# 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 Aguirre & Fields, LP, 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 two direct connector structures at the Fort Bend Grand Parkway Toll Road (Segment D) and the Fort Bend Westpark Tollway (FM 1093) interchange 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 $2,342,622.57. 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 $2,342,622.57, 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 FBPGTRA.

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 June 30, 2016.

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 Aguirre & Fields, LP, 12999 Jess Pirtle Blvd., Sugar Land, Texas 77478, Attention: Mark Gribble, 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:

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

IN WITNESS WHEEOF, 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

Aguirre & Fields, LP
By: Aguirre, LLC – General Partner
ENGINEER

By:_____
Name: Oscar R. Aguirre
Title: President

**ATTACHMENT A**
**SCOPE OF SERVICES**

**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) / WESTPARK TOLLWAY (FM 1093)**
**EASTBOUND/NORTHBOUND & WESTBOUND/NORTHBOUND DIRECT CONNECTORS**

**DESIGN SERVICES**

## GENERAL DESCRIPTION

The work to be performed by the Engineer under this scope of work consists of providing various roadway and structural design engineering services for the eastbound/northbound and westbound/northbound direct connectors and preparation of bid documents for construction. The project will utilize 2014 TxDOT specifications and the latest TxDOT and AASHTO design criteria. The design will also incorporate the latest TxDOT Statewide and Houston District standard details and FBGPTRA aesthetic standards where applicable. The following is a detailed list of tasks which will be performed by the Engineer for this portion of work.

## GENERAL REQUIREMENTS

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

All designs for the above work will be in accordance with the Segment D Program Management Plan (PMP).

Design will be based on completed construction of the Westpark Tollway (FM 1093) Extension project.

Furnish computer media and computer graphics files in compliance with the PMP.

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

Coordinate contract documents preparation with the FBGPTRA , and Program Team Members (PTMs) preparing contract documents for other portions of work.

Provide project planning and control to include quality management.

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

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

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

## 1) SURVEY

The Surveyor shall verify the benchmark coordinates and establish the horizontal and vertical control for the project. The Surveyor shall coordinate control with the adjacent Surveyors / Surveyors, if any for consistency and accuracy of the project. The Surveyor shall:

Recover or Re-establish Project Baseline: The project baseline shall be the stationed "Design Center Line." The baseline shall be marked with control points, offset at equal distances on both sides of the baseline and near the existing right-of-way line, using 5/8 inch iron rods, 36 inches long, at P.C.' s, P.I.'s and P.T.'s of horizontal curves and at 1500 foot stations. Field tie into the adjacent Project baselines set by adjacent Surveyors for consistency and accuracy.

Vertical Control: Locate previously set benchmarks established by TxDOT (State Datum); establish benchmark circuit (run levels) throughout the Project; establish additional benchmarks at intervals not to exceed 1,200 feet for the limits of the Project; tie benchmarks (station/offset) to Project baseline. Benchmarks shall be 3/4-inch diameter, 48 inches long, located near the existing ROW line at identified offset distances from the Baseline. All benchmark circuits shall be tied to the State's elevation datum. Perform the benchmark circuits in accordance with good surveying practices. The Surveyor shall verify the closure and submit adjustments to State for approval prior to beginning the field surveys.

Scope of Work limits:

(a) From northeasterly edge of pavement to the northeasterly right-of-way line for a length of 800 feet (+/-)

(b) Then from south edge of shoulder of Westpark Tollway west bound main lane to north right-of-way line of Westpark Tollway for a length of 600 feet (+/-)

(c) Then from south edge of shoulder of Westpark Tollway west bound main lane to south edge of Westpark Tollway west bound feeder for a length of 700 feet (+/-)

(d) Then from centerline of Westpark Tollway main lane to south edge of Westpark Tollway west bound feeder for a length of 1700 feet (+/-)

(e) And approximately 600 feet of existing connector from southbound Hwy 99 to eastbound Westpark Tollway.

Secure right-of-entry, as needed for the project, short of litigation.

Provide ties to visible and apparent surface features of existing underground and overhead utilities (location, size, elevation and direction). Also, obtain elevations of manhole flow lines, pipe sizes, storm sewer outfalls, and valves of utilities.

Determine type of existing material, pavements, etc.

Determine approximate low chord elevation of any Centerpoint transmission lines which cross SH 99 or Westpark Tollway.

Obtain ties to existing culverts and bridges.

Obtain line (PGL) and the edges of slab at existing bridge bent locations.

Provide temporary signs, traffic control, flags, safety equipment, etc. in accordance with Texas Manual on Uniform Traffic Control Devices. Obtain necessary TxDOT permits. A law enforcement officer will be utilized for traffic control on the existing elevated ramp.

The Surveyor shall control traffic in and near surveying operations adequately to comply with the latest edition of the Texas Manual on Uniform Traffic Control Devices. In the event field personnel must divert traffic or close traveled lanes, a Traffic Control Plan shall be prepared by the surveyor and approved by the FBGPTRA and TxDOT prior to commencement of field work. A copy of the approved plans shall be in the possession of field personnel on the job site at all times and shall be made available to State personnel upon request.

All standards, procedures and equipment used by the Surveyor shall be such that the results of survey will be in accordance with Board Rule 663.15, as promulgated by the Texas Board of Professional Land Surveyors.

Digital Terrain Model – Prepare digital terrain model (DTM) of the project, suitable for use with MicroStation and GEOPAK.

Project Control – Recover project control at start of construction. Provide RPLS sealed control index and sheets for PS&E package. Survey control index and sheets shall be developed in accordance with the TxDOT PS&E Preparation Manual guidelines.

Right-of-way determination is specifically excluded. The current right-of-way, as obtained from TxDOT right-of-way department in sheet format will be utilized without modification for all necessary aspects of this work authorization that occur within the right-of-way.

HORIZONTAL GROUND CONTROL

Horizontal ground control used for design surveys and construction surveys shall be based on acceptable methods conducted by the Surveyor, and shall meet the standards of accuracy required by the Texas Department of Transportation, District 12.

Reference may be made to standards of accuracy for horizontal control traverses, as described in the FGCS Standards and Specifications for Geodetic Control Networks, latest edition, the Texas Department of Transportation Survey Manual, latest edition, the Texas Department of Transportation GPS Manual of Practice, latest edition, or the TSPS Manual of Practice for Land Surveying in the State of Texas, as may be applicable.

VERTICAL GROUND CONTROL

Vertical ground control used for design surveys and construction surveys shall be based on acceptable methods conducted by the Surveyor, and shall meet the standards of accuracy required by the Texas Department of Transportation, District 12.

Reference may be made to standards of accuracy for vertical control traverses, as described in the FGCS Standards and Specifications for Geodetic Control Networks, latest edition, the Texas Department of Transportation Survey Manual, latest edition, the Texas Department of Transportation GPS Manual of Practice, latest edition, or the TSPS Manual of Practice for Land Surveying in the State of Texas, as may be applicable.

## 2) UTILITY COORDINATION

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

a) Request and research utility locations from known utility companies.
b) Show approximate private utility locations in plans.
c) Coordinate with the FBGPTRA during the identification of utility conflicts.
d) Prepare utility conflict list and submit to FBGPTRA at 30% submittal.
e) Develop designs to avoid and/or minimize conflicts with existing and proposed utilities.

## 3) GEOTECHNICAL STUDY

Provide field exploration, laboratory testing, engineering analysis and reporting for the direct connector. Fifteen (15) borings at 120-feet depth will be completed for the bridge foundation analysis and two (2) borings at 50-feet depth will be completed for the retaining wall analysis in accordance with the TxDOT Geotechnical Manual. Engineering analysis will be provided for pavement subgrade, storm sewer construction, bridge foundations and MSE wall recommendations.

## 4) ROADWAY

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

a) Conduct field trips to the project site to investigate and confirm data and assumptions and assess general conditions as needed.

b) Complete a Design Summary Report (DSR) and submit for approval. Attend a meeting if necessary to discuss the DSR findings.

c) Verify schematic geometry and revise based on current survey, latest design criteria and final Westpark Extension geometry. The entrance/exit ramp configuration for SH99 below the EBNB/WBNB direct connector will be evaluated for approval by the FBGPTRA. The current schematic provides an entrance ramp onto NB SH 99, north of FM 1093. There is no proposed exit ramp between FM 1093 and Fry Road.

d) Typical section sheets shall be developed. Sections will be prepared for the direct connectors and approaches as necessary to provide a thorough understanding to the contractor of the work intended. Typical section information shall include the following:

1) Specific station limits
2) Profile Grade Line location
3) Widths of travel lanes

4) Width of shoulders
5) Pavement section design
6) Longitudinal joint locations
7) Pavement cross slopes
8) Traffic barriers
9) Mow strips
10) Ditch side slopes
11) Sodding/seeding limits
12) Structures including retaining walls
13) Riprap
14) Limits of embankment and excavation
15) The proposed pavement design and roadway section (except for any detours) width information will be provided by FBGPTRA.
16) Typical Section number.

e) Separate plan and profile sheets will be prepared for the direct connector to a scale of 1"=100' horizontal and 1"=10' vertical on 11"x17" format sheets.

1) The plan view shall contain, at a minimum, the following design elements:

(a) Calculated roadway center lines/base lines (PGL's) for each connector. Horizontal control point information shall be shown.
(b) Lane and pavement width dimensions.
(c) Proposed structure locations, lengths and widths.
(d) Direction of traffic flow on all roadways. Lane lines and/or arrows indicating the number of lanes shall also be shown.
(e) Control of access line, ROW lines and easements, as required.
(f) Limits of riprap, block sod, and seeding.
(g) Existing utilities and structures
(h) Benchmark location
(i) Radii callouts, curb location, guard rail, guard fence, crash safety items, as required.
(j) Superelevation data, as required.
(k) Typical section number.

2) The profile view shall contain the following design elements:

(a) Calculated profile grade including grade, vertical curve data, and "K" values shall be shown.
(b) Existing natural ground profile at profile grade line.
(c) Existing and proposed elevations.
(d) Proposed ditch flowline, as required, including grade and PI data.
(e) Existing natural ground, as required, at the ROW.
(f) Bridge vertical clearances

f) Roadway detail plan sheets will be prepared that are associated with the roadway construction. Roadway detail sheets will be developed for special details that may be needed to define, detail, or clarify construction items for the contractors' understanding. These plan sheets may include, but are not limited to:

1) Miscellaneous Roadway Details

2) Removal Layouts
3) Alignment Data Sheets
4) Superelevation Sheets.

g) Design cross sections should be prepared 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. Cross Sections will only be provided along the bridge approaches. Each cross-section shall include, but is not limited to:

1) Centerline location and station
2) Proposed ground line
3) Roadway side slopes
4) Elevations at centerline, edges of pavement, and tops of curb
5) Existing ground line
6) Roadway cross-slopes
7) Existing and/or proposed ROW limits
8) Cut and fill quantities at each cross-section
9) Offset/elevation callouts for grade breaks, such as ditch high banks, flowlines and berms adjacent to the roadway.

## 5) DRAINAGE

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

a) The drainage calculations should be prepared to provide for the ultimate interchange. 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 Study (completed in association with the Interchange Schematic Update). The proposed tasks are listed below:

1) Coordinate through FBGPTRA with local agencies affected, such as TxDOT, Fort Bend County Drainage District and Municipal Utility Districts, to keep them informed of the progress and results of project.
2) Conduct field trips to the project site to investigate and confirm data and assumptions and assess general drainage conditions as needed.
3) Review previous plans and drainage reports prepared by others which relate to drainage in the project area. Through research of existing reports, determine if mitigation is necessary. Document findings and discuss with FBGPTRA. Mitigation is not included in this scope of services.
4) Prepare drainage area maps for proposed improvements within the project limits.
5) Design all drainage structures including open ditch drainage, storm sewer, inlets, manholes, subsurface drainage at retaining walls, bridge deck drainage systems, and inlets/internal drainage piping where required on structures.
6) Design and analyze the storm sewer system (including the existing system) utilizing the GEOPAK DRAINAGE program and incorporate output to plan set.
7) Design and analyze the roadside ditches using Flowmaster or similar spreadsheet analysis program and incorporate results into the plans set on the roadway plan and profile sheets.

8) 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"=100' and vertical scale of 1"=10'.

b) Temporary Drainage Facilities

1) 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

c) Storm Water Pollution Prevention Plans (SW3P)

1) Develop SW3P, based on latest NPDES and any Fort Bend County requirements, on separate sheets (may be double banked) but in conformance with the TCP, to minimize potential impact to receiving waterways. The SW3P shall include text describing the plan, quantities, type, phase and locations of erosion control devices and any required permanent erosion control measures.
2) EPIC Sheets will not be developed by the Engineer. If required, they will be provided by the FBGPTRA.

## 6) TRAFFIC

a) The Engineer shall prepare drawings, specifications and details for all signs. Sign detail sheets shall be prepared for large guide signs showing dimensions, lettering, shields, borders, corner radii, etc., and shall provide a summary of large and small signs. The Engineer shall also designate the shields to be attached to guide signs. The proposed signs shall be illustrated and numbered on plan sheets. Sign foundation shall be selected from applicable standards. Sign poles, attachments, and details shall be designed per the FBGPTRA aesthetic standards. The Engineer shall provide the following information on sign/pavement marking layouts:

1) Roadway layout.
2) Center line with station numbering.
3) ROW lines.
4) Designation of arrow used on exit direction signs.
5) Culverts and other structures that present a hazard to traffic.
6) Location of utilities.
7) Existing signs to remain, to be removed, or to be relocated.
8) Proposed signs (illustrated and numbered).
9) Existing overhead sign bridges to remain, to be revised, removed or relocated.
10) Proposed overhead sign bridges, indicating location by plan.

b) The Engineer shall detail permanent and temporary pavement markings and channelization devices on plan sheets. The Engineer shall provide the following information on sign/pavement marking layouts:

1) Proposed markings (illustrated and quantified) which include pavement markings, object markings and delineation.
2) Quantities of existing pavement markings to be removed.
3) Proposed delineators and object markers.

4) The location of direct connector, frontage roads and ramps.
5) The number of lanes in each section of proposed highway and the location of changes in numbers of lanes.
6) ROW limits.
7) Direction of traffic flow on all roadways.

c) The Engineer shall provide illumination layout plans, electrical circuit plans and details for safety lighting along the direct connector. The Engineer shall tabulate all quantities and provide summary sheets.

## 7) CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL

The purpose of this task is to prepare traffic control plans and details in accordance with the latest version of the Texas Manual On Uniform Traffic Control Devices, latest version (TMUTCD), 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) Traffic control will be based on the Westpark Extension project being fully constructed.

2) One phase (single step) is anticipated for construction.

(a) Phase 1 – Construct bridges and approaches. Detours will be setup for when work is planned on spans over frontage roads and mainlanes. Frontage road and mainlane closures will only be permitted during off-peak hours as defined by FBGPTRA. Closures will be limited to one facility at a time.

3) 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) 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)
   (b) TCP Overview with Narrative (if more than one phase)
   (c) Typical Sections
   (d) Detour Layouts for temporary Road Closures
   (e) Advanced Warning Sign Layout
   (f) Quantities

## 8) RETAINING WALLS

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

a) The retaining wall layout plans will include:

1) Layout Plan
   (a) Designation of reference line
   (b) Beginning and ending retaining wall stations
   (c) Offset from reference line
   (d) Horizontal curve data
   (e) Total length of wall
   (f) Indicate face of wall
   (g) All wall dimensions and alignment relations (alignment data as necessary)
   (h) Bore hole locations
   (i) Inlet locations.

2) Elevation

   (a) Top of wall/coping elevations every 25 feet.
   (b) Existing and finished ground line elevations
   (c) Limits of measurement for payment
   (d) Type, limits, of guard rail and/or coping (as applicable).
   (e) Underdrain placement and outfalls
   (f) Foundation Improvements

3) Foundation Studies: Perform the external stability analysis for retaining walls. The Engineer will evaluate the adequacy of the retaining wall footings based on geotechnical recommendations.

4) Design Details

   (a) Structural wall type, details and anchorage details of railing and coping.
   (b) Drainage requirements – troughs, inlets, drain pipes/junction boxes.

## 9) BRIDGES

The design of the direct connector will conform to the FBGPTRA aesthetic standards.

a) Bridge Layouts

1) Prepare bridge layout plans and elevations for all bridge locations in accordance with the latest edition of the TxDOT's *Bridge Design Manual*, *Bridge Division Operation and Planning Manual*, and *Bridge Detailer's Manual*. All bridge layouts shall be at 1"= 40' scale (11"x17" plan sheets).

2) The Engineer shall evaluate and prepare bridge typical sections for construction sequencing.

b) Final Design Calculations and Details

1) All highway bridge structures shall be designed for HL 93 loading. All bridge design shall be in conformance with the latest edition of the TxDOT's *Bridge Design Manual*, *Bridge Division Operation and Planning Manual*, *Bridge Detailer's Manual*, and AASHTO *LRFD Bridge Design Specifications, 4th Edition* with the current interim. Final design calculations and final detail drawings for each structure will be provided in notebook format upon submission of structural review to the FBGPTRA.

c) Bridge Quantities Summary

1) Quantities for each bridge will be provided. These quantities will be incorporated onto summary sheets to be included in the plan set as part of the individual bridge plans.

## 10) GENERAL NOTES AND SPECIFICATIONS

a) Coordinate and combine general notes and specifications with the other team members. Prepare final general notes documents and specification list in Microsoft Word format.

b) The Segment D standard general notes and specifications will be used by the Engineer. The Engineer will modify the notes and specifications to conform to the specific requirements for the section.

## 11) CONSTRUCTION TIME DETERMINATION

a) Prepare a construction time determination using the latest version of Primavera software. The schedule shall indicate tasks, subtasks, critical dates, and milestones for each phase of construction.

## 12) STANDARD DRAWINGS

a) TxDOT Statewide, Houston District and FBGPTRA Aesthetics standards will be used where applicable.

b) Coordinate and combine standard drawings from other team members. Prepare final set standard drawings for submittal.

**13) 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.

b) Coordinate and combine quantity take-offs (stand alone sheets) from other team members into overall project summary sheets for plans.

**14) CONSTRUCTION COST ESTIMATE**

a) An estimate of the construction costs 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.

b) The Engineer will incorporate quantities from other PTM's.

**15) MISCELLANEOUS DRAWINGS**

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.

**16) 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%, 95% 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, internal QA/QC redlines (PDF), and electronic file of the drawings in PDF format.

2) The 60% submittal shall include five (5) sets of legible 11"x17" construction drawings, construction cost estimate, internal QA/QC redlines (PDF), and electronic file of the drawings in PDF format.

3) The 90% submittal shall include five (5) complete sets of legible 11"x17" construction drawings, two (2) specification lists, construction cost estimate, general notes, internal QA/QC redlines (PDF), and electronic file of the drawings in PDF format.

4) The 95% submittal shall include five (5) complete sets of legible 11"x17" construction drawings, two (2) specification lists, construction cost estimate, general notes, internal QA/QC redlines (PDF), and electronic file of the drawings in PDF format.

5) The final 100% complete (Bid Ready) submittal shall include an electronic file of the Bid Ready set of drawings in PDF format – for reproduction during the bidding period, internal QA/QC redlines (PDF) and five (5) complete sets of legible 11"x17" construction drawings.

6) Upon award of construction contract, provide electronic files of the conformed set of the Contract Drawings in PDF and Microstation V8 format, Calculations Report (PDF) and the Specifications in Microsoft Word, to FBGPTRA.

## 17) SCHEDULE

The following schedule is based on 3 week reviews between submittals.

a) 30% - June 22, 2015

b) 60% - September 21, 2015

c) 90% - December 14, 2015

d) 95% - February 17, 2016

e) Final – April 20, 2016

## 18) 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 of the team and contact with FBGPTRA will be maintained.

a) Provide general coordination with the team members concerning administrative and technical issues. Report and coordinate with FBGPTRA on any design issues and requests for information from subconsultants.

b) Prepare and submit monthly progress reports and invoices to FBGPTRA 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) Prepare an overall project design schedule detailing the progression of the work. This schedule will include review dates by the FBGPTRA, submittal dates for deliverables, and estimated time frame to complete the work. The schedule will be updated monthly and included in the progress report. 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.

d) 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.

ATTACHMENT B
COMPENSATION FOR SCOPE OF SERVICES
FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)

FEE SCHEDULE SUMMARY

**EBNB & WBNB DIRECT CONNECTORS**
Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

**PRIME:** Aguirre & Fields
**SUB:** H&H Resources
**SUB:** Progressive Traffic & Transportation
**SUB:** AECOM
**SUB:** Geotech Engineering and Testing
**SUB:** Weisser Engineering & Surveying

| WORK TASK | DESCRIPTION | Aguirre & Fields | H&H Resources | Progressive Traffic & Transportation | Geotech Engineering and Testing | Weisser Engineering & Surveying | TOTAL |
|---|---|---|---|---|---|---|---|
| 1 | SURVEY | $3,832.00 | | | | $18,300.00 | $22,132.00 |
| 2 | UTILITY COORDINATION | $26,031.25 | | | | | $26,031.25 |
| 3 | GEOTECHNICAL STUDY | $3,832.00 | | | $301,689.00 | | $305,521.00 |
| 4 | ROADWAY | $204,828.00 | | | | | $204,828.00 |
| 5 | TRAFFIC | $7,115.00 | | $118,746.00 | | | $125,861.00 |
| 6 | DRAINAGE | $22,527.50 | $171,262.78 | | | | $193,790.28 |
| 7 | CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL | $101,987.50 | | | | | $101,987.50 |
| 8 | RETAINING WALLS | $44,785.00 | | | | | $44,785.00 |
| 9 | BRIDGES | $978,078.75 | | | | | $978,078.75 |
| 10 | GENERAL NOTES AND SPECIFICATIONS | $5,546.50 | | $1,258.00 | | | $6,804.50 |
| 11 | CONSTRUCTION TIME DETERMINATION | $5,235.00 | | | | | $5,235.00 |
| 12 | STANDARD DRAWINGS | $6,324.25 | $1,023.81 | $974.00 | | | $8,322.06 |
| 13 | QUANTITY TAKE-OFFS AND QUANTITY SUMMARIES | $48,915.00 | $7,906.48 | $30,450.00 | | | $87,271.48 |
| 14 | CONSTRUCTION COST ESTIMATE | $35,809.00 | $6,657.80 | $8,560.00 | | | $51,026.80 |
| 15 | MISCELLANOUS DRAWINGS | $25,956.00 | | | | | $25,956.00 |
| 16 | PREPARATION AND SUBMITTAL OF PS&E | $40,666.25 | $15,860.40 | $5,628.00 | | | $62,154.65 |
| 17 | PROJECT MANAGEMENT | $72,352.00 | $5,503.80 | $9,900.00 | | | $87,755.80 |
| 18 | DIRECT EXPENSES | $3,581.50 | $500.00 | $1,000.00 | | | $5,081.50 |
| | TOTAL | $1,637,402.50 | $208,715.07 | $176,516.00 | $301,689.00 | $18,300.00 | $2,342,622.57 |
| | PERCENTAGE OF WORK BY PROVIDER | 69.9% | 8.9% | 7.5% | 12.9% | 0.8% | 100.0% |

## ATTACHMENT B
## COMPENSATION FOR SCOPE OF SERVICES
## FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)

### Aguirre & Fields

### EBNB & WBNB DIRECT CONNECTORS

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Senior Structural Engineer | Project Manager | Project Engineer | Design Engineer | EIT | Engineering Technician | Admin Clerical | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $210.00 | $195.00 | $142.00 | $116.00 | $93.75 | $84.00 | $75.00 | |
| **SURVEY** | | | | | | | | | |
| COORDINATION WITH SURVEY | | | 8 | 16 | | | | | 24 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 8 | 16 | 0 | 0 | 0 | 0 | 24 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,560.00** | **$2,272.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$3,832.00** |
| **UTILITY COORDINATION** | | | | | | | | | |
| RESEARCH PRIVATE UTILITIES | | | 1 | 5 | | 18 | | | 24 |
| UTILITY COORDINATION | | | 1 | 5 | | 20 | | | 26 |
| DRAW PRIVATE UTILITIES ON BASE MAP | | | 1 | 5 | | 9 | 40 | | 55 |
| UTILITY PLAN & PROFILE (DOW 30" & TXU 18") | 4 | | 1 | 15 | | 40 | 60 | | 116 |
| IDENTIFICATION OF UTILITY CONFLICTS | | | 1 | 5 | | 18 | | | 24 |
| PREPARE UTILITY CONFLICTS LIST AT 30% | | | 1 | 5 | | 10 | | | 16 |
| SHEETS & HOURS SUBTOTAL | 4 | 0 | 6 | 40 | 0 | 115 | 100 | 0 | 261 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,170.00** | **$5,680.00** | **$0.00** | **$10,781.25** | **$8,400.00** | **$0.00** | **$26,031.25** |
| **GEOTECHNICAL STUDY** | | | | | | | | | |
| COORDINATION WITH GEOTECH | | | 8 | 16 | | | | | 24 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 8 | 16 | 0 | 0 | 0 | 0 | 24 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,560.00** | **$2,272.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$3,832.00** |
| **ROADWAY** | | | | | | | | | |
| FIELD RECONNAISSANCE | | 10 | 10 | 10 | | 10 | | | 40 |
| DESIGN SUMMARY REPORT | | | 5 | 10 | | 10 | | | 25 |
| GEOMETRY VERIFICATION | | 10 | 40 | 80 | | 80 | | | 210 |
| TYPICAL SECTIONS | 8 | | 2 | 70 | | 110 | 60 | | 242 |
| HORIZONTAL ALIGNMENT DATA | 2 | | 2 | 10 | | 20 | 28 | | 60 |
| REMOVAL LAYOUTS | 6 | | 2 | 15 | | 65 | 110 | | 192 |
| ROADWAY PLAN & PROFILE | 17 | | 2 | 100 | | 210 | 200 | | 512 |
| MISCELLANOUS DETAILS | 2 | | 2 | 8 | | 15 | 25 | | 50 |

## ATTACHMENT B
## COMPENSATION FOR SCOPE OF SERVICES
## FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)

### Aguirre & Fields

### EBNB & WBNB DIRECT CONNECTORS

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Senior Structural Engineer | Project Manager | Project Engineer | Design Engineer | EIT | Engineering Technician | Admin Clerical | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $210.00 | $195.00 | $142.00 | $116.00 | $93.75 | $84.00 | $75.00 | |
| SUPERELEVATION DETAIL SHEETS | 4 | | 2 | 20 | | 40 | 60 | | 122 |
| CROSS SECTIONS & EARTHWORK | 38 | | 2 | 250 | | 100 | 40 | | 392 |
| SHEETS & HOURS SUBTOTAL | 77 | 20 | 69 | 573 | 0 | 660 | 523 | 0 | 1845 |
| **SUBTOTAL LABOR COSTS** | | **$4,200.00** | **$13,455.00** | **$81,366.00** | **$0.00** | **$61,875.00** | **$43,932.00** | **$0.00** | **$204,828.00** |
| **TRAFFIC** | | | | | | | | | |
| SUBCONSULTANT COORDINATION | | | 20 | 20 | | | | 5 | 45 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 20 | 20 | 0 | 0 | 0 | 5 | 45 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$3,900.00** | **$2,840.00** | **$0.00** | **$0.00** | **$0.00** | **$375.00** | **$7,115.00** |
| **DRAINAGE** | | | | | | | | | |
| SUBCONSULTANT COORDINATION | | | 20 | 20 | | | | 5 | 45 |
| STORM WATER POLLUTION PREVENTION PLAN & DETAILS | 7 | | 1 | 15 | | 50 | 100 | | 166 |
| SHEETS & HOURS SUBTOTAL | 7 | 0 | 21 | 35 | 0 | 50 | 100 | 5 | 211 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$4,095.00** | **$4,970.00** | **$0.00** | **$4,687.50** | **$8,400.00** | **$375.00** | **$22,527.50** |
| **CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL** | | | | | | | | | |
| TRAFFIC CONTROL PLAN LAYOUT & NARRATIVE | 1 | | 2 | 5 | | 10 | 30 | | 47 |
| TRAFFIC CONTROL PLAN ADVANCE WARNING SIGNS LAYOUT | 1 | | 2 | 5 | | 10 | 30 | | 47 |
| TRAFFIC CONTROL DETOUR LAYOUTS | 6 | | 2 | 40 | | 50 | 100 | | 192 |
| TRAFFIC CONTROL PLAN PHASE LAYOUTS | 21 | | 2 | 200 | | 300 | 200 | | 702 |
| SHEETS & HOURS SUBTOTAL | 29 | 0 | 8 | 250 | 0 | 370 | 360 | 0 | 988 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,560.00** | **$35,500.00** | **$0.00** | **$34,687.50** | **$30,240.00** | **$0.00** | **$101,987.50** |
| **RETAINING WALLS** | | | | | | | | | |
| RETAINING WALL LAYOUTS AND TYPICAL SECTIONS | 12 | 5 | 2 | 130 | | 140 | 140 | | 417 |
| SHEETS & HOURS SUBTOTAL | 12 | 5 | 2 | 130 | 0 | 140 | 140 | 0 | 417 |
| **SUBTOTAL LABOR COSTS** | | **$1,050.00** | **$390.00** | **$18,460.00** | **$0.00** | **$13,125.00** | **$11,760.00** | **$0.00** | **$44,785.00** |

## ATTACHMENT B
## COMPENSATION FOR SCOPE OF SERVICES
## FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)

### Aguirre & Fields

**EBNB & WBNB DIRECT CONNECTORS**

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Senior Structural Engineer | Project Manager | Project Engineer | Design Engineer | EIT | Engineering Technician | Admin Clerical | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $210.00 | $195.00 | $142.00 | $116.00 | $93.75 | $84.00 | $75.00 | |
| BRIDGES | | | | | | | | | |
| BRIDGE LAYOUTS (7000' LONG STRUCTURE) | 19 | 60 | 2 | 275 | | 275 | 200 | | 812 |
| BRIDGE TYPICAL SECTIONS | 2 | 5 | 2 | 10 | | 30 | 20 | | 67 |
| BORING LOG DATA | 16 | 1 | 2 | 5 | | 10 | 40 | | 58 |
| ESTIMATED QUANTITIES/BEARING SEAT ELEVATIONS | 2 | 5 | 2 | 15 | | 35 | 10 | | 67 |
| FOUNDATION PLAN | 11 | 5 | 2 | 80 | | 120 | 160 | | 367 |
| FOUNDATION DETAILS | 4 | 5 | 2 | 40 | | 50 | 40 | | 137 |
| ABUTMENT PLAN & ELEVATIONS | 4 | 5 | 2 | 40 | | 80 | 30 | | 157 |
| ABUTMENT DETAILS | 4 | 6 | 2 | 40 | | 50 | 40 | | 138 |
| INTERIOR BENT PLAN & ELEVATIONS (63 BENTS-35 UNIQUE) | 35 | 70 | 2 | 350 | | 600 | 200 | | 1222 |
| INTERIOR BENT DETAILS | 35 | 70 | 2 | 350 | | 600 | 200 | | 1222 |
| STRADDLE BENT DETAILS (7 STRADDLE BENTS) | 21 | 30 | 2 | 200 | | 300 | 200 | | 732 |
| COLUMN DETAILS | 4 | 10 | 2 | 30 | | 60 | 40 | | 142 |
| PRESTRESSED CONCRETE GIRDER FRAMING PLANS (22 UNITS) | 22 | 10 | 2 | 200 | | 300 | 300 | | 812 |
| PRESTRESSED CONCRETE GIRDER SLAB SPAN UNITS (22 UNITS) | 22 | 10 | 2 | 200 | | 300 | 300 | | 812 |
| PRESTRESSED CONCRETE GIRDER SLAB SECTIONS (22 UNITS) | 22 | 10 | 2 | 200 | | 300 | 300 | | 812 |
| PRESTRESSED CONCRETE GIRDER MISC SLAB DETAILS | 1 | 1 | 2 | 8 | | 10 | 20 | | 41 |
| GORE DETAILS | 12 | 10 | 2 | 90 | | 200 | 180 | | 482 |
| PRESTRESSED CONCRETE GIRDER DESIGN (IGND) | 1 | 5 | 2 | 20 | | 50 | 10 | | 87 |
| CURVED STEEL PLATE GIRDER FRAMING PLAN (2 UNITS)(EBNB) | 2 | 2 | 2 | 10 | | 40 | 20 | | 74 |
| CURVED STEEL PLATE GIRDER SLAB SPAN UNIT (2 UNITS)(EBNB) | 2 | 2 | 2 | 20 | | 40 | 20 | | 84 |
| CURVED STEEL PLATE GIRDER SLAB SPAN SECTION (2 UNITS)(EBNB) | 2 | 4 | 2 | 10 | | 30 | 35 | | 81 |

ATTACHMENT B
COMPENSATION FOR SCOPE OF SERVICES
FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)

**Aguirre & Fields**

**EBNB & WBNB DIRECT CONNECTORS**

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Senior Structural Engineer | Project Manager | Project Engineer | Design Engineer | EIT | Engineering Technician | Admin Clerical | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $210.00 | $195.00 | $142.00 | $116.00 | $93.75 | $84.00 | $75.00 | |
| CURVED STEEL PLATE GIRDER ELEVATION (2 UNITS)(EBNB) | 4 | 4 | 2 | 50 | | 60 | 45 | | 161 |
| CURVED STEEL PLATE GIRDER CAMBER DATA (2 UNITS)(EBNB) | 2 | 4 | 2 | 20 | | 30 | 25 | | 81 |
| CURVED STEEL PLATE GIRDER FG ELEVATIONS (2 UNITS)(EBNB) | 2 | 4 | 2 | 20 | | 30 | 25 | | 81 |
| CURVED STEEL PLATE GIRDER DETAILS (2 UNITS)(EBNB) | 6 | 4 | 2 | 30 | | 90 | 120 | | 246 |
| AESTHETIC DETAILS | 1 | 1 | 2 | 2 | | 1 | 5 | | 11 |
| BRIDGE DRAIN DETAILS | 3 | 2 | 2 | 10 | | 10 | 10 | | 34 |
| SHEETS & HOURS SUBTOTAL | 261 | 345 | 54 | 2325 | 0 | 3701 | 2595 | 0 | 9020 |
| **SUBTOTAL LABOR COSTS** | | **$72,450.00** | **$10,530.00** | **$330,150.00** | **$0.00** | **$346,968.75** | **$217,980.00** | **$0.00** | **$978,078.75** |
| **GENERAL NOTES AND SPECIFICATIONS** | | | | | | | | | |
| GENERAL NOTES AND SPECIFICATIONS | 0 | | 8 | 22 | | 6 | | 4 | 40 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 8 | 22 | 0 | 6 | 0 | 4 | 40 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,560.00** | **$3,124.00** | **$0.00** | **$562.50** | **$0.00** | **$300.00** | **$5,546.50** |
| **CONSTRUCTION TIME DETERMINATION** | | | | | | | | | |
| CONSTRUCTION TIME DETERMINATION | 0 | | 5 | 30 | | | | | 35 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 5 | 30 | 0 | 0 | 0 | 0 | 35 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$975.00** | **$4,260.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$5,235.00** |

## ATTACHMENT B
## COMPENSATION FOR SCOPE OF SERVICES
## FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)

### Aguirre & Fields

### EBNB & WBNB DIRECT CONNECTORS

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Senior Structural Engineer | Project Manager | Project Engineer | Design Engineer | EIT | Engineering Technician | Admin Clerical | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $210.00 | $195.00 | $142.00 | $116.00 | $93.75 | $84.00 | $75.00 | |
| **STANDARD DRAWINGS** | | | | | | | | | |
| ROADWAY STANDARDS | 25 | | 1 | 1 | | 5 | 18 | | 25 |
| RETAINING WALL STANDARDS | 4 | | 1 | 1 | | 1 | 1 | | 4 |
| BRIDGE STANDARDS | 31 | 1 | 1 | 1 | | 8 | 20 | | 31 |
| SWPPP STANDARDS | 3 | | 1 | 1 | | 1 | 1 | | 4 |
| SHEETS & HOURS SUBTOTAL | 63 | 1 | 4 | 4 | 0 | 15 | 40 | 0 | 64 |
| **SUBTOTAL LABOR COSTS** | | **$210.00** | **$780.00** | **$568.00** | **$0.00** | **$1,406.25** | **$3,360.00** | **$0.00** | **$6,324.25** |
| **QUANTITY TAKE-OFFS AND QUANTITY SUMMARIES** | | | | | | | | | |
| SUMMARY OF TRAFFIC CONTROL QUANTITIES | 1 | | 2 | 40 | | 100 | 40 | | 182 |
| SUMMARY OF ROADWAY QUANTITIES | 1 | | 2 | 60 | | 100 | 40 | | 202 |
| SUMMARY OF SW3P QUANTITIES | 1 | | 2 | 20 | | 20 | 40 | | 82 |
| SHEETS & HOURS SUBTOTAL | 3 | 0 | 6 | 120 | 0 | 220 | 120 | 0 | 466 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,170.00** | **$17,040.00** | **$0.00** | **$20,625.00** | **$10,080.00** | **$0.00** | **$48,915.00** |
| **CONSTRUCTION COST ESTIMATE** | | | | | | | | | |
| 30% ESTIMATE (SEPARATE EBNB & WBNB) | | 2 | 2 | 20 | | 80 | | | 104 |
| 60% ESTIMATE (SEPARATE EBNB & WBNB) | | 2 | 2 | 15 | | 60 | | | 79 |
| 90% ESTIMATE (SEPARATE EBNB & WBNB) | | 2 | 2 | 10 | | 50 | | | 64 |
| 95% ESTIMATE (SEPARATE EBNB & WBNB) | | 2 | 2 | 5 | | 40 | | | 49 |
| FINAL ESTIMATE (SEPARATE EBNB & WBNB) | | 2 | 2 | 2 | | 30 | | | 36 |
| SHEETS & HOURS SUBTOTAL | 0 | 10 | 10 | 52 | 0 | 260 | 0 | 0 | 332 |
| **SUBTOTAL LABOR COSTS** | | **$2,100.00** | **$1,950.00** | **$7,384.00** | **$0.00** | **$24,375.00** | **$0.00** | **$0.00** | **$35,809.00** |

## ATTACHMENT B
## COMPENSATION FOR SCOPE OF SERVICES
## FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)

### Aguirre & Fields

**EBNB & WBNB DIRECT CONNECTORS**

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Senior Structural Engineer | Project Manager | Project Engineer | Design Engineer | EIT | Engineering Technician | Admin Clerical | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $210.00 | $195.00 | $142.00 | $116.00 | $93.75 | $84.00 | $75.00 | |
| **MISCELLANOUS DRAWINGS** | | | | | | | | | |
| TITLE SHEET | 1 | | 1 | 3 | | 5 | 10 | | 19 |
| PROJECT LAYOUT | 6 | | 1 | 20 | | 30 | 70 | | 121 |
| 30% INDEX OF SHEETS | 2 | | 1 | 2 | | 5 | 40 | | 48 |
| 60% INDEX OF SHEETS | 2 | | 1 | 2 | | 5 | 20 | | 28 |
| 90% INDEX OF SHEETS | 2 | | 1 | 2 | | 5 | 10 | | 18 |
| 95% INDEX OF SHEETS | 2 | | 1 | 2 | | 5 | 10 | | 18 |
| FINAL INDEX OF SHEETS | 2 | | 1 | 2 | | 5 | 10 | | 18 |
| SHEETS & HOURS SUBTOTAL | 17 | 0 | 7 | 33 | 0 | 60 | 170 | 0 | 270 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,365.00** | **$4,686.00** | **$0.00** | **$5,625.00** | **$14,280.00** | **$0.00** | **$25,956.00** |
| **PREPARATION AND SUBMITTAL OF PS&E** | | | | | | | | | |
| 30% SUBMITTAL (1 VOLUME) | | 1 | 2 | 10 | | 15 | 30 | | 58 |
| 60% SUBMITTAL (2 VOLUMES) | | 1 | 5 | 10 | | 20 | 50 | | 86 |
| 90% SUBMITTAL (2 VOLUMES) | | 1 | 5 | 10 | | 20 | 50 | | 86 |
| 95% SUBMITTAL (2 VOLUMES) | | 1 | 5 | 10 | | 20 | 50 | | 86 |
| FINAL SUBMITTAL (2 VOLUMES) | | 1 | 5 | 10 | | 20 | 50 | | 86 |
| SHEETS & HOURS SUBTOTAL | 0 | 5 | 22 | 50 | 0 | 95 | 230 | 0 | 402 |
| **SUBTOTAL LABOR COSTS** | | **$1,050.00** | **$4,290.00** | **$7,100.00** | **$0.00** | **$8,906.25** | **$19,320.00** | **$0.00** | **$40,666.25** |
| **PROJECT MANAGEMENT** | | | | | | | | | |
| PROJECT MANAGEMENT (assuming 4 hrs/wk for PM for 12 months) | | | 208 | 50 | | | | 18 | 276 |
| INVOICES, PROGRESS REPORTS & SCHEDULES | | | 36 | 20 | | | | 18 | 74 |
| PROGRESS MEETINGS (monthly, 2 hrs per) | | | 36 | 36 | | | | | 72 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 280 | 106 | 0 | 0 | 0 | 36 | 422 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$54,600.00** | **$15,052.00** | **$0.00** | **$0.00** | **$0.00** | **$2,700.00** | **$72,352.00** |

## ATTACHMENT B
## COMPENSATION FOR SCOPE OF SERVICES
## FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)

### Aguirre & Fields

### EBNB & WBNB DIRECT CONNECTORS

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| DESCRIPTION | QUANTITY | RATE | UNIT | TOTAL COST |
|---|---|---|---|---|
| DIRECT EXPENSES | | | | |
| MILEAGE | 500 | $0.51 | MILE | $255.00 |
| COURIER SERVICES (DELIVERIES) | 20 | $25.00 | EACH | $500.00 |
| PHOTOCOPIES B/W (8-1/2 X 11) | 1000 | $0.10 | EACH | $100.00 |
| PHOTOCOPIES B/W (11 X 17) | 4000 | $0.20 | EACH | $800.00 |
| PHOTOCOPIES COLOR (8-1/2 X 11) | 100 | $0.75 | EACH | $75.00 |
| PHOTOCOPIES COLOR (11 X 17) | 100 | $1.00 | EACH | $100.00 |
| PLOTS (COLOR ON BOND) | 0 | $2.00 | SQUARE FOOT | $0.00 |
| MYLAR (11 X 17) | 500 | $3.50 | SHEET | $1,750.00 |
| CD ARCHIVE | 1 | $1.50 | EACH | $1.50 |
| | | | | $0.00 |
| | | | | $0.00 |
| SUBTOTAL DIRECT EXPENSES | | | | $3,581.50 |

**ATTACHMENT B**
**COMPENSATION FOR SCOPE OF SERVICES**
**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093) INTERCHANGE**

**H&H Resources**

**EBNB & WBNB DIRECT CONNECTORS**
Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Senior Project Manager | Project Manager | Senior Project Engineer | Project Engineer | EIT | Senior Design Tech | Engineer Tech | Admin/Clerical | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $204.17 | $192.34 | $177.54 | $144.99 | $91.73 | $109.49 | $85.81 | $62.14 | |
| DRAINAGE | | | | | | | | | | |
| COORDINATE THROUGH FBGPTRA WITH TXDOT & FBCDD | | | 8 | | 8 | | | | | 16 |
| COORDINATE WITH ROADWAY AND BRIDGE DESIGNERS | | | 8 | | 16 | 16 | | | | 40 |
| CONDUCT FIELD VISITS | | | 4 | | 4 | | | | | 8 |
| REVIEW PREVIOUS PLANS AND DRAINAGE REPORTS | | | 8 | | 24 | 24 | | | | 56 |
| DETERMINE DRAINAGE AREA BOUNDARIES FOR PROJECT LIMITS | | | 4 | | 16 | 40 | | | | 60 |
| DEVELOP INTERNAL DRAINAGE AREA MAPS (1"=100') | 12 | | 24 | | 48 | | 72 | 144 | | 288 |
| DESIGN STORM SEWER SYSTEMS FOR PROPOSED ROADWAYS | | | 8 | | 120 | 40 | | | | 168 |
| ANALYZE EXISTING STORM SEWER IMPACTED BY PROPOSED IMPROVEMENTS | | | 8 | | 40 | 80 | | | | 128 |
| DEVELOP DRAINAGE PLAN AND PROFILE FOR PROPOSED SYSTEMS (1"= | 12 | | 24 | | 48 | | 96 | 192 | | 360 |
| DEVELOP STORM SEWER LATERAL PROFILES | 3 | | 6 | | 12 | | 24 | 36 | | 78 |
| DEVELOP GEOPAK DRAINAGE HYDRAULIC DATA SHEETS | 16 | | 8 | | 16 | | 32 | 64 | | 120 |
| DESIGN ROADSIDE DITCHES | | | 4 | | 24 | 24 | | | | 52 |
| DEVELOP SPECIAL DETAILS | 2 | | 4 | 8 | 16 | | 32 | | | 60 |
| DEVELOP TEMPORARY DRAINAGE PLAN (TO BE PLACED ON TCP) | | | 6 | | 10 | | | 20 | | 36 |
| | | | | | | | | | | |
| SHEETS & HOURS SUBTOTAL | 45 | 0 | 124 | 8 | 402 | 224 | 256 | 456 | 0 | 1470 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$23,850.16** | **$1,420.32** | **$58,285.98** | **$20,547.52** | **$28,029.44** | **$39,129.36** | **$0.00** | **$171,262.78** |
| STANDARD DRAWINGS | | | | | | | | | | |
| DRAINAGE STANDARDS | 8 | | 1 | | 1 | | | 8 | | 10 |
| SHEETS & HOURS SUBTOTAL | 8 | 0 | 1 | 0 | 1 | 0 | 0 | 8 | 0 | 10 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$192.34** | **$0.00** | **$144.99** | **$0.00** | **$0.00** | **$686.48** | **$0.00** | **$1,023.81** |
| QUANTITY TAKE-OFFS AND QUANTITY SUMMARIES | | | | | | | | | | |
| SUMMARY OF STORM SEWER QUANTITIES | 2 | | 8 | | 24 | 24 | | 8 | | 64 |
| SHEETS & HOURS SUBTOTAL | 2 | 0 | 8 | 0 | 24 | 24 | 0 | 8 | 0 | 64 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,538.72** | **$0.00** | **$3,479.76** | **$2,201.52** | **$0.00** | **$686.48** | **$0.00** | **$7,906.48** |
| CONSTRUCTION COST ESTIMATE | | | | | | | | | | |
| 30% ESTIMATE (SEPARATE EBNB & WBNB) | | | 2 | | 4 | 4 | | | | 10 |
| 60% ESTIMATE (SEPARATE EBNB & WBNB) | | | 2 | | 4 | 4 | | | | 10 |
| 90% ESTIMATE (SEPARATE EBNB & WBNB) | | | 2 | | 4 | 4 | | | | 10 |

**ATTACHMENT B**
**COMPENSATION FOR SCOPE OF SERVICES**
**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093) INTERCHANGE**

**H&H Resources**

**EBNB & WBNB DIRECT CONNECTORS**

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Senior Project Manager | Project Manager | Senior Project Engineer | Project Engineer | EIT | Senior Design Tech | Engineer Tech | Admin/Clerical | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $204.17 | $192.34 | $177.54 | $144.99 | $91.73 | $109.49 | $85.81 | $62.14 | |
| 95% ESTIMATE (SEPARATE EBNB & WBNB) | | | 2 | | 4 | 4 | | | | 10 |
| FINAL ESTIMATE (SEPARATE EBNB & WBNB) | | | 2 | | 4 | 4 | | | | 10 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 10 | 0 | 20 | 20 | 0 | 0 | 0 | 50 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$1,923.40** | **$0.00** | **$2,899.80** | **$1,834.60** | **$0.00** | **$0.00** | **$0.00** | **$6,657.80** |
| **PREPARATION AND SUBMITTAL OF PS&E** | | | | | | | | | | |
| 30% SUBMITTAL | | 8 | 8 | | | | | | | 16 |
| 60% SUBMITTAL | | 8 | 8 | | | | | | | 16 |
| 90% SUBMITTAL | | 8 | 8 | | | | | | | 16 |
| 95% SUBMITTAL | | 8 | 8 | | | | | | | 16 |
| 100% SUBMITTAL | | 8 | 8 | | | | | | | 16 |
| SHEETS & HOURS SUBTOTAL | 0 | 40 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 80 |
| **SUBTOTAL LABOR COSTS** | | **$8,166.80** | **$7,693.60** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$15,860.40** |
| **PROJECT MANAGEMENT** | | | | | | | | | | |
| PROJECT MANAGEMENT (12 months) | | 12 | 12 | | | | | | 12 | 36 |
| SHEETS & HOURS SUBTOTAL | 0 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 12 | 36 |
| **SUBTOTAL LABOR COSTS** | | **$2,450.04** | **$2,308.08** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$745.68** | **$5,503.80** |
| **TOTAL LABOR COSTS** | | **$10,616.84** | **$37,506.30** | **$1,420.32** | **$64,810.53** | **$24,583.64** | **$28,029.44** | **$40,502.32** | **$745.68** | **$208,215.07** |
| **DIRECT EXPENSES** | | | | | | | | | | **$500.00** |
| **TOTAL COSTS** | | | | | | | | | | **$208,715.07** |

**ATTACHMENT B**
**COMPENSATION FOR SCOPE OF SERVICES**
**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)**

**Progressive Traffic & Transportation**

**EBNB & WBNB DIRECT CONNECTORS**

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Principal | Project Manager | Project Engineer | Engineering Technician | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $180.00 | $165.00 | $142.00 | $80.00 | |
| TRAFFIC | | | | | | |
| SIGNING & PAVEMENT MARKINGS LAYOUT | 16 | 4 | 56 | 100 | 200 | 360 |
| OVERHEAD SIGN ELEVATIONS | 6 | 2 | 8 | 56 | 90 | 156 |
| LARGE SIGN DETAILS | 6 | 2 | 4 | 64 | 90 | 160 |
| ILLUMINATION LAYOUTS | 11 | 4 | 56 | 100 | 100 | 260 |
| ILLUMINATION CIRCUIT DIAGRAM | 2 | 2 | 14 | 30 | 20 | 66 |
| ILLUIMINATION DETAILS | 2 | 2 | 4 | 8 | 20 | 34 |
| SHEETS & HOURS SUBTOTAL | 43 | 16 | 142 | 358 | 520 | 1036 |
| **SUBTOTAL LABOR COSTS** | | **$2,880.00** | **$23,430.00** | **$50,836.00** | **$41,600.00** | **$118,746.00** |
| GENERAL NOTES AND SPECIFICATIONS | | | | | | |
| GENERAL NOTES AND SPECIFICATIONS | 0 | 2 | 2 | 4 | | 8 |
| SHEETS & HOURS SUBTOTAL | 0 | 2 | 2 | 4 | 0 | 8 |
| **SUBTOTAL LABOR COSTS** | | **$360.00** | **$330.00** | **$568.00** | **$0.00** | **$1,258.00** |
| STANDARD DRAWINGS | | | | | | |
| TRAFFIC STANDARDS | 49 | 2 | 2 | 2 | | 6 |
| SHEETS & HOURS SUBTOTAL | 49 | 2 | 2 | 2 | 0 | 6 |
| **SUBTOTAL LABOR COSTS** | | **$360.00** | **$330.00** | **$284.00** | **$0.00** | **$974.00** |
| QUANTITY TAKE-OFFS AND QUANTITY SUMMARIES | | | | | | |
| SUMMARY OF ILLUMINATION QUANTITIES | 1 | 1 | 10 | 30 | | 41 |
| SUMMARY OF PAVEMENT MARKING QUANITITES | 1 | 1 | 10 | 30 | | 41 |
| SUMMARY OF OVERHEAD SIGN STRUCTURES | 1 | 1 | 10 | 30 | | 41 |
| LARGE SIGN SUMMARY | 1 | 1 | 10 | 30 | | 41 |
| SMALL SIGN SUMMARY | 1 | 1 | 10 | 30 | | 41 |
| SHEETS & HOURS SUBTOTAL | 5 | 5 | 50 | 150 | 0 | 205 |
| **SUBTOTAL LABOR COSTS** | | **$900.00** | **$8,250.00** | **$21,300.00** | **$0.00** | **$30,450.00** |
| CONSTRUCTION COST ESTIMATE | | | | | | |
| 30% ESTIMATE (SEPARATE EBNB & WBNB) | | 1 | 3 | 12 | | 16 |
| 60% ESTIMATE (SEPARATE EBNB & WBNB) | | 1 | 2 | 8 | | 11 |
| 90% ESTIMATE (SEPARATE EBNB & WBNB) | | 1 | 2 | 8 | | 11 |

**ATTACHMENT B**
**COMPENSATION FOR SCOPE OF SERVICES**
**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)**

**Progressive Traffic & Transportation**

**EBNB & WBNB DIRECT CONNECTORS**

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Principal | Project Manager | Project Engineer | Engineering Technician | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $180.00 | $165.00 | $142.00 | $80.00 | |
| 95% ESTIMATE (SEPARATE EBNB & WBNB) | | 1 | 2 | 4 | | 7 |
| FINAL ESTIMATE (SEPARATE EBNB & WBNB) | | 1 | 3 | 8 | | 12 |
| SHEETS & HOURS SUBTOTAL | 0 | 5 | 12 | 40 | 0 | 57 |
| **SUBTOTAL LABOR COSTS** | | **$900.00** | **$1,980.00** | **$5,680.00** | **$0.00** | **$8,560.00** |
| **PREPARATION AND SUBMITTAL OF PS&E** | | | | | | |
| 30% SUBMITTAL | | 1 | 1 | 4 | | 6 |
| 60% SUBMITTAL | | 1 | 1 | 4 | | 6 |
| 90% SUBMITTAL | | 1 | 1 | 4 | | 6 |
| 95% SUBMITTAL | | 1 | 1 | 4 | | 6 |
| 100% SUBMITTAL | | 1 | 4 | 8 | | 13 |
| SHEETS & HOURS SUBTOTAL | 0 | 5 | 8 | 24 | 0 | 37 |
| **SUBTOTAL LABOR COSTS** | | **$900.00** | **$1,320.00** | **$3,408.00** | **$0.00** | **$5,628.00** |
| **PROJECT MANAGEMENT** | | | | | | |
| PROJECT MANAGEMENT (12 months) | | | 60 | | | 60 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 60 | 0 | 0 | 60 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$9,900.00** | **$0.00** | **$0.00** | **$9,900.00** |
| **TOTAL LABOR COSTS** | | **$6,300.00** | **$45,540.00** | **$82,076.00** | **$41,600.00** | **$175,516.00** |
| **DIRECT EXPENSES** | | | | | | **$1,000.00** |
| **TOTAL COSTS** | | | | | | **$176,516.00** |

**ATTACHMENT B**
**COMPENSATION FOR SCOPE OF SERVICES**
**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)**

**Geotech Engineering and Testing**

**EBNB & WBNB DIRECT CONNECTORS**
Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Principal Engineer | Senior Engineer | Graduate Engineer | Field Technician | Typing/ Drafting | Unit of Measure | Estimated Qty | Rate | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $200.00 | $125.00 | $98.00 | $50.00 | $46.00 | | | | |
| DESKTOP GEOLOGIC FAULT STUDY | | | | | | | | | | |
| REVIEW OF EXISTING PUBLISHED FAULT MAPS AND AERIAL IMAGERY | | | | 4 | | | | | | 4 |
| REPORTING | | 1 | 2 | | | | | | | 3 |
| SHEETS & HOURS SUBTOTAL | 0 | 1 | 2 | 4 | 0 | 0 | | | | 7 |
| **SUBTOTAL LABOR COSTS** | | **$200.00** | **$187.50** | **$392.00** | **$0.00** | **$0.00** | | | **$0.00** | **$779.50** |
| PROJECT INITIATION | | | | | | | | | | |
| PROJECT COORDINATION | | 2 | 2 | 6 | | | | | | 10 |
| SHEETS & HOURS SUBTOTAL | 0 | 2 | 2 | 6 | 0 | 0 | | | | 10 |
| **SUBTOTAL LABOR COSTS** | | **$400.00** | **$250.00** | **$588.00** | **$0.00** | **$0.00** | | | **$0.00** | **$1,238.00** |
| FIELD INVESTIGATION | | | | | | | | | | |
| DEVELOP DRILLING PLAN | | | 1 | 4 | | | | | | 5 |
| STAKE BORINGS (17) | | | | 13 | | | | | | 13 |
| COORDINATE WITH SURVEYORS TO TIE IN BORINGS | | | | 2 | | | | | | 2 |
| UTILITY CLEARANCE | | | | 35 | | | | | | 35 |
| TECHNICIAN, BOREHOLE LOGGING | | | | | 300 | | | | | 300 |
| REVIEW BORING LOGS | | | | 13 | | | | | | 13 |
| VEHICLE CHARGE | | | | | | | EA | 35 | $ 55.00 | $ 1,925.00 |
| MOBILIZATION/DEMOBILIZATION | | | | | | | LS | 2 | $ 400.00 | $ 800.00 |
| DRILL AND SAMPLE (0'-20') | | | | | | | LF | 520 | $ 18.00 | $ 9,360.00 |
| DRILL AND SAMPLE (20'-50') | | | | | | | LF | 780 | $ 21.00 | $ 16,380.00 |
| DRILL AND SAMPLE (50'-120') | | | | | | | FT | 1610 | $ 24.00 | $ 38,640.00 |
| TCP SAMPLING | | | | | | | EA | 582 | $ 23.00 | $ 13,386.00 |
| CLEANUP | | | | | | | HR | 14 | $ 152.00 | $ 2,128.00 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 1 | 67 | 300 | 0 | | | | 368 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$125.00** | **$6,566.00** | **$15,000.00** | **$0.00** | | | **$82,619.00** | **$104,310.00** |

**ATTACHMENT B**
**COMPENSATION FOR SCOPE OF SERVICES**
**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)**

**Geotech Engineering and Testing**

**EBNB & WBNB DIRECT CONNECTORS**

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Principal Engineer | Senior Engineer | Graduate Engineer | Field Technician | Typing/ Drafting | Unit of Measure | Estimated Qty | Rate | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $200.00 | $125.00 | $98.00 | $50.00 | $46.00 | | | | |
| **LABORATORY TESTING** | | | | | | | | | | |
| REVIEW SAMPLES, ASSIGN TESTS | | | 4 | 15 | | | | | | 19 |
| DATA REDUCTION AND EVALUATION | | | | 15 | | | | | | 15 |
| WATER CONTENT (ALL SAMPLES) | | | | | | | EA | 1455 | $ 8.00 | $ 11,640.00 |
| LIQUID AND PLASTIC LIMITS | | | | | | | EA | 291 | $ 53.00 | $ 15,423.00 |
| PERCENT PASSING #200 SIEVE | | | | | | | EA | 261 | $ 41.00 | $ 10,701.00 |
| SIEVE ANALYSIS WITH HYDROMETER | | | | | | | EA | 30 | $ 110.00 | $ 3,300.00 |
| TORVANE | | | | | | | EA | 1455 | $ 4.00 | $ 5,820.00 |
| HAND PENETROMETER | | | | | | | EA | 1455 | $ 3.00 | $ 4,365.00 |
| UNCONFINED COMPLRESSION | | | | | | | EA | 180 | $ 39.00 | $ 7,020.00 |
| UU CONSOLIDATED UNDRAINED TRIAXIAL | | | | | | | EA | 121 | $ 54.00 | $ 6,534.00 |
| CU TRIAXIAL TEST | | | | | | | EA | 6 | $ 1,800.00 | $ 10,800.00 |
| CONSOLIDATION TEST | | | | | | | EA | 11 | $ 310.00 | $ 3,410.00 |
| ADDITIONAL INCREMENTS | | | | | | | EA | 44 | $ 44.00 | $ 1,936.00 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 4 | 30 | 0 | 0 | | | | 34 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$500.00** | **$2,940.00** | **$0.00** | **$0.00** | | | **$80,949.00** | **$84,389.00** |
| **ENGINEERING ANALYSIS AND REPORT** | | | | | | | | | | |
| PREPARE PLAN OF BORINGS | | | | 1 | | | | | | 1 |
| ANALYZE FIELD AND LAB TESTS RESULTS | | | | 9 | | | | | | 9 |
| PREPARE SUMMARY OF TEST DATA | | | | 15 | | | | | | 15 |
| PREPARE AND DEVELOP BORING LOG PROFILES | | | 7 | 54 | | | | | | 61 |
| DEVELOP GEOTECHNICAL RECOMMENDATIONS | | | | | | | | | | 0 |
| DEVELOP PARAMTERS FOR OPEN CUT EXCAVATION AND AUGURING | | | 2 | 9 | | | | | | 11 |
| DEVELOP EXCAVATION SUPPORT FOR TRENCH EXCAVATION | | | 2 | 4 | | | | | | 6 |
| RECOMMENDED EXCAVATION DEWATERING METHOD | | | 2 | 3 | | | | | | 5 |
| PIPE BEDDING AND BACKFILL | | | 2 | 3 | | | | | | 5 |
| UTILITITY SOIL DESIGN PARAMETERS | | | 2 | 6 | | | | | | 8 |
| TRENCH SAFETY LETTER REPORT | | 2 | 2 | 10 | | | | | | 14 |

**ATTACHMENT B**
**COMPENSATION FOR SCOPE OF SERVICES**
**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093)**

**Geotech Engineering and Testing**

**EBNB & WBNB DIRECT CONNECTORS**

Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | Principal Engineer | Senior Engineer | Graduate Engineer | Field Technician | Typing/ Drafting | Unit of Measure | Estimated Qty | Rate | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $200.00 | $125.00 | $98.00 | $50.00 | $46.00 | | | | |
| PAVEMENT SUBGRADE STABILIZATION | | | 1 | 2 | | | | | | 3 |
| MSE WALL RECOMMENDATIONS | | | | | | | | | | 0 |
| BEARING CAPACITY | | 2 | 2 | 2 | | | | | | 6 |
| SETTLEMENT | | 6 | 12 | 40 | | | | | | 58 |
| STABILITY | | 6 | 12 | 40 | | | | | | 58 |
| EMBANKMENT SLOPE STABILITY PARAMETERS | | | 2 | 4 | | | | | | 6 |
| PERFORM SLOPE STABILITY ANALYSIS | | 6 | 12 | 24 | | | | | | 42 |
| EROSION PROTECTION RECOMMENDATIONS | | | 1 | 4 | | | | | | 5 |
| DRILLED FOOTING AND PIER FOUNDATION AXIAL CAPACITY | | 12 | 24 | 54 | | | | | | 90 |
| L-PILE PARAMETERS | | 4 | 8 | 14 | | | | | | 26 |
| CONSTRUCTABILITY EVALUATION | | 3 | 6 | 6 | | | | | | 15 |
| REPORT | | 36 | 70 | 180 | | | | | | 286 |
| TYPING/DRAFTING | | | | | | 90 | | | | 90 |
| REPORT PRODUCTION | | | | | | | EA | 1 | $ 1,000.00 | $ 1,000.00 |
| SHEETS & HOURS SUBTOTAL | 0 | 77 | 167 | 484 | 0 | 90 | | | | 818 |
| **SUBTOTAL LABOR COSTS** | | **$15,400.00** | **$20,875.00** | **$47,432.00** | **$0.00** | **$4,140.00** | | | **$1,000.00** | **$88,847.00** |
| ATV RIG ANALYSIS (ALLOWANCE) | | | | | | | | | | |
| MOBILIZATION/DEMOBILIZATION | | | | | | | LS | 2 | $ 117.00 | $ 234.00 |
| DRILLING AND SAMPLING SURCHARGE | | | | | | | FT | 2910 | $ 6.00 | $ 17,460.00 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | | | **$17,694.00** | **$17,694.00** |
| PIEZOMETER INSTALLATION, 30' DEEP (ALLOWANCE) | | | | | | | | | | |
| MONITORING INSTALLATION | | | | | | 16 | | | | 16 |
| MONITORING READINGS | | | | | | 8 | | | | |
| INSTALLATION | | | | | | | EA | 1 | $ 3,107.50 | $ 3,107.50 |
| VEHICLE CHARGE | | | | | | | EA | 4 | $ 55.00 | $ 220.00 |
| SHEETS & HOURS SUBTOTAL | 0 | 0 | 0 | 0 | 0 | 24 | | | | 24 |
| **SUBTOTAL LABOR COSTS** | | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$1,104.00** | | | **$3,327.50** | **$4,431.50** |
| **TOTAL COSTS** | | | | | | | | | | **$301,689.00** |

**ATTACHMENT B**
**COMPENSATION FOR SCOPE OF SERVICES**
**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) /WESTPARK TOLLWAY (FM 1093) INTERCHANGE**

**Weisser Engineering & Surveying**

**EBNB & WBNB DIRECT CONNECTORS**
Limits: Westpark Tollway (FM 1093) Eastbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound
Limits: Westpark Tollway (FM 1093) Westbound to Fort Bend Grand Parkway Toll Road (SH 99) Northbound

| TASK DESCRIPTION | NUMBER OF SHEETS | PROJECT MANAGER (RPLS) | FIELD SUPERVISOR | SURVEY TECHNICIAN | 3 PERSON CREW | CADD SUPPORT | ADMIN | | | TOTAL LABOR HRS & COSTS |
|---|---|---|---|---|---|---|---|---|---|---|
| LABOR RATE PER HOUR | | $140.00 | $85.00 | $95.00 | $155.00 | $90.00 | $50.00 | | | |
| SURVEY | | | | | | | | | | |
| SURVEY | | 3 | 10 | 29 | 55 | 55 | 4 | | | 156 |
| SHEETS & HOURS SUBTOTAL | 0 | 3 | 10 | 29 | 55 | 55 | 4 | 0 | 0 | 156 |
| **SUBTOTAL LABOR COSTS** | | **$420.00** | **$850.00** | **$2,755.00** | **$8,525.00** | **$4,950.00** | **$200.00** | **$0.00** | **$0.00** | **$17,700.00** |
| **EXPENSES** | | | | | | | | | | |
| TRAFFIC CONTROL | | | | | | | LS | 1 | $ 600.00 | $600.00 |
| **SUBTOTAL LABOR COSTS** | | | | | | | | | | **$600.00** |
| | | | | | | | | | **TOTAL** | **$18,300.00** |

## 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."