habitat for listed species and provide recommendations for best management practices (BMPs), if needed.

Hollaway will submit a draft T&E Species Habitat Assessment Report to the Client for review. Hollaway will address revisions and resubmit the final report in an electronic format.

Task 3.0 Clean Water Act (CWA) Permitting
Impacts to WOTUS will require compliance with the CWA. Depending on the type of proposed activity (e.g. transportation, outfall, or bank stabilization, etc.) and the amount of impacts to WOTUS in acres or linear feet, one of several types of CWA permits may be considered. **Table 1** describes the limits for each type of CWA permit that may be needed for this Project, if pre-construction notification thresholds are exceeded. The USACE determines required permitting by acres of impact, cubic yards, or linear feet, as well as whether jurisdictional wetlands would be impacted.

Table 1: USACE Permitting Thresholds and Estimated Timeframes

USACE Permit	Impact Threshold	Estimated Time Frame*
• NWP 14 with Pre-Construction Notification (PCN)	• 1/2 acre in non-tidal waters • 1/3 acre in tidal waters	If a pre-construction notification is required, 45 days from USACE official receipt of federally complete applications

**This is an estimate of the permitting timeline and cannot be guaranteed. Time frames are dependent on USACE staffing and schedules.*

Prior to preparation of the permit documents, Hollaway will meet with the Client to discuss the Project, including goals, plans, objectives, and design. Hollaway will prepare and submit a "Needs List" to the Client indicating items needed to complete the permit documents. This list will also outline the permitting process for the Client.

COST

The following are Lump Sum costs for each task described above in the Scope of Work.

	Task	Cost	Optional Task Cost
Task 1.0	Environmental Suite		
Task 1.1	WOTUS Delineation and JD	$6,555.00	-
Task 1.2	Phase I ESA	$6,605.00	-
Task 1.3	Cultural Resources Desktop Analysis*	$2,717.00	-
Task 2.0	T&E Species Habitat Assessment	-	$5,635.00
Task 3.0	CWA Permitting (PCN)	-	$7,755.00
TOTAL		**$15,877.00**	**$13,390.00**

** Subcontractors will be used for this task (cost includes markup)*

DELIVERABLES

Specific deliverables are discussed under each task. Draft copies of all reports will be provided electronically to the Client for review. Upon incorporating and addressing Client comments, a final report will be submitted electronically to the Client.

ASSUMPTIONS

Hollaway makes the following assumptions regarding this proposal:

- Hollaway will receive an executed contract and right-of-entry to the Project Area prior to beginning fieldwork.
- Hollaway will be provided shapefiles and/or KMZ files of the Project Area that are georeferenced in a mutually agreeable electronic format prior to completing fieldwork.
- Should the Project designs be revised during or after fieldwork is complete, Hollaway will provide a change order for additional scope and fee.
- Hollaway assumes that **Tasks 1.1** through **1.3** will be approved concurrently, with one (1) field mobilization.

- It is assumed that this proposed Project will not require a registered survey of the delineated areas to be performed by a licensed surveyor.
- Hollaway will conduct field survey(s) during reasonable working hours, daylight hours, and only during safe weather conditions.
- Hollaway assumes that this Project is not federally funded and National Environmental Policy Act documentation/public involvement is not required.
- Hollaway assumes one (1) meeting will be required for USACE Field Verification. If additional meetings and agency coordination are required, Hollaway will provide a change order for additional scope and fee.

SCHEDULE

Hollaway will begin work upon receipt of the finalized survey boundaries and executed contract. Hollaway will coordinate with the Client to meet the Project schedule within reason. Agency review timelines are subject to agency workload and manpower; therefore, Hollaway cannot guarantee review timelines.

If you approve Hollaway to proceed with the services outlined in this proposal, please sign and return an executed copy of this entire document to Hollaway. Acceptance and signed approval of this proposal indicates acceptance of the enclosed **Hollaway General Terms and Conditions**.

Thank you for allowing Hollaway to submit a proposal in support of this very important Project. If you have any questions or concerns, please contact me at justin.tassin@hollawayenv.com or (713)868-1043.

Sincerely,

Approved and accepted by:

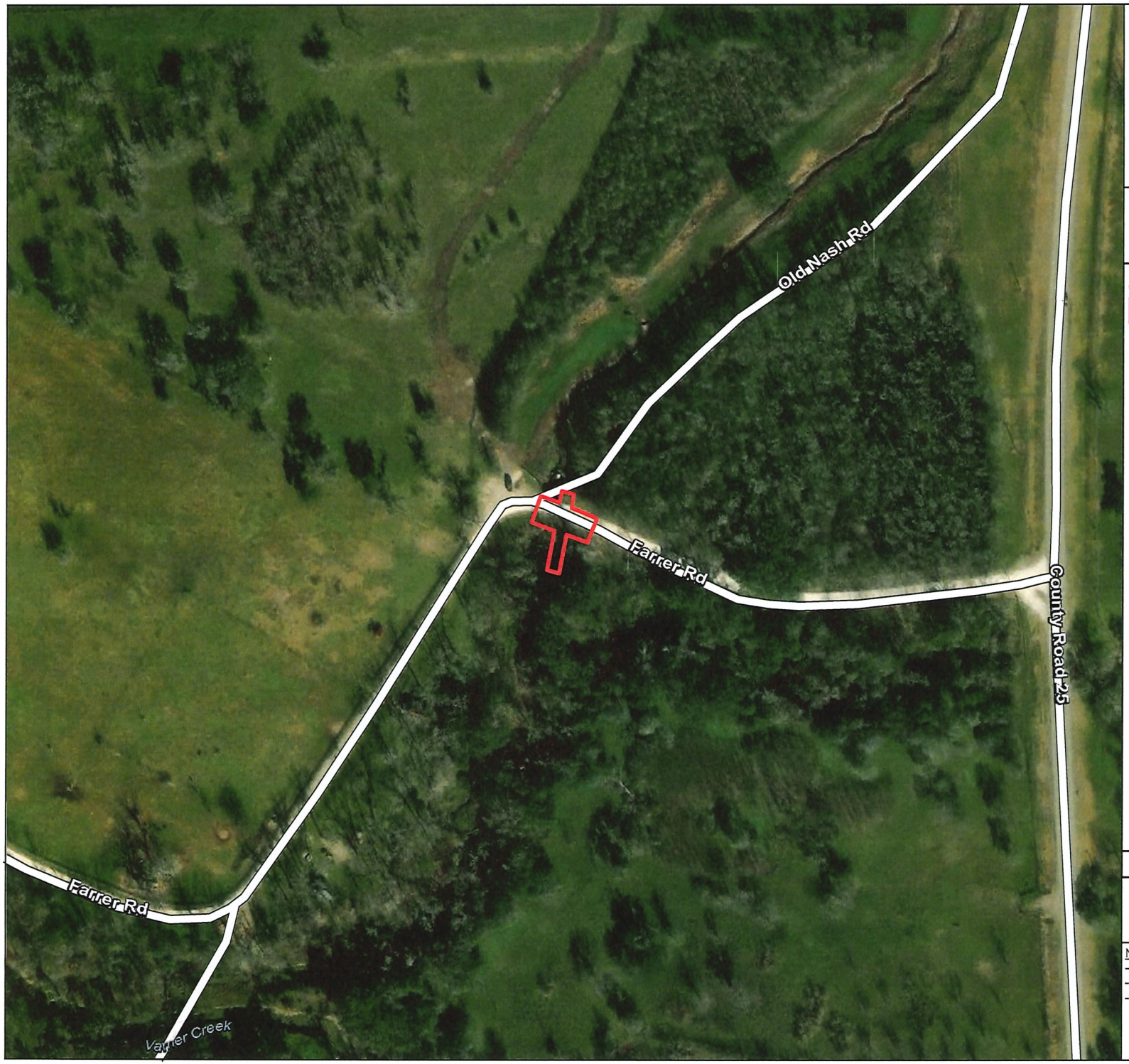
Justin Tassin
Environmental Scientist I

_____
Client Signature

_____
Printed Name

_____
Date

Enclosures:
Project Area Map
2025 Hollaway Standard Billing Rates
Hollaway General Terms and Conditions
Cost Workbook



HOLLAWAY
ENVIRONMENTAL + COMMUNICATIONS

County Road 676 at
Varner Creek Tributary

Brazoria County

LEGEND

Project Area (0.11 ac)

Project Area Map

0 130 260 Feet

NOTES
- Centroid Coordinates: 29.150264, -95.610814
- ESRI Base Map Aerial Date: 01/13/2022
- Date Created: 05/07/2025

Labor Category	2025 Rates	Task 1.1		Task 1.2		Task 1.3		Task 2.0		Task 3.0		TOTAL	
		WOTUS Delineation and JD		Phase I ESA		Cultural Resources Desktop Analysis (Subcontractor)		T&E Species Habitat Assessment		CWA Permitting			
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
Managing Principal	$ 300.00	2	$ 600.00	2	$ 600.00		$ -	2	$ 600.00	2	$ 600.00	8	$ 2,400.00
Sr. Environmental Scientist II	$ 160.00		$ -	-	$ -		$ -		$ -	3	$ 480.00	3	$ 480.00
Sr. Environmental Scientist I	$ 140.00	8	$ 1,120.00	8	$ 1,120.00		$ -	5	$ 700.00	30	$ 4,200.00	51	$ 7,140.00
Environmental Scientist	$ 120.00		$ -		$ -		$ -		$ -		$ -	-	$ -
Associate Environmental Scientist	$ 100.00	30	$ 3,000.00	25	$ 2,500.00	3	$ 300.00	25	$ 2,500.00	3	$ 300.00	86	$ 8,600.00
GIS Analyst	$ 160.00		$ -		$ -		$ -		$ -	10	$ 1,600.00	10	$ 1,600.00
GIS Specialist	$ 140.00	9	$ 1,260.00	9	$ 1,260.00		$ -	9	$ 1,260.00		$ -	27	$ 3,780.00
Technical Editor	$ 150.00	3	$ 450.00	3	$ 450.00		$ -	3	$ 450.00	3	$ 450.00	12	$ 1,800.00
Account Manager	$ 125.00	1	$ 125.00	1	$ 125.00	1	$ 125.00	1	$ 125.00	1	$ 125.00	5	$ 625.00
Cultural Desktop Analysis	$ 2,292.00					1	$ 2,292.00					1	$ 2,292.00
SUB TOTAL		53	$ 6,555.00	48	$ 6,055.00	5	$ 2,717.00	45	$ 5,635.00	52	$ 7,755.00	203	$ 28,717.00
Direct Costs - Non-Travel	Rate	Task 1.1		Task 1.2		Task 1.3		Task 2.0		Task 3.0			
		WOTUS Delineation and JD		Phase I ESA		Cultural Resources Desktop Analysis (Subcontractor)		T&E Species Habitat Assessment		CWA Permitting			
		Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost	Units	Cost
Database Search (each report)	$ 550.00		$ -	1	$ 550.00		$ -		$ -		$ -	1	$ 550.00
SUB TOTAL			$ -		$ 550.00		$ -		$ -		$ -		$ 550.00
DIRECT COSTS SUBTOTALS			$ -		$ 550.00		$ -		$ -		$ -		$ 550.00
TOTAL			$ 6,555.00		$ 6,605.00		$ 2,717.00		$ 5,635.00		$ 7,755.00		$ 29,267.00

Direct Costs, Travel, and Equipment

Item	Unit Price
Printing and Mailing	
Photocopies (Color 8.5x11 / 11x17)	$1.00 / $1.50/ ea.
Photocopies (Black and White 8.5x11 / 11x17)	$0.15 / $0.20/ ea.
Postage	Standard Rates
Equipment	
Drone	$1,600/ day
Boat and Motor (including trailer), plus direct fuel cost	$2,000/ day
ATV (including trailer)	$500/ day
Global Positioning System (Trimble GeoXT)	$175/ day
Vehicle Mileage	$0.70/ mi. or current IRS 2025 Standard Milage rates
Audio/Video Equipment	
Video camera (video + audio recordings)	$350/ day
PA (full system with microphone)	$150/ day
Projector/ Screen	$80/ day
Digital camera (photographs)	$80/ day
Projector	$75/ day
Microphone only	$75/ day
Speakers only	$75/ day
Pop-up screen only	$50/ day
Digital monitor + Multimedia players	$35/ day

EXHIBIT "B"
INSURANCE REQUIREMENTS

1. Workers Compensation in accordance with the laws of the State of Texas. Substitutes to genuine Workers' Compensation Insurance will not be allowed.

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

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

4. 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.

5. Professional Liability insurance with limits not less than $1,000,000 each claim/annual aggregate.

EXHIBIT "C"
COMPLIANCE WITH LAWS

The Consultant agrees to abide by any and all applicable Federal and state laws. The following list of Federal laws is illustrative of the type of requirements generally applicable to transportation projects. It is not intended to be exhaustive. The Consultant shall require that its contractors and subcontractors comply with applicable laws:

i. The Americans With Disabilities Act of 1990 and implementing regulations (42 U.S.C. §§ 12101 et seq.; 28 C.F.R. § 35; 29 C.F.R. § 1630);

ii. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. §§ 2000d et seq.) and United States Department of Transportation regulation, 49 C.F.R. Part 21;

iii. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. §§ 4601 et seq.), with the understanding that the requirements of said Act are not applicable with respect to utility relocations except with respect to acquisitions by the Borrower of easements or other real property rights for the relocated facilities;

iv. Equal employment opportunity requirements under Executive Order 11246 dated September 24, 1965 (30 F.R. 12319), any Executive Order amending such order, and implementing regulations (29 C.F.R. §§ 1625-27, 1630; 28 C.F.R. § 35; 41 C.F.R. § 60; and 49 C.F.R. § 27);

v. Restrictions governing the use of Federal appropriated funds for lobbying (31 U.S.C. § 1352; 49 C.F.R. § 20);

vi. The Clean Air Act, as amended (42 U.S.C. §§ 1857 et seq., as amended by Pub. L. 91-604);

vii. The National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321 et seq.);

viii. The Federal Water Pollution Control Act, as amended (33 U.S.C. §§ 1251 et seq., as amended by Pub. L. 92-500);

ix. The Endangered Species Act, 16 U.S.C. § 1531, et seq.

x. 23 U.S.C. §138 [49 U.S.C. §303]

xi. The health and safety requirements set forth in 23 C.F.R. § 635.108;

xii. The prevailing wage requirements set forth in 42 U.S.C. § 276a, 23 U.S.C. § 113, as supplemented by 29 C.F.R. Part 5, 23 C.F.R. §§ 635.117(f), 635.118 and FHWA Form 1273 §§ IV and V for those contracts that involve construction of highway improvements;

xiii. The Buy America requirements set forth in Section 165 of the Surface Transportation Assistance Act of 1982 and implementing regulations (23 C.F.R. §635.410);

xiv. The requirements of 23 U.S.C. §§ 101 et seq. and 23 C.F.R.;and

xv. The applicable requirements of 49 C.F.R. Part 26 relating to the Disadvantaged Business Enterprise program.

AGREED TO AND ACKNOWLEDGED THIS_____DAY OF_____, 20____

IEA, Inc

a Texas company

By: Wilson Wong, PE

Name: Wilson Wong, P.E.

Title: Houston Office Director

Date: 07/24/25

EXHIBIT "D"
CERTIFICATE OF INTERESTED PARTIES

Effective January 1, 2016, all contracts and contract amendments, extensions, or renewals executed by the Commissioners Court will require the completion of Form 1295 "Certificate of Interested Parties" pursuant to Government Code § 2252.908. Form 1295 must be completed by the Consultant and submitted with the partially executed Professional Services Agreement prior to final execution by Brazoria County. The Consultant shall update this document and resubmit it as needed for the duration of this contract.

The Texas Ethics Commission has posted a video which explains the process on how to submit Form 1295. The video link is available on the Brazoria County Purchasing website at http://www.brazoria-county.com/purch/Index.asp.

EXHIBIT "E"
CONFLICT OF INTEREST DISCLOSURE

Texas Local Government Code Chapter 176 requires that any vendor or person who enters or seeks to enter into a contract with a local governmental entity (including any agent of such person or vendor) disclose in the Questionnaire Form CIQ the vendor or person's employment, affiliation, business relationship, family relationship or provision of gifts that might cause a conflict of interest with a local governmental entity. By law, this questionnaire must be completed and filed with the records administrator of Brazoria County no later than the seventh business day after the date the person engages or communicates with Brazoria County or becomes aware of facts that require the completion of the questionnaire pursuant to Texas Local Government Code Section 176.006.

A person commits an offense if the person knowingly violates Texas Local Government Code section 176.006. An offense under this section is a Class C misdemeanor.

A copy of House Bill 23 which amended the Texas Local Government Code Chapter 176 is available at: http://www.capitol.state.tx.us/tlodocs/84R/billtext/html/HB00023F.HTM.

Texas Local Government Code Chapter 176 can be found here:
http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm.

By submitting a response to this request, the Consultant represents compliance with the requirements of Texas Local Government Code Chapter 176. If required, send completed forms to:

Brazoria County Courthouse
County Clerk's Office
111 E. Locust Street, Suite 200
Angleton, TX 77515

EXHIBIT "F"
CONTRACT AMENDMENTS

INSERT ALL AMENDMENTS TO THIS CONTRACT AS EXHIBIT F-1, F-2, ETC.