

ENGINEERING SERVICES AGREEMENT

THIS AGREEMENT is made and entered into by and between the Fort Bend Grand Parkway Toll Road Authority, a transportation corporation organized and operating under the laws of the State of Texas, hereinafter called the "FBGPTRA" and IDC, Inc., hereinafter called "Engineer."

WITNESSETH

WHEREAS, the FBGPTRA desires to enter into an agreement for the performance by Engineer of services during the Project, and which are within the "Scope of Services" as defined in paragraph 2 below;

WHEREAS, the FBGPTRA proposes to design the southbound frontage road from US 59 to Rabbs Bayou for the Fort Bend Grand Parkway Toll Road, Segment C-1, in Fort Bend County, Texas, (the "Project");

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

AGREEMENT

1. General

The Engineer shall render professional services to FBGPTRA related to the Project as defined in the Scope of Services in Attachment A.

The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of Engineer's profession practicing under similar conditions at the same time and in the same locality.

2. Compensation and Payment

- a. The Maximum Compensation under this contract is \$542,233.00. The amount paid under this Agreement may not exceed the Maximum Compensation without an approved change order.

Compensation for the performance of services within the Scope of Services described in Attachment A will be paid as a lump sum amount not to exceed \$542,233.00, as shown in Attachment B. Progress payments for work detailed in Attachment A will be made when the Engineer has attained a level of completion equal to or greater than agreed upon milestones of completion in the reasonable opinion of FBGPTRA.

The Engineer shall furnish satisfactory documentation of such work (e.g. timesheets, billing rates, classifications, invoices, etc.) as may be required by FBGPTRA.

- b. All performance of the Scope of Services and any Additional Services including changes in the contractual scope of work and revision of work satisfactorily performed, will be performed only when approved in advance and authorized by the FBGPTRA, and Additional Services will be reimbursed based on the billing rates in effect at that time, to the extent that such labor costs, and subcontracts are reasonable and necessary for the performance of such services. Out-of-pocket expense costs may be reimbursed only when approved in advance and authorized by the FBGPTRA. Payment will be made on the basis of project completion certificate and, for Additional Services, time and expense records and in accordance with those payment procedures set forth in subparagraph d. below. Billing rates will be inclusive of all direct labor, fringe benefits, general overhead, and profit.
- c. 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' actual salaries and hourly rates, including overtime rates. Reimbursement to the Subcontractor for non-salary costs incurred by subcontractor will be on the same basis as if the cost was incurred by the Engineer. For subcontractors employed for the convenience of the FBGPTRA, the Engineer will be paid a subcontract administrative fee equal to ten percent (10%) of all subcontractor invoiced amounts.
- d. It is understood and agreed that monthly payments will be made to the Engineer by the FBGPTRA based on the following procedures: On or about the 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 FBGPTRA 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 FBGPTRA.) It is specifically understood that any requests for travel reimbursements shall comply with those procedures for travel reimbursement to Fort Bend County employees established by the Fort Bend County Auditor. The FBGPTRA shall review such invoices and approve them within 30 calendar days with such modifications as are consistent with this Agreement and forward same to the Auditor. The County shall pay each such invoice as approved by the FBGPTRA within thirty (30) calendar days after the FBGPTRA's approval of same.

3. 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 December 31, 2015.

4. The FBGPTRA's Option to Terminate

- a. The FBGPTRA has the right to terminate this Agreement at its sole option at any time, with or without cause, by providing 30 days written notice of such intentions to terminate and by stating in said notice the "Termination Date" which shall be less than 30 days later than the actual receipt of such written notice by the Engineer. Upon such termination, the FBGPTRA shall compensate the Engineer in accordance with paragraph 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to the FBGPTRA. The Engineer's final invoice for said services will be presented to and paid by the FBGPTRA in the same manner set forth in paragraph 2(b), above.
- b. Termination of this Agreement and payment as described in subparagraph (a) of this Paragraph shall extinguish all rights, duties, obligations, and liabilities of the FBGPTRA 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 common law or statute. The obligations in Paragraph 6 shall survive the termination of this Agreement.
- c. If the FBGPTRA terminates 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 FBGPTRA'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 FBGPTRA by virtue of this Agreement or otherwise. Failure of the FBGPTRA to exercise any of its said 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 common law or statute.
- e. Copies of all completed and partially completed documents prepared under this Agreement shall be delivered to the FBGPTRA within 30 days or upon Engineer's receipt of termination payment, whichever is sooner, when and if this Agreement is terminated.

5. Inspection of the Engineer's Books and Records

The Engineer will permit the FBGPTRA, or any duly authorized agent of the FBGPTRA, to inspect and examine the books and records of the Engineer for the purpose of verifying the amount of work performed on the Project. FBGPTRA's right to inspect survives the termination of this Agreement for a period of four years.

6. Ownership and Reuse of Documents

All documents, including original drawings, estimates, specifications, field notes, and data created, produced, developed or prepared by Engineer or its approved outside advisory or support consultants (collectively, the "Documents") shall be the property of the FBGPTRA subject to all of the following terms and conditions; provided, however, FBGPTRA shall not own and shall have no right to receive any documents not deemed "final" by the Engineer until termination of this Agreement. Engineer will deliver the Documents to FBGPTRA within 30 days of the termination of this agreement and may retain a set of reproducible record copies of the Documents, provided that the Engineer has received full compensation due pursuant to the terms of this Agreement. It is mutually agreed that FBGPTRA will use the Documents solely in connection with the Project and for no other purposes, except with the express written consent of the Engineer, which consent will not be unreasonably withheld. Any use of the Documents without the express written consent of the Engineer will be at District's sole risk and without liability or legal exposure to Engineer.

FBGPTRA shall also be the owner of all intellectual property rights of the services rendered hereunder, including all rights of copyright therein. It is the intention of Engineer and FBGPTRA that the services provided are a "work for hire" as the term is used in the federal Copyright Act. Moreover, Engineer hereby agrees to assign, and by these presents, does assign to FBGPTRA all of Engineer worldwide right, title and interest in and to such work product and all rights of copyright therein.

Engineer agrees that all trademarks, trade names, service marks, logos, or copyrighted materials of FBGPTRA that Engineer is permitted to use in connection with the services will not be used without FBGPTRA's consent and shall remain in the sole and exclusive properties of FBGPTRA and this Agreement does not confer upon Engineer any right or interest therein or in the use thereof.

7. Personnel, Equipment, and Material

- a. The Engineer represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for the timely performance of the Scope of 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 the FBGPTRA, to perform the Scope of Services when and as required and without delays. It is understood that the FBGPTRA will approve assignment and release of all key Engineer personnel and that the Engineer shall submit written notification of all key Engineer personnel changes for the FBGPTRA's approval prior to the implementation of such changes. For the purpose of this agreement, key Engineer personnel are defined as: Project Manager. 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 shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of the Engineer who, in the opinion of the FBGPTRA, is incompetent or by his conduct becomes detrimental to the Project shall, upon request of the FBGPTRA, 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 operation under this Agreement.

8. Items to be furnished to Engineer by the FBGPTRA

The following items will be supplied to the Engineer:

- a. Copies of preliminary studies by others.
- b. Assistance in coordination with all utility companies.
- c. Assistance in coordination with all public and governmental entities.

9. Subletting

The Engineer shall not sublet, assign, or transfer any part of its rights or obligations in this Agreement without the prior written approval of the FBGPTRA. Responsibility to the FBGPTRA for sublet work shall remain with the Engineer.

10. Conference

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

11. Appearance as Witness

If requested by the FBGPTRA, or on its behalf, the Engineer shall prepare such engineering exhibits and plans as may be requested for all hearings and trials related to the Project and, further, it shall prepare for and appear at conferences at the office of the FBGPTRA's Executive Director 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. Trial preparation and appearance by the Engineer in courts regarding litigation matters are Additional Services and compensation will be made in accordance with the schedule contained in Exhibit B-1.

12. 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 FBGPTRA with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

13. Insurance

The Engineer shall obtain and maintain, throughout the term of the Agreement, insurance of the types and in the minimum amounts set forth in Attachment C.

14. Indemnification

With respect to claims brought by third parties against either Engineer of the FBGPTRA relating to the property or facilities with respect to which this Agreement pertains, Engineer and the FBGPTRA agree as follows:

- a. **ENGINEER WILL INDEMNIFY AND HOLD HARMLESS THE FBGPTRA, ITS DIRECTORS, OFFICERS, AND EMPLOYEES AGAINST ANY CLAIMS, DEMANDS OR CAUSES OF ACTION; AND COSTS, LOSSES, LIABILITIES, EXPENSES AND JUDGMENTS INCURRED IN CONNECTION THEREWITH, INCLUDING REASONABLE ATTORNEY'S FEES AND COURT COSTS, BROUGHT BY ANY OF ENGINEER'S EMPLOYEES OR REPRESENTATIVES, OR BY ANY OTHER THIRD PARTY, BASED UPON, IN CONNECTION WITH, RESULTING FROM OR ARISING OUT OF THE NEGLIGENT ACTS, ERRORS OR OMISSIONS OF ENGINEER; HOWEVER, ENGINEER'S CONTRACTUAL OBLIGATION OF INDEMNIFICATION SHALL NOT EXTEND TO THE NEGLIGENCE OR OTHER FAULT OF THE FBGPTRA OR STRICT LIABILITY IMPOSED UPON THE FBGPTRA AS A MATTER OF LAW (INCLUDING STRICT LIABILITY IMPOSED UPON THE FBGPTRA AS A RESULT OF THE CONDITION OF THE PROPERTY OR FACILITIES WITH RESPECT TO WHICH THIS AGREEMENT PERTAINS).**
- b. In the event that both the FBGPTRA and Engineer are adjudicated negligent or otherwise at fault or strictly liable without fault with respect to damage or injuries sustained by the claimant, each shall be responsible for its own costs of litigation and pro rata share of damages as determined by the proceedings.

It is a condition precedent to the indemnitor's contractual obligation of indemnification under this Agreement that the party seeking indemnity shall provide written notice of a third party claim, demand or cause of action within 30 days after such third party claim, demand or cause of action is received by the party seeking indemnity. It is a further

condition precedent to the indemnitor's contractual obligation of indemnification under this Agreement that the indemnitor shall thereafter have the right to participate in the investigation, defense and resolution of such third party claim.

15. Dispute Resolution

Except as expressly provided in Section 4. Termination, if a dispute arises out of, or relates to, the breach thereof, and if the dispute cannot be settled through negotiation, then the FBGPTRA and the Engineer agree to submit the dispute to mediation. In the event the FBGPTRA or the Engineer desires to mediate any dispute, that party shall notify the other party in writing of the dispute desired to be mediated. If the parties are unable to resolve their differences within 10 days of the receipt of such notice, such dispute shall be submitted for mediation in accordance with the procedures and rules of the American Arbitration Association (or any successor organization) then in effect. The deadline for submitting the dispute to mediation can be changed if the parties mutually agree in writing to extend the time between receipt of notice and submission to mediation. The expenses of the mediator shall be shared 50 percent by the FBGPTRA and 50 percent by the Engineer. This requirement to seek mediation shall be a condition required before filing an action at law or in equity.

16. Delivery of Notices, Etc.

- a. All written notices, demands, and other papers or documents to be delivered to the FBGPTRA under this Agreement shall be delivered to the Fort Bend Grand Parkway Toll Road Authority, P.O. Box 2789, Sugar Land, Texas 77487-9740, Attention: Bill Jameson, or at such other place or places as it may from time to time designate by written notice delivered to the Engineer. For purposes of notice under this Agreement, a copy of any notice or communication hereunder shall also be forwarded to the following address: Fort Bend County Clerk, 301 Jackson Street, Richmond, Texas 77469, Attention: County Judge.
- b. All written notices, demands, and other papers or documents to be delivered to the Engineer under this Agreement shall be delivered to IDC, Inc., 11111 Wilcrest Green, Suite 250, Houston, Texas 77042, Attention: Larry Janak, or such other place or places as the Engineer may designate by written notice delivered to the FBGPTRA.

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 Engineer shall send a written report of such accident or other event to the FBGPTRA, setting forth a full and concise statement of the facts pertaining thereto. The Engineer shall also immediately send the FBGPTRA a copy of any summons, subpoena, notice, 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 FBGPTRA's Acts

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

19. Limitations

Notwithstanding anything herein to the contrary, all covenants and obligations of the FBGPTRA under this Agreement shall be deemed to be valid covenants and obligations only to extent authorized by the Act creating the FBGPTRA and permitted by the laws and the Constitution of the State of Texas. This Agreement shall be governed by the laws of the State of Texas, and no officer, director, or employee of the FBGPTRA shall have any personal obligation hereunder.

20. Captions Not a Part Hereof

The captions of subtitle 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. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all disputes arising hereunder and waive the right to sue or be sued elsewhere.

22. Successors and Assigns

The FBGPTRA 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. Appendices


The Appendices attached to this Agreement, which consists of:

Attachment A	Scope of Services
Attachment B	Compensation for Scope of Services
Attachment C	Insurance Requirements

IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the 18th day of March, 2015.

FORT BEND GRAND PARKWAY TOLL ROAD
AUTHORITY, a local government Texas
corporation

By: 
James D. Condrey, DDS
Chairman, Board of Directors

ATTEST: 
By _____
Secretary, Board of Directors

IDC, Inc.
ENGINEER

By: 
Name: Jim Gonzales
Title: President & CEO

**ATTACHMENT A
SCOPE OF SERVICES
GRANDPARKWAY SEGMENT C, SECTION C-1**

**SERVICES TO BE PROVIDED BY THE ENGINEER
Preliminary Engineering, Final Design & PS&E FM 2759/FM 762 (Crabb
River Road) Improvements
From US 59 (Southwest Freeway) to North of Rabbs Bayou (Phase 1A)
(Station 200+00 to Station 245+25)**

GENERAL DESCRIPTION

The work to be performed by the Engineer under this scope of work consists of providing providing various design engineering and coordination services for the development of Preliminary Engineering (Environmental & Schematic) and Final Design PS&E package for the Crabb River Road Phase-1A project, a distance of approximately 0.9 Mile. Crabb River Road Phase 1A consists of overlaying the existing pavement with Asphalt and re-striping and signing from US 59 to the existing bridge just North of Rabbs Bayou for the Northbound lanes (3 lanes for the Northbound traffic) and building a new section of concrete curb & gutter pavement with storm sewer for the Southbound traffic from the existing stub-out just South of US 59 to the existing bridge just North of Rabbs Bayou. There will be 3 lanes for the southbound traffic between US 59 and Sansbury Blvd which will be reduced to 2 lanes open ditch and ACP from Sansbury Blvd to Rabbs Bayou Bridge. This Phase will also involve building the tie-in of the existing Cul-de-sac just east of Crabb River Rd to the US 59 Eastbound Frontage Road.

GENERAL REQUIREMENTS

Produce roadway plans including cross-sections, specifications and estimates (PS&E) and prepare construction bid documents.

Prepare plans for Clearing and Grubbing Contract.

Furnish computer media and computer graphics files in compliance with the FBGCTPA Engineer's requirements.

Submit 30%, 60%, 90% and final (signed/sealed) PS&E packages for review by the FBGPTRA Engineer.

The scope of this project will not include any improvements to US 59 Intersection any connections to it.

Coordinate contract documents preparation with the FBGCTPA Engineer.

Provide project planning and control to include quality management.

Providing an accurate, complete and constructible set of contract documents.

If so directed by FBGCTPA, make the revisions to the contract documents, as reported during the design process.

**ATTACHMENT A
SCOPE OF SERVICES
GRANDPARKWAY SEGMENT C, SECTION C-1**

1) UTILITY COORDINATION

The purpose of this task is to provide utility coordination to the FBGCTPA Engineer including:

- a) Coordinate with the FBGCTPA Engineer during the identification of utility conflicts.
- b) Obtain plans of utility locations from the various utility companies (private and public).
- c) Prepare utility conflict list and submit to FBGCTPA Engineer at 30% submittal.

2) ROUTE & DESIGN STUDIES

- A. Develop Preliminary Schematic and submit to FBGCTPA for review. Prepare Horizontal & Vertical Alignments for Crabb River Road from US 59 to north of Rabbs Bayou.
- B. Develop preliminary existing and proposed typical sections for the Crabb River Road to represent schematic conditions.
- C. Coordinate and review the work produced by Environmental, Survey, Bridge and Geotechnical Consultant.
- D. Coordinate and review the work produced to comply with County and State policies and procedures, and to deliver that work on time.
- E. Address Schematic review comments by FBGCTPA and TxDOT and prepare Final Schematic for Review & Approval
- F. Conduct field trips to the project site to investigate and confirm data and assumptions and assess general conditions as needed.

3) ROADWAY

The purpose of this task is to prepare the roadway design and develop the final drawings, using the CADD standards, as provided by the FBGCTPA Engineer and required by FBGCTPA, which will be included in the contract documents for construction. The following tasks describe the work to be performed:

- 1) Specific station limits
- 2) Profile Grade Line location
- 3) Crabb River Road center line
- 4) Widths of travel lanes
- 5) Width of shoulders
- 6) Pavement section design
- 7) Longitudinal joint locations
- 8) Pavement cross slopes
- 9) Traffic barriers
- 10) Mow strips
- 11) Ditch side slopes
- 12) Sodding/seeding limits

**ATTACHMENT A
SCOPE OF SERVICES
GRANDPARKWAY SEGMENT C, SECTION C-1**

- 13) Drainage Structures
- 14) Riprap
- 15) Limits of embankment and excavation
- 16) Typical Section.

The scope for Roadway Work is as follows:

- A. Develop existing typical sections for all Crabb River Road elements based on the approved schematic.
- B. Develop Proposed Typical section sheets. Sections will be prepared for all proposed SB Frontage lanes, and existing NB over with overlay as necessary to provide a thorough understanding to the contractor of the work intended.
- C. Develop Proposed Typical section sheet. Sections will be prepared for all existing and proposed construction for Sansbury Boulevard.
- D. Prepare GEOPAK Model , Roadway Alignments & Cross Sections for Crab River Road:
 - Set up and prepare the digital Terrain model with GPK, PRJ files
 - Set up Criterion files.
 - Set up horizontal & vertical alignment parameters. Design speed, K values and generate alignments.
 - Develop existing and proposed cross sections, calculate earthwork quantities and develop earthwork quantities & summary sheets. at a maximum interval of 100 feet for determining final earthwork and other bid item quantities. The cross sections shall be prepared at the beginning and end stations and at even 100-foot stations
- E. Prepare demolition and removal layout sheet.
- F. Prepare roadway plan and profile sheets for the Proposed (Permanent Southbound) Crabb River Road Overlay Operations at (1" = 50' H, 1" = 4' V) showing widening and horizontal and vertical geometric designs, which will be based on the approved schematic. Refine the horizontal and vertical alignments as needed for the detailed PS&E phase design.
- G. Prepare roadway plan and profile sheets for Existing Northbound Overlay Operations at (1" = 50' H, 1" = 4' V) showing horizontal and vertical geometric designs, which will be based on the approved schematic.
- H. Prepare Horizontal Alignment Data Sheet. (1=200')
- J. Prepare Intersection Layout For Sansbury Boulevard (1" = 200' H) showing Crabb River Road and cross-street Sansbury Boulevard horizontal.
- K. Prepare Intersection Plan & Profile Layout for Sansbury Boulevard. (1= 100').

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SCOPE OF SERVICES
GRANDPARKWAY SEGMENT C, SECTION C-1**

- L. Provide Driveway Connection Detail for Crabb River Roadway.
- M. Conduct field trips to the project site to investigate and confirm data and assumptions and assess general conditions as needed.

4) DRAINAGE

The purpose of this task is to prepare drainage plans and details, including:

A. Preliminary Drainage: The Letter Drainage Report Services will include the following:

1. Coordinate through FBGPTRA Engineer with local agencies affected, such as TX DOT, Fort Bend County Drainage District, the City of Sugar Land and Municipal Utility Districts, to keep them informed of the progress and results of project.
2. Review existing drainage report and discuss with TxDOT and County. Review any updated construction plans, available drainage study and other technical data related to the project and modify drainage report accordingly.
3. Conduct field trips to the project site to investigate and confirm data and assumptions and assess general drainage conditions as needed.
4. Develop the existing and proposed drainage area boundaries based on the latest roadway schematic. The drainage area maps will be developed for hydraulic mitigation analysis. Inlet level analysis will be performed in the final design phase.
5. Based on the proposed typical section and proposed grade line, prepare preliminary proposed culvert/bridge crossing sizing's at Middle Bayou using HY-8 or HEC-RAS software. Preliminary drainage structure sizing should be developed to ensure no adverse impact to adjacent properties.
6. Prepare preliminary storm sewer layouts.
7. Prepare a letter drainage report summarizing the methodologies and findings of the hydrologic and hydraulic investigation. The report will be signed and sealed by a professional engineer. The results will be summarized and presented to the FBGCTPA for review. The report will include exhibits, tables, and drainage calculations.

Note: It is assumed no hydraulic mitigation is required for Middle Bayou.

- B. Final Drainage Design:** Drainage Design for PS&E. The drainage calculations should be prepared to provide for the ultimate three-lane SB Frontage Road. At a minimum the drainage items to be provided shall include the drainage area maps showing the final drainage areas and inlet and storm sewer calculations for revised storm sewer flow elements. All drainage designs shall be prepared in accordance with the findings presented in the Drainage Impact Letter Report and existing GP Drainage Report (to be provided by FBGPTRA Engineer, if available). The northbound roadway drainage ditches will not be modified. The proposed tasks are listed below:

**ATTACHMENT A
SCOPE OF SERVICES
GRANDPARKWAY SEGMENT C, SECTION C-1**

1. Prepare drainage area maps for proposed improvements within the project limits.
2. Prepare plan/profile sheets for storm drain systems and outfall ditches, outlet structures. Prepare storm sewer plan/profile drawings and special plan details, where required, for storm sewer system, laterals, junction boxes, outfall structures, etc. Identify and resolve potential utility conflicts during project design. Drawings will be prepared on 11"X 17" sheet at horizontal scale of 1"=50' and vertical scale of 1"=4'.
3. Prepare runoff calculations sheets and Winstorm model calculation sheets.
4. Develop proposed culvert/bridge crossing Analysis calculation sheets at Middle Bayou.
5. Prepare miscellaneous drainage details for outlet protection, outlet structures and utility accommodation structures.
6. Develop Storm Water Pollution Prevention Plans: (1"=100').

No Detention pond is proposed in this scope of work

5) SIGNING & PAVEMENT MARKINGS

Prepare layouts (1" = 100' H double bank) showing signs and pavement markings. The Engineer shall design all permanent signing and markings in accordance with TxDOT Houston District guidelines and the *1980 Texas Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways* (latest revision). After a full review of the final proposed roadway plans, the locations and type of all necessary proposed warning and regulatory signs shall be determined. The Engineer shall then prepare drawings depicting all proposed pavement markings, and all proposed signing for the Project. Permanent signing and marking design shall consist of the following drawings for the entire Project:

- A. Signing and Pavement Marking Layouts (Details for all special signs and marking as required for the Project).
- B. Small Sign Summary (to identify all proposed small signs and mounting materials).
- C. Pavement Marking Summary (to identify all proposed pavement markings and delineators).
- D. Standard Detail Drawings (to provide guidance to the contractor during construction of all small signing). Existing Small Signing and Inventory (to identify all existing signs).

Note: Overhead guide sign and illumination, guide sign structural details (columns, truss and foundations) and special guide sign structures and foundations are not included in this scope.

6) MISCELLANEOUS DRAWINGS

- a) Title Sheet - Include a vicinity map of the project limits, project title and signature blocks.

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GRANDPARKWAY SEGMENT C, SECTION C-1**

- b) Index Sheet(s) - List the sheets and standard drawings to be used on this project. All the sheets in the plan set will be numbered continuously including standard drawings.
- c) Project Layout Sheets – Prepare a small-scale plan view plot (1"=200', double stacked) of the project showing/summarizing the alignment data, horizontal control, and the vertical control. Provide benchmark data and bore hole locations.

7) GENERAL NOTES AND SPECIFICATIONS

- a) Using latest TX DOT Houston District Master General Notes, prepare final general notes documents and specification list in Microsoft Word format.
- b) The FBGPTRA will supply the Authority's specific standard general notes and specifications for use by the Engineer. The Engineer will modify the notes and specifications to conform to the specific requirements for the section.

8) STANDARD DRAWINGS

- a) Select standard drawings applicable to the project from those provided by FBGPTRA ENGINEER. All standards should be obtained in an electronic format and comply with all CADD standards set forth by the FBGPTRA Engineer.
- b) Coordinate and combine standard drawings from other team members. Prepare final set standard drawings for submittal.

9) QUANTITY TAKE-OFFS AND QUANTITY SUMMARIES

- a) Quantities will be determined and included on summary sheets. The quantities will be included in tables and organized according to the bid item codes that will be used for construction. Quantities should be organized by item per sheet and totaled for the item and the project. Quantity calculations should be organized and easily verified by the FBGPTRA Engineer. Sample calculations should be prepared for each submittal for review by the FBGPTRA Engineer. Calculations should be organized by item, clear and concise, and in an electronic format that can be transmitted via e-mail, if necessary.
- b) Coordinate and combine quantity take-offs (standalone sheets) from other program team members into overall project summary sheets for plans.

10) CONSTRUCTION COST ESTIMATE

- a) An estimate of the construction costs will be prepared based on plan quantities in standard TX DOT bid format at the 30%, 60%, 90%, 100% and final submittal stages of the project. More detailed and refined quantities will be updated for each successive submittal. All estimates shall be in Microsoft Excel format.

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- b) The estimate may be based on TxDOT Houston District's average low bid unit prices, but modified based on quantities, phasing and other reasons pertinent to this project.

11) CLEARING & GRUBBING PACKAGE

- a) Title Sheet - Include a vicinity map of the project limits, project title and signature blocks.
- b) Index Sheet(s) - List the sheets and standard drawings to be used on this project. All the sheets in the plan set will be numbered continuously including standard drawings.
- c) Project Layout Sheets – Prepare a small-scale plan view plot (1"=200', double stacked) of the project showing/summarizing the alignment data, horizontal control, and the vertical control. Provide benchmark data and bore hole locations.

12) PREPARATION AND SUBMITTAL OF PS&E

- a) Provide submittals for the design, including bridge design, for interim progress reviews by FBGPTRA at the 30%, 60%, 90% and final completion stage. Incorporate plan sheets and submittals prepared by other PTM's for this project. All submittals will follow the PMP for content.
 - 1) The 30% submittal shall include five (5) sets of legible 11"x17" construction drawings, construction cost estimate, and electronic file of the drawings in Microstation V8 format.
 - 2) The 60% submittal shall include five (5) sets of legible 11"x17" construction drawings, construction cost estimate, and electronic file of the drawings in Microstation V8i format.
 - 3) The 90% submittal shall include five (5) complete sets of legible 11"x17" construction drawings, two (2) specification lists, construction cost estimate, and electronic file of the drawings in Microstation V8i format.
 - 4) The 95% submittal shall include five (5) complete sets of legible 11"x17" construction drawings, two (2) specification lists, construction cost estimate, and electronic file of the drawings in Microstation V8i format.
 - 5) The final 100% complete (Bid Ready) submittal shall include an electronic file of the Bid Ready set of drawings in Microstation V8 format – for reproduction during the bidding period, five (5) complete sets of legible 11"x17" construction drawings, and one reproducible (mylar) set.
- b) Upon award of construction contract, provide electronic files of the conformed set of the Contract Drawings in Microstation V8i format, and the Specifications in Microsoft Word, to FBGPTRA.

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13) PROJECT MANAGEMENT and SECTION LEAD MANAGEMENT TASKS

The purpose of this task is to provide the overall management of this design contract. Project files will be set up and overall coordination of the team and contact with FBGPTRA, FBGPTRA Engineer and sub-consultants (team members) will be maintained.

- a) Provide general coordination with the team members concerning administrative and technical issues. Report and coordinate with FBGPTRA Engineer on any design issues and requests for information from sub-consultants.
- b) Prepare and submit monthly progress reports and invoices to FBGPTRA Engineer for review and approval. The invoices will include the progress report and invoice. The progress report will list outstanding issues that need resolution, as well as, progress of the tasks and estimated completion dates for the work.
- c) Internal administration of the project files. At the completion of the work, the project files will be submitted to the FBGPTRA Engineer.
- d) Prepare an overall project design schedule detailing the progression of the work. This schedule will include review dates by the FBGPTRA Engineer, submittal dates for deliverables, and estimated time frame to complete the work. Changes or adjustments in the schedule caused by delays due to unforeseen task difficulties or lengthy review times will be shown and reported to the FBGPTRA Engineer.
- e) Attend coordination and interim progress review meetings every month or as necessary, to be scheduled on an as-needed basis. Prepare and distribute meeting minutes within five working days after the meeting.

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**PARSONS BRINCERHOFF, INC.
SCOPE OF SERVICES
CRABB RIVER ROAD IMPROVEMENTS (PHASE IA)
DESIGN SERVICES
(Limits: from US 59 to Rabbs Bayou)**

Task I. PROJECT MANAGEMENT

The purpose of this task is to provide the overall management of this design contract. Project files will be set up and overall coordination with IDC will be maintained.

- f) Provide general coordination with the team members concerning administrative and technical issues. Report and coordinate with IDC on any design issues and requests for information.
- g) Prepare and submit monthly progress reports and invoices to IDC for review and approval. The invoices will include the progress report and invoice. The progress report will list outstanding issues that need resolution, as well as, progress of the tasks and estimated completion dates for the work.
- h) Internal administration of the project files. At the completion of the work, the project files will be submitted to IDC.
- i) Prepare an overall project design schedule detailing the progression of the work. This schedule will include review dates IDC, submittal dates for deliverables, and estimated time frame to complete the work. Changes or adjustments in the schedule caused by delays due to unforeseen task difficulties or lengthy review times will be shown and reported to IDC.
- j) Attend coordination and interim progress review meetings every month or as necessary, to be scheduled on an as-needed basis.

Task II. RE-EVALUATION CONSULTATION CHECKLIST

The Engineer shall complete a Re-evaluation Consultation Checklist (RCC) for the Final Environmental Impact Statement (FEIS) for Grand Parkway (SH 99), Segment C, to account for a design change that provides a more efficient connection to southbound Crabb River Road (FM 2759) south of Sansbury Boulevard from the planned southbound Grand Parkway frontage road. Because the proposed design change is limited to a relatively small area within the planned Grand Parkway project footprint, this scope of work assumes that all documentation required for the Reevaluation will consist of the RCC and corresponding attachments. No

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additional environmental studies are anticipated or included in this scope of services and would be considered supplemental to this scope.

The Engineer shall:

- Collect data,
- Evaluate the design change, and
- Assemble attachments necessary to support the RCC.

The Engineer shall complete the RCC and review for quality and accuracy prior to submittal to IDC.

The Engineer shall address one round of comments each from:

- IDC,
- TxDOT Houston District, and
- TxDOT Environmental Affairs Division, and
- revise the RCC accordingly.

The Engineer shall conduct project management and administration, and coordinate with IDC and TxDOT.

Task III. TRAFFIC CONTROL PLANS

The purpose of this task is to prepare traffic control plans and details, including:

The traffic control work consists of preparation of Traffic Control Plans (TCP), specifications and general notes, and cost estimate for the various traffic control measures.

a) General

- 1) A TCP shall show the various construction sequences (phases) and phases with barricades, signing, striping, delineation, detours, temporary retaining walls, temporary drainage, and any other devices used for control of traffic during construction.

b) Manuals and Guidelines

- 1) The following manuals will be used in the development of the TCP:
 - (a) Texas Department Of Transportation (TXDOT) 2014 Standard Specifications For Construction and Maintenance Of Highways, Streets, And Bridges
 - (b) Texas Manual On Uniform Traffic Control Devices, latest version, (TMUTCD)
 - (c) AASHTO's "A Policy on Geometric Design of Highways and Streets", latest version

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c) Traffic Control Plans:

- 1) Traffic control plan layouts will be prepared for the various phases and steps of the project according to the TMUTCD and the General Guidelines for Traffic Handling. Each phase of the TCP shall show the location of the traffic flow indicated by directional arrows. The construction areas will be clearly defined. All barricades, traffic barriers, concrete traffic barrier end treatments, pavement markings, signing (regulatory, warning, and guide), flaggers, temporary roadways and walls, and drainage shall be shown on the plans. Features that are existing or under construction, such as, roadways, retaining walls, bridges, drainage structures, etc. shall also be shown.
- 2) Traffic control plan typical sections will be prepared for each stage of the construction sequence to delineate the position of the existing traffic with respect to the proposed construction and will be shown on each TCP layout sheet. Detour pavement design will be provided by FBGPTRA; roadway section width will be provided by the Engineer.
- 3) Where detours or temporary pavement are required, a separate phase shall be shown for this construction, with traffic handling, profiles and typical sections.
- 4) At a minimum, the following sheets are to be included in the TCP package:
 - (a) TCP Layouts (1"=100' Scale) – Number of Phases as required.
 - (b) TCP Overview with Narrative (if more than one phase)
 - (c) Typical Sections
 - (d) Detour Layouts for temporary Road Closures
 - (e) Quantities

2) GENERAL NOTES AND SPECIFICATIONS

- a) Using latest TxDOT Houston District Master General Notes, prepare final general notes documents and specification list in Microsoft Word format.
- b) The FBGPTRA will supply the Authority's specific standard general notes and specifications for use by the Engineer. The Engineer will modify the notes and specifications to conform to the specific requirements for the section.

14) STANDARD DRAWINGS

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- a) Select standard drawings applicable to the project from those provided by FBGPTRA ENGINEER. All standards should be obtained in an electronic format and comply with all CADD standards set forth by the FBGPTRA Engineer.
- b) Coordinate and combine standard drawings from other team members. Prepare final set standard drawings for submittal.

15) QUANTITY TAKE-OFFS AND QUANTITY SUMMARIES

- c) Quantities will be determined and included on summary sheets. The quantities will be included in tables and organized according to the bid item codes that will be used for construction. Quantities should be organized by item per sheet and totaled for the item and the project. Quantity calculations should be organized and easily verified by the FBGPTRA Engineer. Sample calculations should be prepared for each submittal for review by the FBGPTRA Engineer. Calculations should be organized by item, clear and concise, and in an electronic format that can be transmitted via e-mail, if necessary.
- d) Coordinate and combine quantity take-offs (stand alone sheets) from other program team members into overall project summary sheets for plans.

16) CONSTRUCTION COST ESTIMATE

- c) An estimate of the construction costs for items designed will be prepared based on plan quantities in standard TxDOT bid format at the 30%, 60%, 90%, 95% and final submittal stages of the project. More detailed and refined quantities will be updated for each successive submittal. All estimates shall be in Microsoft Excel format.
- d) The estimate may be based on TxDOT Houston District's average low bid unit prices, but modified based on quantities, phasing and other reasons pertinent to this project.

17) PREPARATION AND SUBMITTAL OF PS&E

- c) Provide submittals for the design, for interim progress reviews by FBGPTRA at the 30%, 60%, 90% and final completion stage. All submittals will follow the Project Management Plan (PMP) for content.
 - 1) The 30% submittal shall include five (5) sets of legible 11"x17" construction drawings, construction cost estimate, and electronic file of the drawings in Microstation V8 format.

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- 2) The 60% submittal shall include five (5) sets of legible 11"x17" construction drawings, construction cost estimate, and electronic file of the drawings in Microstation V8 format.
 - 3) The 90% submittal shall include five (5) complete sets of legible 11"x17" construction drawings, two (2) specification lists, construction cost estimate, and electronic file of the drawings in Microstation V8 format.
 - 4) The 95% submittal shall include five (5) complete sets of legible 11"x17" construction drawings, two (2) specification lists, construction cost estimate, and electronic file of the drawings in Microstation V8 format.
 - 5) The final 100% complete (Bid Ready) submittal shall include an electronic file of the Bid Ready set of drawings in Microstation V8 format – for reproduction during the bidding period, five (5) complete sets of legible 11"x17" construction drawings, and one reproducible (mylar) set.
- d) All submittals shall include a copy of the engineer's internal QA/QC mark-ups.
- e) Upon award of construction contract, provide electronic files of the conformed set of the Contract Drawings in Microstation V8 format, and the Specifications in Microsoft Word, to FBGPTRA.

Task VI. TRAFFIC SIGNAL PLANS

The Engineer shall perform study, design plans and details, and prepare drawings for permanent traffic signal improvements within the Project limits:

The traffic signal layouts shall be designed in conformance with TxDOT requirements. Material for construction of the proposed traffic signals shall conform to TxDOT standards and specifications. The traffic signal design shall be prepared in accordance with Americans with Disabilities Act (ADA) requirements as adopted by TxDOT. All required specifications, general notes, and estimates shall be included.

Plan layouts shall be prepared in English units on 1"=40' scale, 11"x17" drawings. Permanent traffic signal plans shall consist of the following drawings:

1. Existing Condition
2. Plan Layouts (to specify proposed signal improvements or modifications including Signal Head, Loop Detector, and Electrical Schedules, Phasing Diagram, etc.).
3. Traffic Signal Elevations.
4. Basis of Estimate

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GRANDPARKWAY SEGMENT C, SECTION C-1**

5. Traffic Signal General Notes
6. Standard Detail Drawings

Task V. SUBMITTAL

GENERAL DESCRIPTION

The work to be performed by the Engineer under this scope of work consists of providing various roadway design engineering services for Crabb River Road PHASE 1A (Grand Parkway Segment C Frontage Road). The following is a detailed list of tasks which will be performed by the Engineer for this portion of Segment C.

GENERAL REQUIREMENTS

Furnish computer media and computer graphics files in compliance with the FBGPTRA Engineer's requirements.

Submit 30%, 60%, 90%, 95% and final (signed/sealed) PS&E packages for review by the Fort Bend Grand Parkway Toll Road Authority (FBGPTRA) Engineer.

Coordinate contract documents preparation with the FBGPTRA Engineer.

Provide project planning and control to include quality management.

The FBGPTRA will have the ultimate authority for determining what constitutes an accurate, complete and constructible set of design documents.

If so directed by FBGPTRA, make the revisions to the **design** documents, as reported during the design process.

TASK VI. MIDDLE BAYOU CULVERT LAYOUT DESIGN

1) The purpose of this task is to prepare culvert layouts for the cross culvert at Middle Bayou:

- 1) Prepare culvert layouts for the Middle Bayou cross culvert. Drawings will be prepared on 11"X17" sheets at a horizontal scale of 1"=100' and vertical scale of 1"=10'.

2) Temporary Drainage Facilities

Develop plans for temporary drainage facilities necessary during staged construction of the project. Ponding on or diverting of water onto roadways is not permissible. All temporary drainage facilities shall be shown on the Traffic Control Plan Sheets.

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GRANDPARKWAY SEGMENT C, SECTION C-1**



HUITT-ZOLLARS, INC. | 1500 South Dairy Ashford | Suite 200 | Houston, TX 77077-3858 | 281.496.0066 phone | 281.496.0220 fax | huitt-zollars.com

SURVEYING SERVICES by HUITT-ZOLLARS, INC.

**Re: Proposal for Professional Survey Services
Crabb River Road from U.S. 59 to Rabb's Bayou**

Scope of Services:

Huitt-Zollars shall:

1. Establish vertical control for the project site. Vertical control will be based on current NGS standards. Existing local TxDOT monumentation will be observed and noted, unless otherwise directed.
2. Verify horizontal control provided to Huitt-Zollars by outside source.
3. Perform a topographic and planimetric survey of the area bounded by the approximate existing southeasterly right-of-way line of U. S. 59 on the north, the existing easterly right-of-way line of Crabb River Road on the east, the northerly bank of Rabb's Bayou on the south and the easterly boundary line of Canyon Gate Section 1 Subdivision on the west (see attached document), using current TxDOT standards, complete with the resultant drawings.
4. Perform cross-sections from top-of-bank to top-of-bank of Middle bayou extending 500' north and south from the Crabb River Road Bridge.
5. Create a TIN file and a drawing with contours.

Deliverables:

All deliverables shall be prepared in accordance to TxDOT's current standards and procedures for right-of-way mapping. A current Houston District checklist shall be completed and provided with our final submittal.

Deliverables shall contain the following:

1. CAD drawings in MicroStation format (2D and 3D).
2. Electronic ASCII point file containing all points collected.
3. All documents used to ascertain the right-of-way of Crabb River Road, U. S. 59 and the adjoining rights-of-way (in electronic format), public and private utilities.

Compensation:

The Scope of Services above shall be completed for a Lump Sum Fee of \$75,990.00.

Additional Services

Services not mentioned in the above Scope of Services will be completed on a "Time and Materials" basis in accordance with the attached Hourly Rate Sheet, or an agreed lump sum fee with prior written approval from the Client. Additional Services can include but are not limited to the following:

1. Certifying to another type of survey other than the type referenced above.
2. Changes in the limits of the survey.
3. Preparation of documents for easements.
4. Platting

Schedule: The Scope of Services above shall be completed in approximately 60 business

**ATTACHMENT A
SCOPE OF SERVICES
GRANDPARKWAY SEGMENT C, SECTION C-1**

days from the receipt of the signed and executed contract.

HTS, INC.

GEOTECHNICAL INVESTIGATION by HTS, INC. CONSULTANTS

SCOPE:

1. Locate the borings in the field using existing maps and aerial photographs. Each location will be established using GPS coordinate system. The borings will be located in the field using the established GPS coordinates. Texas One Call will be notified and an HTS representative will be available to provide assistance to insure boring locations are identified and properly cleared of known utilities. After drilling is completed, the boring locations will be marked by an HTS representative using wooden stakes. A sketch of the boring locations with GPS coordinates will be submitted to the client for their surveyor's use for obtaining boring coordinates and elevations.
2. Drill and sample a total of 9 geotechnical borings (Boring Nos. 1 through 9) to a depth of 10 feet below the surface.
3. Obtain both disturbed and relatively undisturbed soil samples from the borings with continuous samples being taken from the ground surface to a depth of 10 feet.
4. Measure the depth to groundwater during drilling, approximately 15 minutes after the water is initially encountered, and 24 hours after the completion of drilling.
5. Backfill the borings with bentonite grout after obtaining 24-hour groundwater level measurements. All grouting will be performed with the drill rigs providing continuous grouting for the full depth of the borings.
6. Perform geotechnical laboratory tests on soil samples recovered during drilling in order to determine the engineering properties of the site subgrade soils. Laboratory testing will include Atterberg limits, percent soil finer than the No. 200 sieve, sieve analysis, unit weight of soils, unconfined compression tests, unconsolidated undrained triaxial, moisture density relationship, and California Bearing Ratio tests. Laboratory tests will be performed in accordance with applicable ASTM test procedures and methods. Soil classifications will be performed in strict accordance with ASTM D 2488.
7. Characterize the site subsoil and groundwater conditions and provide the results on both the boring logs and soil profiles.
8. Provide recommended subgrade preparation and construction requirements for the proposed roadway.
9. Prepare a report of the geotechnical investigation that presents the results of data, finding and recommendations. All calculations pertaining to the investigation will be included as an appendix to the report.

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Task Name	Duration	Start	Finish
SUBMITTALS	194 days	Mon 3/16/15	Thu 12/10/15
30% MILESTONE SUBMITTAL W/ REVIEW	56 days	Mon 3/16/15	Mon 6/1/15
60% MILESTONE SUBMITTAL W/ REVIEW	35 days	Mon 8/3/15	Fri 9/18/15
90% MILESTONE SUBMITTAL W/ REVIEW	20 days	Mon 9/21/15	Fri 10/16/15
Prepare Final Signed/Sealed Plans	20 days	Mon 10/19/15	Fri 11/13/15
Assemble Final PS&E	11 days	Mon 11/16/15	Mon 11/30/15

ATTACHMENT B
GRAND PARKWAY SEGMENT C, SECTION C-1
PLANS, SPECIFICATIONS AND ESTIMATE and ENV/SCHEM
Crabb River Road Improvements from US 59 to Rabbs Bayou

IDC, INC FEE

Task I - UTILITY COORDINATION	\$13,412
Task II - ROUTE & DESIGN STUDIES	\$52,471
Task III - ROADWAY DESIGN CONTROLS	\$80,055
Task IV - DRAINAGE DESIGN	\$73,694
Task V - SIGNING AND PAVEMENT MARKINGS	\$18,568
Task VI - MISCELLANEOUS DRAWINGS	\$8,381
Task VII - GENERAL NOTES & SPECIFICATIONS	\$5,811
Task VIII - STANDARD DRAWINGS	\$5,364
Task IX - QUANTITY TAKE-OFFS & QUANTITY SUMMARIES	\$10,360
Task X - CONSTRUCTION COST ESTIMATE	\$7,156
Task XI - CLEARING & GRUBBING PACKAGE	\$7,334
Task XII - PREPARATION & SUBMITTAL OF PS&E	
Task XIII - PROJECT MGMT & COORDINATION	\$46,055
Sub Total IDC FEE (LABOR)	\$328,661
Sub Total IDC FEE (Expenses)	\$1,941
GRAND TOTAL IDC (Labor & Expense)	\$330,602
SUB-CONSULTANT FEE STRUCTURE	

1. Parsons Brinckerhoff, Inc. FEE

Task - I - PROJECT MANAGEMENT	17,713.00
Task II - RE-EVALUATION CONSULTATION CHECKLIST	5,071.00
Task III - TRAFFIC CONTROL PLANS	51,133.00
Task IV - TRAFFIC CONTROL PLANS	14,858.00
Task V - SUBMITTAL	6,171.00
Task IV - MIDDLE BAYOU CULVERT LAYOUT DESIGN	17,986.00
Sub Total PB Fee (LABOR)	112,932.00
Sub Total PB Fee (Expenses)	6,047.00
GRAND TOTAL PB, Inc Services	118,979

2. SURVEYING by HUITT-ZOLLARS, INC. FEE

Task - Topographic & Planimetric Survey with H/W Controls	75,990.00
GRAND TOTAL SURVEYING - HZI Services	75,990.00

3. GEOTECHNICAL INVESTIGATION (HTS)

Task - Provide Geotechnical Services For Phase IA	16,662.00
GRAND TOTAL SURVEYING - HTS Services	16,662.00
GRAND TOTAL PRELIM. & FINAL DESIGN SERVICES CRABB RIVER ROAD - PHASE IA	\$ 542,233



ATTACHMENT B
GRAND PARKWAY SEGMENT C, SECTION C-1
Crabb River Road Improvements from US 99 to Rabbs Bayou

3/18/2015

IDC, INC FEE

Task Description	Sheet Count	Principal \$70	Project Manager \$65	Project Engineer \$55	Designer \$38	CADD Tech. \$28	Clerical \$25	Total Labor (Hours)	Direct Labor (Dollars)	Overhead 161.00% (Dollars)	Fixed Fee 12% (Dollars)	30% Submittal	60% Submittal	90% Submittal	100% Submittal	Total Amount (Dollars)	
Task I - UTILITY COORDINATION																	
A. Coordination on Utility Conflict w/ FBGCTRA Engineer			4	16	16			36	\$1,748.00	\$2,814	\$547	\$1,533	\$1,533	\$1,533	\$511	\$5,110	
B. Utility Data Research For Public & Private Companies			4	16	16			24	\$1,240.00	\$388	\$388	\$1,087	\$1,087	\$1,087	\$362	\$3,625	
C. Utility Conflict List			0	0	16	16	0	32	\$1,600.00	\$2,576	\$501	\$1,403	\$1,403	\$1,403	\$468	\$4,977	
Subtotal	0	0	0	48	48	16	0	92	\$4,688	7,387	1,437	4,023	4,023	4,023	1,341	\$13,412	
Task II - ROUTE & DESIGN STUDIES																	
A. Develop Draft Schematic	ROLL	8	32	40	80	80		160	\$7,880.00	\$12,687	\$2,468	\$23,035	\$23,035	\$23,035	\$7,369	\$23,035	
B. Develop Preliminary Existing & Proposed Typical Sections	2		2	8	16	16		26	\$1,178.00	\$1,897	\$369	\$3,444	\$3,444	\$3,444	\$1,074	\$3,444	
C. Coordination with Environmental Consultant For CE Checklist		4	16	20	20	20		40	\$2,420.00	\$3,886	\$758	\$7,074	\$7,074	\$7,074	\$2,121	\$7,074	
D. Coord. & Review to comply w/ FBGCTRA/County/State		8	32	40	40	40		40	\$2,640.00	\$4,250	\$827	\$7,717	\$7,717	\$7,717	\$2,315	\$7,717	
E. Address Draft Schem. concerns by FBGCTRA & Prepare Final	ROLL	4	8	16	24	24		52	\$2,592.00	\$4,173	\$812	\$7,577	\$7,577	\$7,577	\$2,273	\$7,577	
F. Field Trip to Investigate & Confirm Data & Assumptions		4	8	8	8	8		20	\$1,240.00	\$1,996	\$388	\$3,625	\$3,625	\$3,625	\$1,087	\$3,625	
Subtotal	2	28	98	92	120	120	0	338	\$17,960.00	\$28,899.50	\$5,621.94	\$52,471	\$52,471	\$52,471	\$15,625	\$52,471	
Task III - ROADWAY DESIGN CONTROLS																	
A. Develop Design Criterion DCC		8	8	8	8	8		16	\$960.00	\$1,546	\$301	\$842	\$842	\$842	\$252	\$842	
B. Existing & Proposed Typical Sections (Crabb River Road)	2		4	16	16	16		28	\$1,052.00	\$1,694	\$329	\$923	\$923	\$923	\$282	\$923	
C. Proposed Typical Sections (Sansbury Boulevard)		1	1	2	8	8		19	\$703.00	\$1,132	\$220	\$617	\$617	\$617	\$185	\$617	
D. Geomak Model, Roadway Alignments & Cross-Sections									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
1. Prepare DTM, GPK and PRJ Files				4	16	16		20	\$828.00	\$1,333	\$259	\$726	\$726	\$726	\$224	\$726	
2. Set up Criterion Files				4	16	16		20	\$828.00	\$1,333	\$259	\$726	\$726	\$726	\$224	\$726	
3. Set up Horiz & Vert Alignment Parameters, Design speed, K value, alignments			2	8	16	16		24	\$1,178.00	\$1,897	\$369	\$1,033	\$1,033	\$1,033	\$312	\$1,033	
4. Develop Existing & Proposed Cross-Sections		4	4	4	40	40		84	\$3,980.00	\$6,408	\$1,247	\$3,490	\$3,490	\$3,490	\$1,063	\$3,490	
5. Calculate Earthwork Quantities & Earthwork Summary	1		1	6	8	8		33	\$1,337.00	\$2,153	\$419	\$1,172	\$1,172	\$1,172	\$357	\$1,172	
F. Prepare Demolition & Removal Layout Sheets	6		8	40	60	60		188	\$7,240.00	\$11,656	\$2,268	\$6,349	\$6,349	\$6,349	\$1,916	\$6,349	
G. Roadway FR P&P Sheets (Permanient) (1"=50') (SB)	6		4	16	24	24		44	\$2,052.00	\$3,304	\$643	\$1,800	\$1,800	\$1,800	\$540	\$1,800	
H. Horizontal Alignment Data Sheets (1"=200')	1		4	4	12	12		24	\$900.00	\$1,449	\$282	\$789	\$789	\$789	\$237	\$789	
I. Sansbury Intersection Layout Sheet	1		1	4	8	8		29	\$1,037.00	\$1,670	\$325	\$909	\$909	\$909	\$273	\$909	
J. Sansbury Blvd. Plan & Profile & Grading Sheet	2		2	12	16	16		52	\$1,940.00	\$3,123	\$608	\$1,701	\$1,701	\$1,701	\$510	\$1,701	
K. Crabb River Road Driveway Connection Table & Details	1		2	18	16	16		36	\$1,728.00	\$2,782	\$541	\$1,515	\$1,515	\$1,515	\$455	\$1,515	
L. Crabb River Road Driveway Connection Table & Details	1		2	18	16	16		36	\$1,728.00	\$2,782	\$541	\$1,515	\$1,515	\$1,515	\$455	\$1,515	
M. Field Trip for Project Site (Roadway)		0	0	0	36	36		12	\$700.00	\$1,127	\$219	\$614	\$614	\$614	\$184	\$614	
Subtotal	22	0	36	186	272	160	0	654	\$27,386.00	\$44,091.46	\$8,577.30	\$24,016	\$24,016	\$24,016	\$7,205	\$80,065	
Task IV - DRAINAGE DESIGN																	
A. PRELIMINARY DRAINAGE LETTER REPORT		4	12	24	24	24		72	\$3,516.00	\$5,661	\$1,101	\$3,083	\$3,083	\$3,083	\$925	\$3,083	
1. Coordinate through FBGCTRA w/Agencies, TXDOT/FB Drain Dist, MUDS, etc		1	4	4	24	24		29	\$1,650.00	\$2,657	\$517	\$1,447	\$1,447	\$1,447	\$432	\$1,447	
2. Review Existing Drainage Report & discuss w/County & TXDOT			3	6	6	6		15	\$653.00	\$1,041	\$208	\$660	\$660	\$660	\$198	\$660	
3. Field Trips to Project Site (Change)			2	6	6	6		14	\$688.00	\$1,108	\$215	\$603	\$603	\$603	\$181	\$603	
4. Develop Drainage Boundaries based on Final Schematics			12	40	40	40		52	\$2,980.00	\$4,798	\$933	\$2,613	\$2,613	\$2,613	\$784	\$2,613	
5. Middle Bayou Bridge / Culvert Hydraulic Analysis & Data	3		4	16	24	24		44	\$2,052.00	\$3,304	\$643	\$1,800	\$1,800	\$1,800	\$540	\$1,800	
6. Preliminary Storm Sewer Layouts (1"=100')		4	16	32	24	24		76	\$3,982.00	\$6,427	\$1,250	\$3,501	\$3,501	\$3,501	\$1,050	\$3,501	
B. FINAL DRAINAGE DESIGN									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
1. Drainage Area Maps for Proposed Improvements	1		8	4	8	8		20	\$748.00	\$1,204	\$234	\$656	\$656	\$656	\$197	\$656	
2. Storm Sewer P&P Sheets (1"=50')	6		8	16	24	24		80	\$3,208.00	\$5,165	\$1,005	\$2,813	\$2,813	\$2,813	\$844	\$2,813	
3. Crabb River Road Runoff Calculations & Winstorm Model	4		4	16	16	16		20	\$1,140.00	\$1,835	\$367	\$1,000	\$1,000	\$1,000	\$300	\$1,000	
4. Middle Bayou Culvert / Bridge Crossing Calculation Sheets	0		1	2	4	4		32	\$1,840.00	\$2,962	\$576	\$1,614	\$1,614	\$1,614	\$484	\$1,614	
5. Miscellaneous Drainage Details	3		8	12	24	24		44	\$2,092.00	\$3,368	\$655	\$1,835	\$1,835	\$1,835	\$550	\$1,835	
6. Develop Storm Sewer Pollution Prevention Plans (1"=100')	18		9	82	222	144		513	\$25,210	\$40,588	\$7,896	\$22,108	\$22,108	\$22,108	\$6,632	\$22,108	
Subtotal	6	2	2	12	24	24	0	62	\$2,374.00	\$3,822	\$744	\$2,082	\$2,082	\$2,082	\$624	\$2,082	
Task V - SIGNING AND PAVEMENT MARKINGS																	
A. Sign & Pavement Marking Layouts (1"=50')	1		2	4	4	4		12	\$1,850.00	\$2,978	\$579	\$1,622	\$1,622	\$1,622	\$486	\$1,622	
B. Small Sign Summary	1		2	8	16	16		40	\$1,604.00	\$2,592	\$502	\$1,407	\$1,407	\$1,407	\$422	\$1,407	
C. Pavement Marking Summary	8		4	4	8	8		12	\$524.00	\$844	\$164	\$460	\$460	\$460	\$136	\$460	
D. Standard Detail Drawings: Existing Small Signing & Inventory	16		4	36	64	64		164	\$6,352	\$10,227	\$1,989	\$5,570	\$5,570	\$5,570	\$1,671	\$5,570	
Subtotal	16	0	4	36	64	64	0	164	\$6,352	\$10,227	\$1,989	\$5,570	\$5,570	\$5,570	\$1,671	\$18,566	
Task VI - MISCELLANEOUS DRAWINGS																	
A. Title Sheet	1		1	4	8	8		13	\$589.00	\$948	\$184	\$517	\$517	\$517	\$155	\$517	
B. Index Sheet	1		0	2	8	8		22	\$750.00	\$1,208	\$235	\$658	\$658	\$658	\$197	\$658	
C. Project Layout Sheets	20		4	12	16	16		32	\$1,528.00	\$2,460	\$479	\$1,340	\$1,340	\$1,340	\$402	\$1,340	
Subtotal	22	0	5	18	32	32	0	67	\$2,867	\$4,616	\$898	\$2,514	\$2,514	\$2,514	\$752	\$2,514	



ATTACHMENT B
GRAND PARKWAY SEGMENT C, SECTION C-1
Crabb River Road Improvements from US 59 to Rabbs Bayou

3/18/2015

IDC, INC FEE

Task Description	Sheet Count	Principal	Project Manager	Project Engineer	Designer	CADD Tech.	Clerical	Total Labor (Hours)	Direct Labor (Dollars)	Overhead 161.00% (Dollars)	Fixed Fee 12% (Dollars)	30% Submittal	60% Submittal	90% Submittal	100% Submittal	Total Amount (Dollars)
Task VII - GENERAL NOTES & SPECIFICATIONS																
A. Prepare Final General Notes Documents & Specs List in Word	1		4	8	8			20	\$1,004.00	\$1,616	\$314	\$680	\$880	\$880	\$293	\$2,935
B. Modify Notes & Specs to Conform to Requirements	2		6	10	8			20	\$984.00	\$1,584	\$308	\$893	\$993	\$993	\$298	\$2,876
Subtotal								40	\$1,988	\$3,201	\$623	\$1,743	\$1,743	\$1,743	\$581	\$5,811
Task VIII - STANDARD DRAWINGS																
A. Select Standard Drawings from FBGPTA Engineer	1		1	4	8			13	\$589.00	\$948	\$184	\$517	\$517	\$517	\$172	\$1,722
B. Coordinate/Combine Standard Drawings from Team; Prepare Final Set	40		2	12	12			26	\$1,246.00	\$2,006	\$390	\$1,093	\$1,093	\$1,093	\$364	\$3,642
Subtotal	42		9	30	48			99	\$4,395	\$2,954	\$1,377	\$1,609	\$1,609	\$1,609	\$536	\$5,364
Task IX - QUANTITY TAKE-OFFS & QUANTITY SUMMARIES																
A. Organize Quantities and Calculations	1		2	12	16			30	\$1,398.00	\$2,251	\$438	\$1,226	\$1,226	\$1,226	\$409	\$4,087
B. Develop Crabb River Road Summary Sheets	6		2	16	24	8		50	\$2,146.00	\$3,455	\$672	\$1,882	\$1,882	\$1,882	\$627	\$6,273
Subtotal	7		8	28	24	0		80	\$3,544	\$5,706	\$991	\$3,108	\$3,108	\$3,108	\$1,036	\$10,360
Task X - CONSTRUCTION COST ESTIMATE																
A. Estimate of Construction Costs at 30%, 60%, 90%, 100% & Final Subtotal	1		8	24	16			48	\$2,448.00	\$3,941	\$767	\$2,147	\$2,147	\$2,147	\$716	\$7,156
Subtotal	1		12	48	68	12	0	138	\$2,448	\$5,909	\$1,951	\$2,147	\$2,147	\$2,147	\$716	\$7,156
Task XI - CLEARING & GRUBBING PACKAGE																
A. Title Sheet	1		1	2	4			7	\$327.00	\$526	\$102	\$287	\$287	\$287	\$96	\$956
B. Clear & Grub Removal Sheet	1		2	8	12			22	\$1,026.00	\$1,652	\$321	\$900	\$900	\$900	\$300	\$2,999
C. Grading Layout Sheet w/ Contours	2		4	8	12			24	\$1,156.00	\$1,861	\$362	\$1,014	\$1,014	\$1,014	\$338	\$3,379
Subtotal	4		7	18	28	0	0	53	\$2,509	\$4,039	\$786	\$2,200	\$2,200	\$2,200	\$733	\$7,334
Task XII - PREPARATION & SUBMITTAL OF PS&E																
A. Submission Preparation & QA/QC Review																
1. 30% Submittal												\$135,328.37				\$135,328
2. 60% Submittal												\$82,856.93				\$82,857
3. 90% Submittal													\$82,856.93			\$82,857
5. Final Submittal														\$27,619.98		\$27,619
Subtotal												\$135,328	\$82,857	\$82,857	\$27,619	\$328,661
Task XIII - PROJECT MGMT & COORDINATION																
A. Coordination w/FBGCTRA Engineer /Sub-Consultants	4		24	24				64	\$3,460.00	\$5,571	\$1,084	\$3,034	\$3,034	\$3,034	\$1,011	\$10,114
B. Monthly Progress Reports & Invoices to FBGPTA (9 Months)	5		18	8				49	\$2,410.00	\$3,880	\$755	\$2,113	\$2,113	\$2,113	\$704	\$7,045
C. Internal Administration of Project Files	2		9	18				18	\$2,165.00	\$3,486	\$678	\$1,899	\$1,899	\$1,899	\$633	\$6,329
D. Prepare Construction Timeline Schedule	4		4	40				44	\$2,800.00	\$4,632	\$902	\$2,526	\$2,526	\$842	\$8,419	
E. Attend Coord & Interim Progress Review Mtg. w/ Minutes (9 Meetings)	10		24	24				76	\$4,030.00	\$6,488	\$1,262	\$3,534	\$3,534	\$1,178	\$11,780	
F. Coordinate Work with TXDOT/FBGCTRA (2 Meetings)	6		6					12	\$810.00	\$1,304	\$254	\$710	\$710	\$237	\$2,368	
Subtotal	31		121	74	0	0	66	292	\$16,755	\$25,366	\$4,934	\$13,817	\$13,817	\$13,817	\$4,606	\$46,065
Total Labor												\$135,328	\$82,857	\$82,857	\$27,619	\$328,661
Direct Costs																
Deliveries (\$35 Ea)												\$300	\$300	\$300	\$100	\$1,000
Mileage												\$42	\$42	\$42	\$14	\$141
Outside Reproduction (30%, 60%, 90%, 100% Submissions)												\$240	\$240	\$240	\$80	\$800
Total Direct Costs (IDC)												\$582	\$582	\$582	\$194	\$1,941
TOTAL IDC COSTS												\$135,911	\$83,439	\$83,439	\$27,813	\$330,602



**ATTACHMENT B PARSONS BRINCKERHOFF
GRAND PARKWAY SEGMENT C, SECTION C-1
Crabb River Road Improvements from US 59 to Rabbs Bayou**

Project Principal	Project Manager		Sr. Bridge Engr.		Sr. Planner		Sr. Engr.		Sr. Traffic Engr.		Traffic Engineer		Engineer		EIT		Sr. Designer		Total	
	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost		Hours
PARSONS BRINCKERHOFF																				
Project Management	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Meetings	4	\$1,067	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
QA/QC	8	\$2,134	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Monthly Reporting Invoices	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Project Schedule	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Subtotal Task	12	\$3,201	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Re-evaluation Consultation Checklist																				
Collect Data	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Evaluate Design Change	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Assemble Attachments	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Complete/review RCC form	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Address IDC comments	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Address District comments	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Address ENV comments	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Coordination w/IDC, TxDOT	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Subtotal Task	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
TRAFFIC CONTROL PLANS																				
General Notes	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Quantity Summary	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
TCP Typical Sections (2 Sections Per Phase)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
TCP Layouts (Phase I Sheets) 1" = 100'	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
TCP Layouts (Phase II Sheets) 1" = 100'	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
TCP Intersection Details (2 Estimated)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Temporary Drainage Details	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Temporary Signals (2 Estimated)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Standard sheets	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
TCP Details (Special) (1 Estimated)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
QC Revisions /City and TxDOT	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Subtotal Task	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
TRAFFIC SIGNALS																				
Index of Standards	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
General Notes	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Quantity Summary	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Utility Layout	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Plan View	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Conduit and Conductor Layout	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Wiring Diagram	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Interval Sequence & Timing	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Subtotal Task	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
SUBMITTAL																				
Plot, Assemble and Submit Plans (5 submittals)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Cost Estimate	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Subtotal Task	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Middle Bayou Culvert Layout Design																				
General Notes	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Bridge Class Culvert Layout/Plan and Profile	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Hydraulic Data Sheet	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Hydraulic Computations	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Drainage Details (Special)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Box Culvert Summary (BOS) Sheet	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Quantity Summary	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Standard sheets	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Subtotal Task	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Total Hours and Labor Cost	12	\$3,201	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
ODCs as 5% of Labor Plus Travel																				
Total Cost																				

\$118,979

**ATTACHMENT B
GRAND PARKWAY SEGMENT C, SECTION C-1
PLANS, SPECIFICATIONS AND ESTIMATE and ENV/SCHEM**

Crabb River Road Topographic And Planimetric

Survey From U. S. 59 South To Rabbs Bayou

Huitt-Zollars

TASK 1 - ESTABLISH VERTICAL CONTROL		TOTAL
RESEARCH		\$465
FIELD WORK		\$2,700
QA/QC DATA PROCESSING		\$465
FINAL CALCULATIONS		\$155
DRAFTING		\$1,080
SUBTOTAL		\$4,865

TASK 2 - ESTABLISH HORIZONTAL CONTROL		TOTAL
RESEARCH		\$465
FIELD WORK		\$1,620
QA/QC DATA PROCESSING		\$465
FINAL CALCULATIONS		\$180
DRAFTING		\$1,080
SUBTOTAL		\$3,810

TASK 3 - PLANIMETRIC AND TOPOGRAPHIC SURVEY OF ALL AREAS EXCEPT RABBS BAYOU		TOTAL
RESEARCH		\$310
FIELD WORK		\$32,400
QA/QC DATA PROCESSING		\$930
FINAL CALCULATIONS		\$720
DRAFTING		\$21,600
SUBTOTAL		\$55,960

TASK 4 - PLANIMETRIC AND TOPOGRAPHIC SURVEY OF RABB'S BAYOU		TOTAL
RESEARCH		\$310
FIELD WORK		\$2,700
QA/QC DATA PROCESSING		\$775
FINAL CALCULATIONS		\$620
DRAFTING		\$2,160
SUBTOTAL		\$6,565

TASK 5 - TIN, DTM AND CONTOUR DRAWING		TOTAL
RESEARCH		\$0
FIELD WORK		\$0
QA/QC DATA PROCESSING		\$880
FINAL CALCULATIONS		\$310
DRAFTING		\$3,600
SUBTOTAL		\$4,790

TOTAL COSTS

\$75,990

ATTACHMENT B
GRAND PARKWYA SEGMENT C, SECTION C-1
PLANS, SPECIFICATIONS AND ESTIMATE and ENV/SCHEM
GEOTECHNICAL PROPOSAL
Survey From U. S. 59 South To Rabbs Bayou
HTS , inc

GEOTECHNICAL SERVICES	TOTAL
FIELD ACTIVITIES	\$5,471
LABORATORY TESTING	\$4,003
ENGINEERING	\$7,188
SUBTOTAL	\$16,662

TOTAL COSTS

\$16,662

Attachment C

The Engineer shall furnish certificates of insurance to the FBGPTRA evidencing compliance with the insurance requirements hereof. Certificates shall indicate name of the Engineer, name of insurance company, policy number, term of coverage and limits of coverage. The Engineer shall cause its insurance companies to provide the FBGPTRA with at least 30 days prior written notice of any cancellation or non-renewal of the insurance coverage required under this Agreement. The Engineer shall obtain such insurance from such companies having a Bests rating of B+/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

- a. Workers' Compensation insurance in accordance with the laws of the State of Texas, or state of hire/location of Services, and Employers' Liability coverage with a limit of not less than \$1,000,000 each employee for Occupational Disease, \$1,000,000 policy limit for Occupational Disease; and Employer's Liability of \$1,000,000 each accident.
- b. Commercial General Liability insurance including coverage for Products/Completed Operations, Blanket Contractual, Broad Form Property Damage, Personal Injury/Advertising Liability, and Bodily Injury and Property Damage with limits of not less than:

\$2,000,000	general aggregate limit
\$1,000,000	each occurrence, combined single limit
\$2,000,000	aggregate Products, combined single limit
\$1,000,000	aggregate Personal Injury/Advertising Liability
\$50,000	Fire Legal Liability
\$5,000	Premises Medical
- c. 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.
- d. Umbrella Excess Liability insurance written as excess of Employer's Liability, with limits not less than \$2,000,000 each occurrence combined single limit.
- e. Professional Liability insurance with limits not less than \$2,000,000 each claim/annual aggregate.

The FBGPTRA and the FBGPTRA's Directors shall be named as additional insureds to all coverages required above, except for those requirements in paragraphs "a" and "e." All policies written on behalf of the Engineer shall contain a waiver of subrogation in favor of the FBGPTRA and the FBGPTRA's Directors, with the exception of insurance required under paragraph "e."