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ENGINEERING SERVICES AGREEMENT

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

THIS AGREEMENT is between **Harris County**, a body corporate and politic under the laws of the State of Texas, hereinafter called "County", acting herein for the **Harris County Toll Road Authority** (HCTRA), a division of the County, and **CivilTech Engineering, Inc.,** hereinafter called the "Engineer" or “Company”.

W I T N E S S E T H:

WHEREAS, the County proposes to hire the Engineer to provide Hydrologic and Hydraulic (H&H) Modeling and Engineering required to provide corridor and area-wide H&H analysis for the Harris County Toll Road Authority AET Program - Countywide in Harris County, Texas, hereinafter called the “Project”;

WHEREAS, the Engineer has represented to the County that it is qualified and prepared to perform all of the services described in the Scope of Services, Appendix A, attached hereto and incorporated herein by reference as if copied herein verbatim (Scope of Services), and has submitted a proposal to provide professional engineering services for the Project;

WHEREAS, the County is satisfied that the Engineer is capable of performing the necessary services required for the Project and desires to contract with the Engineer to perform the services described in the Scope of Services;

WHEREAS, the provisions of Chapter 262, Texas Local Government Code, Competitive Bidding Law do not apply to the proposed agreement because the contract is for professional engineering services;

WHEREAS, the County has determined and found that it would be in the best interest of the County to delegate to the Executive Director of HCTRA supervisory and management authority over the Engineer; and

WHEREAS, the Engineer will control the methods and means in performing the work set out in the Scope of Services;

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

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1. General

a. In performing professional engineering services under this Agreement, the Engineer will function solely and exclusively for the benefit of the County and not for the benefit of the contractors for the Project or any other party. All services rendered by the Engineer under this Agreement shall be performed under the supervision of HCTRA. The Engineer shall render services in accordance with generally accepted professional standards and use the degree of care and skill reasonably necessary to ensure compliance with all applicable laws and regulations.

b. The Engineer shall be responsible for the professional quality, technical accuracy and the coordination of all deliverable documents and services furnished by the Engineer under this Agreement. The Engineer shall, without additional compensation, correct or revise all errors and deficiencies in its documents.

c. The Engineer will collaborate with the County's personnel to facilitate the implementation of a Project Database within the County's Electronic Document Management System known as "CAPTRAC". The Electronic Document Management System will provide electronic management that shall govern the distribution and file copies of all Project related correspondence, reports, plans, and technical data. The County and the Engineer will use "CAPTRAC" to facilitate the effective electronic exchange of Project information and documents with members of the design team and other interested stakeholders.

d. The Engineer will collaborate with the County's personnel to facilitate the maintenance of the Project Database. Project files shall be entered into the database by the Engineer on a timely basis and made available by the County on "CAPTRAC" at all times for performance of daily Project activities. Other documents, including those used for legal review, audit requests/requirements, and open records request purposes, shall be entered by the County staff assisting the Engineer team. The Engineer shall also ensure that all Project files are appropriately entered into the database:

    1. At all critical milestones;
    2. At established periodic intervals; and
    3. Following completion of the work as a final Project record, including applicable record drawings.

2. Scope of Services

The services to be provided herein in regard to the Project are defined in Appendix A ("Scope of Services").

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3. Compensation and Payment

a. The Engineer shall be entitled to payments based on hourly rates and reimbursement as set forth in this section, and the Engineer agrees that such payment will constitute full compensation for the performance of services under this Agreement. The County shall not be obligated to pay in excess of **$1,728,000.00** and the Engineer shall not be obligated to perform further services hereunder once such sum has been earned, except to the extent that HCTRA has given prior written authorization to perform additional services and receive compensation therefore from funds in excess of such figure and within the maximum sum available under 3.c.

(1) The Engineer shall be entitled to payments based upon hourly billing for defined services and any additional services not included in the Scope of Services under this Agreement, including changes in the contractual scope of work and revision of work satisfactorily performed, provided that such additional services will be performed only when approved in advance and authorized by the County, and will be reimbursed at the raw salary rates in effect at that time, times a multiplier as set forth below, to the extent that such direct salary costs and subcontracts are reasonable and necessary for the performance of such services. The reimbursable hourly raw salary rates cannot exceed those set forth in Appendix B. The Engineer shall also be entitled to expense reimbursement as set forth in Appendix B, provided that miscellaneous expenses, if any, may be reimbursed hereunder only when HCTRA determines that incurring such expenses is not required as part of the original Scope of Services and provides written approval of such expense in advance of it being incurred. Payment will be made on the basis of certified time and expense records and in accordance with those payment procedures set forth in subparagraph b., below. Billing rates will have a 3.0 multiplier on raw salary rates.

(2) Where subcontractors are employed by the Engineer to perform additional services not within the original Scope of Services, the Engineer will be reimbursed for subcontractors' salaries and hourly rates, including overtime rates, on the same basis as described for the Engineer's own personnel in subparagraph a. (1), of this Paragraph. Reimbursement to the Subcontractor for non-salary costs incurred by subcontractors will be on the same basis as if the costs were incurred by the Engineer. The Engineer will be paid a subcontract administrative fee equal to ten percent (10%) of all subcontractor invoiced amounts. Total contract amounts shall include subcontractor fees.

b. It is understood and agreed that monthly payments will be made to the Engineer by the County based on the following procedures: On or about the

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fifteenth day of each month during the performance of services hereunder and on or about the fifteenth day of the month following completion of all services hereunder, the Engineer shall submit to the County two (2) copies of invoices showing the amounts due for services performed during the previous month, set forth separately for work under this Agreement and for additional services (accompanied by supporting certified time and expense records of such charges in a form acceptable to the County Auditor). It is specifically understood that any requests for travel reimbursements shall comply with those procedures for travel reimbursement to County employees established by the Harris County Auditor. HCTRA shall review such invoices and approve them within ten (10) calendar days with such modifications as are consistent with this Agreement and forward same to the County Auditor. The County shall pay each such invoice as approved by the County Auditor within twenty (20) calendar days after the County Auditor's approval of same. Invoices are due and payable net 30 days from receipt.

c. It is expressly understood and agreed that the County has available the total maximum sum of **$1,814,000.00** as hereinafter certified available for the purpose of satisfying the County's obligations under the terms and provisions of this Agreement. The County shall not be liable under any circumstances or any interpretations hereof for any costs under the Agreement except for those certified available for this Agreement by the Harris County Auditor, as evidenced by the issuance of a purchase order by the Harris County Purchasing Agent for the certified amount. Once the funds are expended for the purpose of satisfying the County’s obligations under the terms and provisions of this Agreement, the County shall have no further obligations nor shall the Engineer be required to perform further services hereunder.

4. Time of Performance

It is understood and agreed that the time for performance of the Engineer's services under this Agreement shall begin with receipt of the Notice to Proceed and end **1460** calendar days from that date, except to the extent continued performance after that date is authorized in writing by the Executive Director of HCTRA or his designee. The Engineer is responsible for notifying HCTRA thirty days prior to the end of the contract.

5. The County's Option to Terminate

a. The County has the right to terminate this Agreement at its sole option at any time, with or without cause, by providing written notice of such intention to terminate and by stating in said notice the "Termination Date." Upon such termination, the County shall compensate the Engineer in accordance with Paragraph 3., above, for those services that were provided under this Agreement prior to its termination and that have not been previously invoiced to the County. The Engineer's final invoice for said services will be presented

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to and paid by the County in the same manner set forth in Paragraph 3. b., above.

b. Termination of this Agreement and payment in settlement as described in subparagraph a. of this Paragraph shall extinguish all rights, duties, obligations, and liabilities of the County and the Engineer under this Agreement and this Agreement shall be of no further force and effect; provided, however, such termination shall not act to release the Engineer from liability for any previous default either under this Agreement or under any standard of conduct set by law. No termination of this Agreement shall have the effect of terminating the Engineer's obligations under Sections 7 (Delays and Damages), 8 (Inspection of the Engineer's Books and Records), 12 (Appearance as Witness), or 15 (Indemnification).

c. If the County shall terminate this Agreement as provided in this Paragraph, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to the Engineer.

d. The County's rights and options to terminate this Agreement, as provided in any provision of this Agreement shall be in addition to, and not in lieu of, any and all rights, actions and privileges otherwise available under law or equity to the County by virtue of this Agreement or otherwise. Failure of the County to exercise any of its rights, actions, options or privileges to terminate this Agreement as provided in any provision of this Agreement shall not be deemed a waiver of any rights, actions or privileges otherwise available under the law or equity with respect to any continuing or subsequent breaches of this Agreement or of any other standard of conduct set by law.

e. Copies of all completed and partially completed documents prepared under this Agreement shall be delivered to the County upon the Engineer's receipt of termination payment when and if this Agreement is terminated.

6. Source of Fee Payments

The County intends to pay for design and construction with the proceeds from the sale and issuance of bonds and a yearly revenue fund account. It is expressly acknowledged that all payments owing for Engineering services performed under this Agreement shall be made solely from these sources of funds for financing design and construction of the Project. The County shall be under no liability under this Agreement to make payment to the Engineer from any other source. In addition, the County reserves the right, at its sole discretion, at any time prior to issuance by the County of the written notice to proceed as provided in Paragraph 4., above, to cancel this Agreement and in the event of such cancellation, the Engineer shall not be entitled to any payment, nor have any claim for compensation or damages resulting from such cancellation. In no

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event shall the liability of the County under this Agreement exceed the amount hereunder certified as available by the County Auditor.

7. Delays and Damages

Except as otherwise provided herein, the Engineer agrees that no other charges or claims for damage shall be made by it against the County for any delays or hindrances occurring during the progress of the Engineer in providing to the County the services specified in this Agreement.

8. Inspection of the Engineer's Books and Records

The Engineer will permit the County, or any duly authorized agent of HCTRA, to inspect and examine the pertinent books and records of the Engineer, but only for the purpose of verifying the direct salary costs, overtime work, and out-of-pocket expenses for additional services charged to the Project described in and contemplated by Paragraph 3. a., above.

9. Personnel, Equipment, and Material

a. The Engineer represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for performance of the services required under this Agreement and that the Engineer shall furnish and maintain, at its own expense, adequate and sufficient personnel and equipment, in the opinion of HCTRA, to perform the services when and as required and without delays. It is understood that HCTRA will approve assignment and release of all key engineering personnel and that the Engineer shall submit written notification of all key engineering personnel changes monthly for HCTRA's approval prior to the implementation of such changes. Services described in this Agreement shall be performed under the direction of an engineer licensed to practice professional engineering in the State of Texas.

b. All employees of the Engineer or a subcontractor of the Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of the Engineer or a subcontractor of the Engineer who, in the opinion of HCTRA, is incompetent or by his conduct becomes detrimental to the Project shall, upon request of HCTRA, immediately be removed from association with the Project.

c. Except as otherwise specified, the Engineer shall furnish all equipment, transportation, supplies, and materials required for its operations under this Agreement.

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10. Subletting

The Engineer shall not sublet, assign, or transfer all or any part of the services in this Agreement without the prior written approval of HCTRA. Responsibility to HCTRA for sublet work shall remain with the Engineer.

11. Conferences

At the request of HCTRA, the Engineer shall provide appropriate personnel for conferences at its offices, or attend conferences at the various offices of HCTRA, or at the site of the Project, and shall permit inspections of its offices by HCTRA, or others when requested by HCTRA.

12. Appearance as Witness

If requested by the County, or on its behalf, the Engineer shall prepare such engineering exhibits and plats as may be requested for all hearings and trials related to the Project and, further, it shall prepare for and appear at conferences and shall furnish competent expert engineering witnesses to provide such oral testimony and to introduce such demonstrative evidence as may be needed throughout all trials and hearings with reference to any litigation relating to the Project. Compensation for trial preparation and appearance by the Engineer in courts regarding litigation matters will be made in accordance with the provisions of Paragraph 3. a. (1), above.

13. Compliance with Laws

The Engineer shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required, the Engineer shall furnish the County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees specified above.

The Engineer shall strictly comply with Section 2251.022 Texas Government Code, and shall require that its subcontractors fully comply with Section 2251.023 Texas Government Code.

14. Insurance

The Engineer shall obtain, keep and maintain any and all insurance that may be required by law or that may be required by any agreement the County has with any other party concerning the Project. The Engineer’s insurance policies shall be the primary policies. Under no circumstances will the County be liable for any

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policy premiums or deductibles. The Minimum Insurance Requirements are attached hereto as Appendix C.

15. Indemnification

TO THE EXTENT ALLOWED BY LAW, THE ENGINEER AGREES TO INDEMNIFY AND HOLD HARMLESS THE COUNTY, ITS OFFICERS, EMPLOYEES, AND AGENTS FROM LIABILITY, LOSSES, EXPENSES, DEMANDS, REASONABLE ATTORNEYS' FEES, AND CLAIMS FOR BODILY INJURY (INCLUDING DEATH) AND PROPERTY DAMAGE TO THE EXTENT CAUSED BY THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT OF THE ENGINEER (INCLUDING THE ENGINEER'S AGENTS, EMPLOYEES, VOLUNTEERS, AND SUBCONTRACTORS/CONSULTANTS UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE ENGINEER EXERCISES CONTROL) IN THE PERFORMANCE OF THE SERVICES DEFINED IN THIS AGREEMENT. THE ENGINEER SHALL ALSO SAVE THE COUNTY HARMLESS FROM AND AGAINST ANY AND ALL EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES, IN PROPORTION TO THE ENGINEER'S LIABILITY, THAT MIGHT BE INCURRED BY THE COUNTY, IN LITIGATION OR OTHERWISE RESISTING SUCH CLAIMS OR LIABILITIES.

16. Delivery of Notices, Etc.

a. All routine written notices, invoices, change orders, etc. are to be delivered to the Deputy Director, Tolling Operations at the Harris County Toll Road Authority, 7701 Wilshire Place Drive, Houston, Texas 77040, or at such other place or places as the County may designate by written notice delivered to the Engineer.

   All formal notices and demands under this Agreement shall be delivered to the Harris County Toll Road Authority, 7701 Wilshire Place Drive, Houston, Texas 77040, Attention: Executive Director.

b. All written notices, demands, and other papers or documents to be delivered to the Engineer under this Agreement shall be delivered to CivilTech Engineering, Inc., 11821 Telge Road, Cypress, Texas 77429, Attn: Mike McGovern, PE, or at such other place or places as the Engineer may designate by written notice delivered to the County.

17. Reports of Accidents, Etc.

Within 24 hours after the occurrence of any accident or other event which results in, or might result in, injury to the person or property of any third person (other than an employee of the Engineer), whether or not it results from or involves any action or failure to act by the Engineer or any employee or agent of the Engineer and which arises in any manner from the performance of this Agreement, the

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Engineer shall send a written report of such accident or other event to the County, setting forth a full and concise statement of the facts pertaining thereto. The Engineer shall also immediately send the County a copy of any summons, subpoena, notice, or other documents served upon the Engineer, its agents, employees, or representatives, or received by it or them, in connection with any matter before any court arising in any manner from the Engineer's performance of work under this Agreement.

18. The County's Acts

Anything to be done under this Agreement by the County may be done by such persons, corporations, or firms as the County may designate.

19. Limitations

Notwithstanding anything herein to the contrary, all covenants and obligations of the County under this Agreement shall be deemed to be valid covenants and obligations only to the extent authorized by the Act creating the County and permitted by the laws and the Constitution of the State of Texas.

20. Captions Not a Part Hereof

The captions or subtitles of the several sections and divisions of this Agreement constitute no part of the content hereof, but are only labels to assist in locating and reading the provisions hereof.

21. Controlling Law, Venue

This Agreement shall be governed and construed in accordance with the laws of the State of Texas. This Agreement shall be performed entirely in Harris County, Texas and the parties hereto acknowledge that venue is proper in Harris County, Texas, for all disputes arising hereunder and waive the right to sue or be sued elsewhere.

22. Successors and Assigns

The County and the Engineer bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

23. Independent Contractor

Notwithstanding any provision of this Agreement, the Engineer shall at all times act as an independent contractor, and not as an employee of the County, and the

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Engineer shall be responsible for the means and methods employed in performing services hereunder.

24. Certificate of Interested Parties (Form 1295)

Texas law requires all parties who enter into any contract with the County that must be approved by Commissioners Court to disclose all Interested Parties. Texas Ethics Commission Form 1295 must be completed in its entirety. If changes to this Form are necessary during this Agreement, the Engineer will notify and send the County an updated and complete version.

25. Additional Statutory Requirements

Company represents and certifies that, at the time of execution of this Agreement, Company (including any wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of the same) is not listed by the Texas Comptroller of Public Accounts pursuant to Chapters 2252 or 2270 of the Texas Government Code, nor will Company engage in scrutinized business operations or other business practices that would cause it to be listed during the term of this Agreement.

26. Historically Underutilized Business Requirements

The State of Texas maintains a Historically Underutilized Business Program, which identifies any business at least 51 percent owned by an Asian Pacific American, African American, Hispanic American, Native American, woman and/or Service Disabled Veteran, who reside in Texas and actively participate in the control, operations and management of the entity's affairs as a Historically Underutilized Business.

In accordance with Section 284.007 of the Texas Transportation Code, the County shall make a good faith effort to meet or exceed goals provided under Section 284.007(b) for awarding contracts and subcontracts associated with a project it operates, maintains, or constructs to historically underutilized businesses. For purposes of this section, the term “historically underutilized business” has the meaning given to such term in subsection (d) of Section 284.007, Transportation Code.

The Engineer agrees to reasonably assist the County in its efforts to meet or exceed the goals provided under Section 284.007(b) for awarding contracts or subcontracts to historically underutilized businesses.

The Engineer will take affirmative steps to assure that minority firms and specifically women’s business enterprises are used when possible and will not be discriminated against on the grounds of race, color, religious creed, sex, or national origin in consideration for an award.

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Affirmative steps shall include:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises; and

4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises.

The Engineer shall submit evidence of compliance to Appendix X when requested by County.

[SIGNATURE PAGE FOLLOWS]

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APPROVED AS TO FORM:

CHRISTIAN D. MENEFEE
County Attorney

By: DocuSigned by: Marcy Linebarger 0B97D5E185374E3...
MARCY LINEBARGER
Assistant County Attorney

HARRIS COUNTY

By: _____
LINA HIDALGO
County Judge

Date: _____

CIVILTECH ENGINEERING, INC.

By: DocuSigned by: 9771A514F2E3450...

Name: Sam Talje

Title: VP

Date: 9/16/2022

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APPENDIX A

HYDROLOGIC AND HYDRAULIC (H&H) MODELING AND ENGINEERING

SCOPE OF SERVICES

Highway: Beltway 8
Limits: IH 45 N To SH 225
County: Harris County

The work to be performed by the Engineer under this contract shall consist primarily of providing engineering services for the preparation of drainage reports for three H&H Drainage Segments due to roadway improvements to the Sam Houston Tollway from IH 45 N to SH 225 (approximately 62 miles). The project limits cross the following watersheds, Greens Bayou, White Oak Bayou, Buffalo Bayou, Brays Bayou, Sims Bayou, Clear Creek, Armand Bayou, and San Jacinto River. The limits for Drainage Segment 2 that comprises 22 miles are:

> H&H Drainage Segment 2 (Southwest Region) extends from the southern limits of H&H Drainage Segment 1 to the southern limits of Sims Bayou crossing the southern leg of the Sam Houston Tollway approximately 2.3 miles west of SH 288 and just east of Almeda Rd. Watersheds included in Drainage Segment 2 are Buffalo Bayou, Brays Bayou and Sims Bayou;

The drainage study will assess potential mitigation needs due to any increased flows resulting from the Sam Houston Tollway operational improvements for the proposed condition based on the roadway widening limits for design sections 3 and 7. The drainage analysis shall include evaluation of the current Sam Houston Tollway drainage system based on Atlas 14 rainfall data, assessing existing cross drainage structures and evaluating if the existing roadway and drainage system meets the current TxDOT and Harris County Flood Control District (HCFCD) standards. The drainage analysis for the proposed condition shall evaluate trunkline and ditch drainage component sizes, assess bridge structures, cross drainage structures, evaluate and determine mitigation needs and impacts to abutting properties and the 100-year floodplain associated with the operational improvement project. The drainage impact study and H&H drainage study report, signed and sealed by a professional engineer, shall include applicable hydrologic and hydraulic models such as HEC-HMS, HEC-RAS 1D/2D, and SWMM/XP-SWMM. The drainage reports shall also include but is not limited to the following: drainage area maps, drainage outfall descriptions, and recommendations for mitigation of impacts. Plan production is limited to development of hydraulic data sheets and drainage area maps for bridges and bridge-class culvert crossings and non-bridge-class culverts.

GENERAL REQUIREMENTS

Design Criteria.

The Engineer shall prepare all work in accordance with 1.) HCTRA AET Design Guidelines and Criteria; 2.) the latest version of applicable TxDOT procedures, specifications, manuals, guidelines, standard drawings, standard specifications or previously approved special provisions and special specifications including *Hydraulic Design Manual* and other TxDOT approved manuals; 3.) HCFCD's Hydrology & Hydraulics Guidance Manual and Policy Criteria and Procedure Manual; and 4.) other government agencies (if applicable). When design criteria are not identified in the above documents, the Engineer shall notify the HCTRA AET Program Management Consultant (PMC) who will coordinate with HCTRA to provide guidance.

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(Function Code 161 - Drainage)

Right-of-Entry and Coordination. The Engineer shall notify the PMC who will work with HCTRA to secure permission to enter private property to perform any surveying, environmental, engineering or geotechnical activities needed off HCTRA right-of-way (ROW). In pursuance of the HCTRA's policy with the general public, the Engineer shall not commit acts which would result in damages to private property, and the Engineer 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 PMC in conjunction with HCTRA prior to each entry.

The Engineer shall notify the PMC and coordinate with adjacent engineers on all controls at project interfaces. The Engineer shall document the coordination effort, and each engineer shall provide written concurrence regarding the agreed project controls and interfaces. In the event the Engineer and the other adjacent engineers are unable to agree, the Engineer and each adjacent engineer shall meet jointly with the PMC for resolution. HCTRA shall have authority over the Engineer's disagreements and HCTRA's decision shall be final.

The Engineer shall prepare any exhibit necessary for approval by other governmental or regulatory agencies (FEMA, etc.) in compliance with the applicable format and guidelines required by each entity and as approved by the PMC and HCTRA. The Engineer shall notify the PMC in writing prior to beginning any work on any outside agency's exhibit.

Coordination. The Engineer shall coordinate issues and communications with HCTRA internal resource areas through PMC. The Program Manager will communicate the resolution of issues and provide the Engineer direction as needed to complete the drainage study. The Engineer shall coordinate with affected cities, and all other governmental agencies through the PMC.

The Engineer shall perform the services per the task and description of work provided below:

Data Collection.

The Engineer shall notify the PMC in writing whenever the Engineer finds disagreement with the information or documents provided. The Engineer shall collect, review, and evaluate data as described below.

1. Data from the PMC:
    - Roadway design requirements.
    - Horizontal control points.
    - Benchmark elevations and descriptions for vertical control.
    - The data on file concerning:
        - An electronic copy of the existing 2D Microstation planimetric mapping file, on a reproducible CD.
        - Existing roadway 3D Microstation Digital Terrain Mapping file on a reproducible CD.
        - Existing facilities construction documents and "as-builts".
        - Survey data for current roadway conditions
    - PMC will provide limits of improvements within each design segment for drainage prioritization to prepare the drainage impact study
    - Existing HCTRA right-of-way maps.

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- Existing hydraulic and hydrologic studies associated with the project and project area, if available.
- Bridge Inventory, Inspection, and Appraisal Program reports and any appropriate project files.
- Existing geotechnical information.
- Assist the Engineer to obtain the required data and information from other local, regional, State and Federal agencies.
- Timely review and decisions necessary to permit the Engineer to maintain the contracted project schedule as shown in the work order.
- Design criteria for roadway, structures, and drainage.
- Available Federal Emergency Management Agency flood insurance study maps, studies and models, including MAAPNext preliminary water surface elevation data, if available.
- The County will secure all required permits and agreements.

2. Documents for existing and proposed development along proposed route from local municipalities and local ordinances related to project development.
3. Existing drainage studies and PER completed by HCFCD and relevant to Sam Houston Tollway, this includes proposed flood control channel improvements and/or regional detention projects that could impact the project.
4. Available applicable data including GIS data and maps, site survey data, construction plans, previous reports and studies, and readily available rainfall history for the area. Particular sources of data collected will include but not limited to the State, County, and the Federal Emergency Management Agency (FEMA). This also includes current and historic LIDAR data sets.
5. Utility plans and documents from appropriate municipalities and agencies.
6. Engineer to provide additional surveying needs to the PMC.
7. At completion of data collection effort, notify the Program Manager if analysis of the collected data indicates there is missing data pertinent to complete the study.

Field Reconnaissance

The Engineer shall conduct field reconnaissance and collect data, including maintaining a photographic record of existing drainage crossings (upstream and downstream). This shall include observation of current conditions, outfall channels, cross drainage structures, tributary channels, and land development projects that contribute flow to the tributary and/or ROW.

Roadway and Hydraulic Design Criteria

The Engineer shall perform hydraulic design analysis using appropriate hydraulic methods, which may include computer models such as HEC-RAS 1D/2D, and PC-SWMM/XP-SWMM, for the project according to Design Criteria identified above.

Hydrologic Analysis

The Engineer shall conduct a hydrologic analysis for the existing and proposed conditions (operational improvements) incorporating Atlas 14 rainfall. For the purpose of this study the proposed conditions refers to the limits of roadway widening within design Sections 3 and 7, approximately 3.5 miles. Section 3 extends from ramps north of Westpark Dr to Boheme Rd, and Section 7 is approximately between the Hillcroft entrance ramp and the proposes toll gantry. Specific scope of work includes the following:

- Existing Condition (Safety Improvements – no change to existing impervious)

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i. Based on the drainage areas and hydrologic parameters developed, calculate existing condition discharges using appropriate hydrologic methods to determine WSEs of the off-site sheet flows for the 50%, 10%, 2% and 1% AEP storm frequencies, to establish the base condition. This includes development of both peak flows and full hydrographs.

ii. Determine hydrologic parameters such as impervious cover (C value runoff coefficient), overland flow paths and slopes from appropriate sources that includes but is not limited to topographic maps, GIS modeling, construction plans and existing hydrologic studies. This will be performed for the contributing offsite drainage areas to the project area, and for the contributing drainage area to the cross-drainage structures.

- Proposed Condition (Operational Improvements, Sections 3 and 7)
  i. Delineate drainage area boundaries for the areas within project limits across the design segment within the watersheds.
  ii. Determine hydrologic parameters such as impervious cover, overland flow paths and slopes from appropriate sources including but not limited to topographic maps, GIS modeling, construction plans and existing hydrologic studies. This will be performed for the contributing offsite drainage areas to the project area, and for the contributing drainage area to the cross-drainage structures.
  iii. Calculate discharges using appropriate hydrologic methods to determine WSEs of the off-site sheet flows for the 50%, 10%, 2% and 1% AEP storm frequencies. This includes development of both peak flows and full hydrographs.

Drainage Cross Structure Hydraulic Analysis

The analysis shall be completed for both existing and proposed conditions. The Engineer shall analyze cross-structures, including non-bridge-class culverts, bridge-class culverts, and bridges. Impacts will be determined for both, upstream and downstream of the bridge crossings. The following is a preliminary list of the bridge and culvert crossings. All bridge crossings identified in the table include two frontage road and one mainlane bridge crossings, for a total of 3 bridge crossings per location.

Major Bridge Crossing		
No.	Location	Stream
1	In between Faust Ln and Briar Hill Dr	HCFCD No. W100-00-00 (Buffalo Bayou)
2	North of Beechnut St	HCFCD No. D100-00-00 (Brays Bayou)
3	South of Beechnut St	HCFCD No. D120-00-00 (Wennington Bayou)
4	south of I-69	HCFCD No. D118-00-00 (Keegans Bayou)
5	South of I-69 and north of W Bellfort Ave	HCFCD No. D118-05-00
6	South of US 90	HCFCD No. C100-00-00 (Sims Bayou)
7	South of W Fuqua St	HCFCD No. C147-00-00
8	East of Park Manor St	HCFCD No. C145-00-00

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Culvert Crossing		
No.	Location	Stream
1	North of Hammerly Blvd	HCFCD No. W140-06-00
2	South of I-10	HCFCD No. W156-02-00
3	North of Richmond Ave	HCFCD No. D124-01-00
4	North of I-69	HCFCD No. D118-04-00
5	Stafford Rd	HCFCD No. D140-04-02
6	South of S Gessner Rd	HCFCD No. D140-04-00
7	North of US 90	HCFCD No. D140-04-05
8	South of Daisyette St	HCFCD No. C162-00-00
9	East of Rockwell Dr	HCFCD No. C150-00-00
10	West of Drakestone Blvd	HCFCD No. C147-02-00
11	East of Antioch Dr	HCFCD No. C144-00-00
12	West of Almeda Rd	HCFCD No. C143-00-00

Specific scope of work for each cross-structure may vary, depending on its role (cross-drainage, internal drainage equalization, or floodplain equalization). The scope of work for the cross-structures shall include the following:

A. Existing condition

1. Determine peak flows at each crossing, based on the hydrologic analysis performed as part of hydrologic analysis task for the purpose of the cross-structure analysis. FEMA effective hydrology data, pre-Atlas 14 rainfall data, will be used for all FEMA/HCFCD studied crossings. The 0.2% AEP will be considered the pseudo Atlas 14 1% AEP event. For all crossings unstudied by FEMA or HCFCD peak flows will be developed based on Atlas 14 rainfall data.
2. Analyze hydraulics for each crossing and develop models as necessary and appropriate, in HY-8, HEC-RAS 1D or 2D, or other approved methodology/software. Determine a reasonable downstream tailwater condition based on design criteria and the information available. If available, the current effective FEMA models will be used as a base model for the analysis. If a “best available data” model is provided by the local floodplain administrator, it shall be utilized accordingly for this analysis. The provided base model shall be reviewed for correctness and updated as needed. If the provided effective model is not in HEC-RAS format, it shall be converted to HEC-RAS for this analysis. If the FEMA effective model or other “best available” model is not available, the Engineer shall develop the model based on survey information using Atlas 14 rainfall data.
3. Determine the 10%, 2%, 1% and 0.2% AEP water surface elevations at each crossing.
4. Analyze each crossing to assess the hydraulic performance of the crossing, in accordance with TxDOT and HCFCD hydraulic design criteria.
5. Develop a roadway inundation map for the 2% and 1% AEP storm events to identify sections along the Sam Houston mainlanes that are overtopped. The existing roadway dgn data to be provided by the PMC.

B. Proposed Condition (Operational Improvements Sections 3 and 7)

1. Develop proposed condition hydraulic models for each crossing within the operational improvements project limits.
2. Determine the proposed conditions 10%, 2%, 1% and 0.2% design AEP, water surface elevations at each crossing.

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3. Consider and analyze floodplain conveyance impacts, as necessary and appropriate. If the cross-structure analysis shows impacts for the proposed condition peak flow rates, provide mitigation to avoid impacts, including ROW needs. Impacts will be determined both upstream and downstream of the culvert/bridge crossings for events up to an including the 1% AEP storm.
4. Analyze each crossing to identify recommended improvements to meet TxDOT and HCFCD hydraulic design criteria. The improvements may include extending, adjusting, or replacing culvert or bridge crossings.
5. If fill in the floodplain cannot be avoided, it shall be mitigated, and the potential mitigation options shall be presented to the PMC for review and approval. Proposed cut/fill data will be provided by individual roadway design segments. Floodplain fill will be determined based on the FEMA effective 500-year floodplain data.

Roadway Impact Analysis

This analysis shall be completed for the existing conditions, and proposed conditions. The Engineer shall analyze discharge at all identified drainage outfalls and assess detention needs necessary to mitigate impacts associated with roadway improvements using methods described below. The majority of the roadway is drained by storm sewer systems. Center median ditches are also present in some locations. Depressed sections will be evaluated separately as discussed under the Depressed Section Evaluation section.

Hydraulic analysis of ditch / storm sewer systems (trunkline level only) and major structures, including any necessary in-line or off-line detention, will be performed for the 50%, 10% and 1% AEP storm events, incorporating Atlas 14 rainfall intensities, and using dynamic hydraulic modeling software such as XP SWMM 1D/2D or PC SWMM 1D/2D. Specific scope of work includes the following:

A. Existing Condition (For Study Segment Limits)

1. As part of the Hydrologic Analysis task, determine peak flows and hydrographs for each ditch / sewer (trunkline) for the 10% and 1% AEP storm events. Peak flows and hydrographs will be developed for the 50% AEP Storm event for the drainage systems that are within the operational improvement limits for the purpose of the mitigation analysis.
2. Develop an existing conditions dynamic model for each of the identified outfall systems. The dynamic model shall include median / roadside ditches, storm sewer systems and culverts connecting independent drainage systems. The dynamic hydraulic model shall terminate at the outfalls listed previously.
3. Determine tailwater elevation at each outfall based on engineering judgment and best available data and Design Criteria.
4. Assess the drainage system to determine allowable discharges to each outfall and the existing hydraulic grade line through the drainage system for the 10% and 1% AEP storm events.
5. Conduct a 10% and 1% AEP sheet flow analysis using the dynamic model for the proposed condition to identify roadway sections that are at risk to flooding during major storm events. This includes identify potential flooded roadway locations along both frontage roads and mainlanes. This information will assist HCTRA with developing a flood resilient roadway system.

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B. Proposed Conditions (Operational Improvements Limits, Sections 3 and 7)

1. Determine the proposed condition peak flows and hydrographs for each ditch / sewer section for the 50%, 10% and 1% AEP storm events, based on the hydrologic analysis performed as part of the Hydrologic Analysis task.
2. Develop a proposed condition dynamic model for each of the drainage outfall systems. The dynamic model shall include median / roadside ditches, storm sewer systems and culverts connecting independent drainage systems. The dynamic hydraulic model shall terminate at each outfall. Coordinate with the design segment teams regarding roadway and drainage improvements.
3. Assess the proposed drainage system to determine the proposed condition discharges to the outfalls for the 1% AEP storm event and evaluate if the proposed condition discharges to the drainage system outfalls are less than or equal to the existing conditions. Assess the hydraulic grade line through the drainage system for the 10% AEP storm event.
4. Optimize the proposed condition drainage system to meet design criteria and to limit discharge into outfalls to the capacity of the system. Typically, this will involve not increasing proposed discharges above existing discharges. Optimization will include, when possible, the use of in-line detention within the ditch / storm sewer system, with discharges controlled by restrictors or similar structures at the existing culverts and outfalls. The Engineer shall also evaluate alternative flow routes, if necessary, to relieve system overload. Should in-line detention not be feasible, off-site detention in the vicinity of the proposed outfall may also be considered and assessed in the dynamic model. Detention requirements shall be coordinated with the PMC in conjunction with HCTRA. However, it is assumed that hydrograph routing within dynamic model will be performed to assess no adverse impacts in both the 50%, 10%, and 1% AEP storm events.

Depressed Sections/Pump Station Evaluation

The Engineer shall perform an evaluation of the existing pump station facilities located at depressed sections along the Sam Houston Tollway and determine the improvements needed to upgrade or replace the existing pump station facility to meet the Atlas 14 rainfall intensities and design according to TxDOT criteria. The Engineer shall recommend the extent of the improvements and provide the associated construction cost.
The pump station facilities are located at:

- 5803 W Sam Houston Pkwy S, Houston, Texas 77072
- 10750 Harwin Dr, Houston, TX 77042 (two facilities at this location)
- 320 W Sam Houston Pkwy N, Houston, Texas 77024

Specific scope of work includes the following:

1. Review the drainage reports prepared for the depressed section design (existing condition).
2. Evaluate the existing condition drainage design in the vicinity of the depressed section to re-assess drainage boundaries and inflow to the depressed section.
3. Determine the approximate level of protection provided by the current pump facility at each of the depressed sections. XP-SWMM will be used to evaluate the performance of the existing pump station.
4. Estimate pump capacity needed to provide an improved level of protection at each depressed

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section to meet TxDOT criteria under Atlas 14 rainfall conditions, includes up to two alternative conditions.
5. Determine preliminary mitigation needs associated with the proposed pump station improvements and additional ROW needs.
6. Coordinate the findings with the HCTRA and TxDOT and determine recommended improvements at each location.
7. Prepare an opinion of probable cost estimate for the pump station improvements at each location.

Scour Analysis

The Engineer shall perform a hydraulic scour analysis using HEC-18 and HEC-RAS at all drainage bridge structures:

The scour analysis will be performed for both bridge crossings that are proposed to be widened and for the non-widened bridge crossings, approximately 27 bridge structures will be analyzed. The scope of work for each crossing shall include:

1. The Engineer shall prepare each scour analysis using methodology approved by TxDOT. The Engineer shall select the methodology depending on site conditions such as the presence of cohesive or cohesionless soil, rock or depth of rock, proposed foundation type, and existing site performance. The Engineer shall follow the methodology outlined in HEC-18, TxDOT Hydraulic Design Manual, TxDOT Scour Evaluation Guide and the TxDOT Geotechnical Manual. This coordination shall include consultation with the appropriate PMC /HCTRA/TxDOT technical expert.
2. Coordinate with the PMC and the segment design engineers regarding the potential scour depths, scour envelope and potential recommended countermeasures to assist the segment design engineer with the bridge design modifications and/or treatment.
3. The Engineer shall prepare a separate scour report, combining the analysis and findings for all crossings which require a scour analysis, including completing TxDOT Form 2605 for each bridge crossing and submit to the PMC.

Resiliency and Sustainability (R&S) Support

The Engineer shall support the Segment Design teams in identification of potential sustainable design elements, up to two alternatives, that could be included under the operational improvement projects. This includes providing on call services to support the design teams.

Plans, Specifications and Estimates (PS&E) Development for Hydraulics

The Engineer shall coordinate with roadway design segments to collect necessary bridge/culvert profile data in order to provide hydraulic data for the existing and proposed roadway conditions.

The Engineer shall provide the following services:

1. Prepare Hydraulic Data Sheets for all drainage bridge structures, approximately 27 bridge structures.
2. Prepare Hydraulic Data Sheets for all bridge-class culverts and non bridge-class culverts.
3. Prepare overall drainage area maps and hydrologic calculation sheets for bridge, non-bridge-class, and bridge-class culverts.
4. Provide technical support to SDC for preparing Harris County Engineering Department and HCFCD Express Review Sheets (sections related to detention and floodplain only) for Operational Improvements Section 3 and 7.

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Drainage Report

The Engineer shall provide the following services:

1. The Engineer shall prepare drainage impact study associated with operational improvements projects (Sections 3 and 7). This report will be signed and sealed, and dated by a professional engineer and will serve as the drainage impact study for the project. The report will be submitted to HCFCD, COH, and TxDOT for review and approval. This shall include a draft drainage impact study report and a final drainage impact study report which addresses comments provided by the HCFCD, COH, and TxDOT.
2. The Engineer shall prepare a Segment 2 H&H drainage study and report of the project area to document the flood prone areas and potential improvements at drainage crossing to provide regional flood relief. The report will be signed, sealed, and dated by a registered or licensed engineer and submit to the PMC and HCTRA for review. This shall include a draft report and a final report which addresses comments provided by the PMC. The drainage report shall include, at a minimum, the following sections:
    i. Introduction: location, study objectives, general creek and watershed information, and other pertinent facts
    ii. Hydrology: watershed description, soil and land use information, hydrologic data and methodology or models used to develop flow data, pertinent input data and parameters of hydrologic analyses, summary table of results for a full range of peak discharges.
    iii. Hydraulics: overview of hydraulic modeling process, including data sources, specific models used, description of existing structures, drainage system characteristics, and other pertinent facts; discussion of design alternatives and the results of respective hydraulic modeling for the scenarios evaluated; hydraulic model output data for existing and proposed conditions
    iv. Summary of Conclusions / Recommendations: summary of study objectives, and recommended solutions, if any.
    v. Exhibits, including at a minimum: location map, topography map, drainage area map, land-use map, and FEMA FIRM
    vi. Appendices: detailed scour calculations, models, model output files, photographs, and other pertinent information
    vii. External USB drive, including PDF of full report and exhibits and all appendices (including hydrologic and hydraulic models)

(Function Code 145 – Project Management)

PROJECT MANAGEMENT

The Engineer shall provide the following services:

1. Attend kick-off meeting with the PMC and HCTRA to discuss the project locations and limits, design criteria and requirements.
2. Coordinate with the PMC and HCTRA/TxDOT in the development of the analysis for the required drainage improvements. This shall include, but is not limited to, attending meetings to discuss progress, clarify design issues, schedule, etc. The Engineer shall coordinate all milestone submittals.
3. Provide technical support and coordinate with the PMC, HCTRA, HCFCD, TxDOT and COH regarding permitting requirements for proposed improvements in FEMA floodplain or stormwater system tie-in/discharge to HCFCD, TxDOT, or COH facilities

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4. Coordinate with the AET Section Design Consultants, Sections 2, 3, 4 and 7.
5. Coordinate with affected county, cities and all other government agencies, as necessary, through PMC.
6. Perform general project management tasks including invoicing, progress reports, and general coordination with the PMC. This includes preparation of meeting minutes within five business days of the meeting.
7. Implement Quality Assurance / Quality Control program for each deliverable. The PMC and HCTRA may at any time review the Engineer's Quality Control. The PMC and HCTRA may request all markup documents including drawings and engineering reports from the Engineer.

DELIVERABLES

The Engineer shall submit the following to the PMC:

Reports:

1. Operational Improvements Drainage Impact Study Report (Sections 3 and 7) – the Engineer shall prepare a brief letter report summarizing data collection efforts and preliminary findings related to the current roadway condition. The letter report should highlight roadway sections where the mainlanes are overtopped under existing conditions.
2. Draft Segment 2 H&H Study Drainage Report (Three [3] copies) – The report shall document and justify all data, boundary conditions, assumptions, methodologies, and results. The text, tables, exhibits, and appendices shall document clearly and concisely the work performed and results found. The report shall provide recommendations for critical review by HCTRA. The text, tables, exhibits, and appendices (including computer models) shall be saved on a compact disc and included with each report. Assume one round of comments from HCTRA. The Engineer shall address all comments provided.
3. Final Segment 2 H&H Study Drainage Report (Three [3] copies) - The report shall be signed and sealed by a professional engineer.
4. The Engineer shall prepare a separate scour report, combining analysis and findings for all crossings which require a scour analysis.

Calculations:

The Engineer shall provide the copies of H&H models used on an external USB drive in a universally reliable format.

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APPENDIX B

Maximum Raw Salary Rates

CivilTech Engineering, Inc.

JOB CLASSIFICATION	Maximum Raw Salary Rate
Principal	$120.00
Senior Project Manager	$110.00
Project Manager	$105.00
Senior Engineer	$89.00
Project Engineer	$80.00
Design Engineer	$70.00
Engineer-In-Training II	$49.00
Engineer-In-Training I	$43.00
CADD Technician	$48.00
Engineering Technician	$45.00
Junior Engineering Technician	$55.00
Senior Engineering Technician	$65.00
GIS Technician – Senior	$65.00
Aerial Mapping Technician	$40.00
Project Administrator	$45.00
Document Control Specialist	$30.00
Admin/Clerical	$32.00

Note: Maximum Raw Salary Rates shown above are effective for the first year of the approved contract and are subject to an annual escalation rate of 4% effective on the contract anniversary date.

Maximum Reimbursable Expense		
Mileage	Per mile	IRS Approved Rate
Parking	Per day	$20.00
Lodging/Hotel (Taxes/Fees not included)	Day/person	$167.00
Lodging/Hotel – Taxes and Fees	Day/person	$50.00
Meals	Day/person	$64.00
Plots (color on bond)	Each	At cost
Photocopies 8 ½ x 11” B/W	Each	At cost
Photocopies 11” x 17” B/W	Each	At cost
Photocopies 8 ½ x 11” Color	Each	At cost
Photocopies 11” x 17” Color	Each	At cost
22” x 34” Prints	Each	At cost
Delivery (Local)	Each	At cost
Reproduction	Each	At cost
City of Houston Utility Records	Each	At cost
CenterPoint Energy Utility Records	Set	At cost

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APPENDIX C

MINIMUM INSURANCE REQUIREMENTS

During the term of the Contract, the Contractor at its sole cost and expense shall provide primary commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Contractor shall provide and maintain the following coverage and limits:

A. **Workers Compensation**, as required by the laws of Texas, **and Employers' Liability**, as well as All States, USL&H (United States Longshore & Harbor Workers Compensation Act) and other endorsements if applicable to the project, and in accordance with state law.

Employers' Liability

- Each Accident: $1,000,000
- Disease–Each Employee: $1,000,000
- Policy Limit: $1,000,000

B. **Commercial General Liability**, including but not limited to the coverage indicated below. Coverage shall not exclude or limit Products/Completed Operations, Contractual Liability, or Cross Liability. Where exposure exists, the County may require coverage for watercraft, blasting, collapse, explosions, blowout, cratering, underground damage, pollution, or other coverage. *Harris County shall be named Additional Insured on primary/non-contributory basis.*

- Each Occurrence: $1,000,000
- Personal and Advertising Injury: $1,000,000
- Products/Completed Operations: $1,000,000
- General Aggregate (per project): $2,000,000

C. **Automobile Liability**, including coverage for all owned, hired, and non-owned vehicles used in connection with the contract. *Harris County shall be named Additional Insured on primary/non-contributory basis.*

- Combined Single Limit-Each Accident: $1,000,000

D. **Umbrella/Excess Liability** *(Harris County shall be named Additional Insured on primary/non-contributory basis).*

- Each Occurrence/Aggregate: $1,000,000

E. **Professional/Errors & Omissions Liability**

- Per Claim/Aggregate: $1,000,000

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The County reserves the right to require additional insurance if necessary. Coverage shall be issued by companies licensed by the Texas Department of Insurance (TDI) to do business in Texas and who have an A.M. Best rating of at least A-. Contractor shall furnish evidence of such insurance to the County in the form of unaltered insurance certificates. If any part of the contract is sublet, insurance shall be provided by or on behalf of any subcontractor, and shall be sufficient to cover their portion of the contract. Contractor shall furnish evidence of such insurance to the County as well.

Policies of insurance required by the contract shall waive all rights of subrogation against the County, its officers, employees and agents. If any applicable insurance policies are cancelled, materially changed, or non-renewed, contractor shall give written notice to the County at least 30 days prior to such effective date and within 30 days thereafter, shall provide evidence of suitable replacement policies. Failure to keep in force the required insurance coverage may result in termination of the contract. Upon request, certified copies of original insurance policies shall be furnished to the County.

The requirements stipulated in this attachment do not establish limits of contractor liability.

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APPENDIX X

Disclosure of M/WBE Participation

Name of MBE/WBE Certified Firm	**Zarinkelk Engineering Services, Inc.**
Certified by:	City of Houston
Address / City / State / Zip:	617 Caroline St, Houston, TX 77002
Name of Contact Person:	Giti Zarinkelk
Email address for Contact Person:	giti.zarinkelk@zarinkelk.com
Telephone number for Contact Person:	832.242.2426
Percent of Subcontract:	7.6%
Description of services:	Development of PS&E sheets (production work)
6-digit NAICS code for work to be performed:	541330

Name of MBE/WBE Certified Firm	**Agha Engineering, LLC**
Certified by:	City of Houston
Address / City / State / Zip:	4600 Highway 6 N, Houston, TX 77084
Name of Contact Person:	Majed Agha
Email address for Contact Person:	magha@aghaengineering.com
Telephone number for Contact Person:	832.901.1029
Percent of Subcontract:	17.6%
Description of services:	Drainage crossing hydraulic impact analysis
6-digit NAICS code for work to be performed:	541330

Name of MBE/WBE Certified Firm	**IGET Services**
Certified by:	City of Houston
Address / City / State / Zip:	4103 Blossom CT, Houston, TX 77059
Name of Contact Person:	Satya Pilla
Email address for Contact Person:	info@igetservices.com
Telephone number for Contact Person:	832.858.3982
Percent of Subcontract:	9.9%
Description of services:	Bridge scour analysis
6-digit NAICS code for work to be performed:	541330

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ORDER OF COMMISSIONERS COURT
Authorizing an Agreement with CivilTech Engineering, Inc.

The Commissioners Court of Harris County, Texas, met in regular session at its regular term at the Harris County Administration Building in the City of Houston, Texas, on _____, with all members present except _____.

A quorum was present. Among other business, the following was transacted:

ORDER AUTHORIZING AN AGREEMENT WITH CIVILTECH ENGINEERING, INC. TO PROVIDE HYDROLOGIC AND HYDRAULIC (H&H) MODELING AND ENGINEERING REQUIRED TO PROVIDE CORRIDOR AND AREA-WIDE H&H ANALYSIS FOR THE HARRIS COUNTY TOLL ROAD AUTHORITY AET PROGRAM - COUNTYWIDE

Commissioner _____ introduced an order and moved that Commissioners Court adopt the order. Commissioner _____ seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

	Yes	No	Abstain
Judge Lina Hidalgo	☐	☐	☐
Comm. Rodney Ellis	☐	☐	☐
Comm. Adrian Garcia	☐	☐	☐
Comm. Tom S. Ramsey, P.E.	☐	☐	☐
Comm. R. Jack Cagle	☐	☐	☐

The County Judge thereupon announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order adopted follows:

IT IS ORDERED that:

1. The Harris County Judge is authorized to execute on behalf of Harris County an agreement in an amount not to exceed $1,814,000.00 with CivilTech Engineering, Inc. to provide Hydrologic and Hydraulic (H&H) Modeling and Engineering required to provide corridor and area-wide H&H analysis for the Harris County Toll Road Authority AET Program - Countywide. The Agreement is incorporated by reference and made a part of this order for all intents and purposes as though set out in full word for word.

2. All Harris County officials and employees are authorized to do any and all things necessary or convenient to accomplish the purposes of this order.