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 Terracon Consultants, 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 construct Toll Road grade separation structures from US 59 to north of the Fort Bend Westpark Tollway (FM 1093) in Fort Bend County, Texas, called the Fort Bend Grand Parkway Toll Road, Segment D (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 and Attachment A-1.

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 \$183,250.98. 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 \$183,250.98, 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.

Compensation for services described in Attachment A-1 will be paid per the rates described in Attachment B-1 only for work authorized in writing prior to being performed and only for such work as was actually performed. 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.
- đ. 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 200 calendar days from that date.

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 3(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:

- ENGINEER WILL INDEMNIFY AND HOLD HARMLESS THE a. FBGPTRA, ITS DIRECTORS, OFFICERS, AND EMPLOYEES AGAINST ANY CLAIMS, DEMANDS OR CAUSES OF ACTION; AND COSTS, LOSSES, LIABILITIES, EXPENSES AND JUDGMENTS INCURRED IN **INCLUDING** REASONABLE CONNECTION THEREWITH, 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. <u>Termination</u>, 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 Terracon Consultants, Inc., 11555 Clay Road, Houston, Texas 77043, Attention: Brandon Smith, P.E., 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.

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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 A-1 Additional Services

Attachment B Compensation for Scope of Services

Attachment B-1 Compensation for Additional 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 12011.

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

James D. Condrey

Chairman, Board of Directors

ATTEST:

By_

Secretary, Board of Directors

Terracon Consultants, ENGINEER

(

Name:

Title: Vice Provide

ATTACHMENT A SCOPE OF SERVICES

FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) - SEGMENT D

GEOTECHNICAL SERVICES

A. PROJECT INFORMATION

We understand this project involves the construction of an approximate 2.2 mile segment of SH 99 between the Brazos River and approximately 2,200 feet north of Bullhead Slough in Fort Bend County, Texas. Based on the information provided to us, Terracon's scope of geotechnical engineering services includes four (4) bridges and additional structures along the alignment of this project.

We understand that the four bridges are planned at New Territory Boulevard, Ellis Creek, US 90, and Bullhead Slough. The bridges are planned to consist of elevated roadways, as well as roadways supported on mechanically stabilized earth (MSE) walls. We anticipate that steel and concrete spans will be constructed with span lengths varying from about 100 to 300 feet. In addition, the MSE walls are planned to have maximum heights of about 25 feet.

We understand the additional structures will include toll gantries and storm sewers. We also understand the bridge foundations and the MSE walls will be designed in accordance with TxDOT design guidelines. We understand recommendations for overhead sign foundations are not requested at this time.

B. SCOPE OF SERVICES

A brief summary of the services to be provided by Terracon is provided in the following paragraphs.

<u>Field Program</u>. As requested, the field program for this project will consist of the following borings:

Structure :	Numberior Borings	Boring Depth (fee)
Bridges	15	100
Retaining Walls	9	35
Toll Gantries	6	50

The total drilling footage planned for this project is 2,115 feet. Traffic control may also be required for the planned borings for this project. Traffic control may require flagmen, signaling devices, barricades, and cones. We will prepare the necessary documentation to request drilling permits from the governing agencies. Our scope of services assumes no borings are required to be drilled within existing pavement areas.

In addition to the borings, we plan to install four piezometers to depths of 35 feet within borings drilled for this project to observe groundwater levels in the area of the bridges. We plan to observe water levels in the installed piezometers at 24-hours, 7 days, and 30 days. After our groundwater observations, the piezometers are planned to be abandoned in place. Maintenance of the piezometers and groundwater readings beyond 30 days are outside of our scope of services.

We plan to utilize multiple drill rigs for this project. The drilling rigs will be equipped to drill using both dry-auger and wet-rotary techniques. During drilling, the TxDOT cone penetrometer tests will be performed on 5-foot intervals throughout the depth of the exploratory borings. Test samples will generally be collected utilizing either open-tube samplers or the Standard Penetration Test. Once the samples have been collected and classified in the field, they will be properly prepared and placed in appropriate sample containers for transport to our laboratory. After completion, the borings will be backfilled with cement grout or bentonite chips.

We plan to use all-terrain (ATV) mounted drilling equipment to access the boring locations. This scope assumes that the site can be accessed during normal business hours (Monday through Friday from 8:00 AM to 5:00 PM) and does not include services associated with surveying of boring locations, clearing of pathways, locating of underground utilities, or use of equipment for soft or wet surface conditions. If such conditions are known to exist on the site, Terracon should be notified so that we may adjust our scope of services and estimated fees if necessary.

Terracon will notify DIG TESS, a utility location service, to locate primary utilities along the roadway easements. If underground utilities are known to exist in the vicinity of the borings, Terracon should be given the opportunity to review utility plans to avoid the existing lines. Terracon cannot be responsible for damage to utilities for which we are unaware or are incorrectly located in the field.

<u>Laboratory Testing</u>. The sample classifications will be reviewed by a Geotechnical Engineer in the laboratory, and a laboratory testing program will be assigned which will be specific to the project requirements and the subsurface conditions observed. The testing program could include moisture contents, unit dry weights, Atterberg limits, unconsolidated-undrained Triaxial shear tests, sieve analyses, and hydrometer tests. Consolidation testing will be performed on selected samples to estimate settlements resulting from new MSE wall fill placement.

<u>Engineering Reports</u>. The results of our field and laboratory programs will be evaluated by a professional Geotechnical Engineer licensed in the State of Texas. Based on the results of our evaluation and the project data provided with your authorization, a draft engineering report will be prepared for the project which will detail the results of the testing performed, and provide Boring Logs and a Boring Location Plan. The draft report will also provide geotechnical engineering recommendations in accordance with TxDOT requirements, which will address the following:

Site and subgrade preparation;

- Foundation design and construction;
- MSE retaining wall design guidelines, including global stability, bearing capacity, overturning, and sliding analyses;
- Estimated settlements of MSE retaining walls;
- D50 values for soils observed near Bullhead Slough and Ellis Creek; and
- Storm sewer design and construction considerations.

The report will also provide skin friction tables and design capacity curves for driven piles and drilled shaft foundations using TxDOT's Wincore software. We will finalize the report once the draft report has been reviewed by TxDOT and the review comments have been provided to Terracon.

Our scope of services does not include lateral load analyses or providing lateral load parameters for any of the foundations. If requested, we would be glad to provide a cost estimate for such analyses.

<u>Schedule.</u> As discussed, we plan to initiate requests for drilling permits as soon as this cost estimate is accepted. Once site access is provided and we are authorized to begin drilling, we anticipate that drilling will take about 12 to 20 working days to complete with multiple drill rigs.

We plan to begin laboratory testing as the drilling progresses. However, we anticipate that the laboratory testing program will be completed within 3 to 4 weeks after completion of drilling. Draft boring logs and preliminary design information will be provided soon after completion of laboratory testing. The draft report without global stability and settlement analyses is planned to be submitted about three weeks after the completion of laboratory testing. The draft report with global stability and settlement analysis will then be submitted about three weeks after the submission of the original draft report and upon receiving drawings for the MSE walls. Assuming nominal comments on the draft report, we estimate the final geotechnical engineering report will take approximately three weeks to complete after we review all provided comments.

Anticipated Time After: Receiving Notice to Proceed:	Deliverable	
12 weeks from NTP	Draft Report without Global Stability / Settlement Analyses	
15 weeks from NTP	Draft Report with Global Stability / Settlement Analyses	

C. ESTIMATED COSTS

The itemization of the estimated costs is attached. The estimated costs assume that all review comments on the draft reports will be provided to Terracon so that the report will be finalized only once. We assume that comments on the draft reports will be provided to us within a month of submitting the draft reports.

Additional draft/final reports and/or copies if required, attendance at meetings, and any services requested after submittal of the final report will be invoiced in accordance with the attached unit rates in concurrence with your approval. Any project and/or scope changes requiring additional or revised analyses will also incur additional charges. We will provide you an estimate of additional charges for authorization prior to executing the scope changes. Field standby time is included to the extent shown in the Itemized Cost Estimates included as attachments. The cost of our services will not exceed the authorized amounts without approval of the Client. In summary, the estimated costs are as follows:

ATTACHMENT A-1 ADDITIONAL SERVICES

Fort Bend Grand Parkway Toll Road - Segment D

There are no additional services included in the initial scope of work, and no additional services are to be performed without approval of FBGPTRA. Additional services, if and when required, will be at additional expense, authorized in writing, and performed at the rates described in Attachment B-1 Compensation for Additional Services.

ATTACHMENT B COMPENSATION FOR SCOPE OF SERVICES FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) – SEGMENT D

FEE SCHEDULE SUMMARY

Field	Investigation				
Item	Description Advanced	Amount	¿ Unit	Rate/Unit	. Cost
1	Mobilization/Demobilization	2	Each	\$300.00	\$600.00
2		2	Each	\$117.00	\$234.00
3	Drill and Sample, 0 to 50 feet	1,365	Foot	\$16.00	\$21,840.00
4	Drill and Sample, 50 to 100 feet	750	Foot	\$18.00	\$13,500.00
5	ATV Drilling Surcharge	2,115	Foot	\$6.00	\$12,690.00
6		423	Each	\$23.00	\$9,729.00
7	Supplies for Drilling	1	LS	\$500.00	\$500.00
8	A SACRETURE OF PROPERTY AND PRO	2,115	Foot	\$5.00	\$10,575.00
9		140	Foot	\$80.00	\$11,200.00
10	Drill Crew Stand-by	36	Hour	\$146.00	\$5,256.00
11	Project Engineer (coordination)	42	Hour	\$100.95	\$4,239.90
12	Engineering Technicians	310	Hour	\$54.75	\$16,972.50
13	Rental of Traffic Control	3	Weeks	\$2,000.00	\$6,000.00
14	(500	Mile	\$0.50	\$250.00
Subtotal for Field Investigation =			\$113,586.40		
Labor	atony: Nesting	A. Santa A.			
	Description	Amount	Unit	Rate/Unit	(Cost
1	Liquid and Plastic limit	88	Each	\$53.00	\$4,664.00
2	Unconsolidated Undrained Triaxial	50	Each	\$54.00	\$2,700.00
3	Unconfined Compressive Strength	108	Each	\$39.00	\$4,212.00
4	The same of the same and the sa	118	Each	\$8.00	\$944.00
5	Percent Finer than No. 200 Sieve	64	Each	\$41.00	\$2,624.00
6	The second control of	6	Each	\$49.00	294.00
7	and the same of th	8	Each	\$110.00	\$880.00
8	Control of the contro	20	Each	\$500.00	\$10,000.00
	Sul	btotal for L	aborator	y Testing =	\$26,318.00
					and the second s
Engin	eering Analyses & Reporting :: 🛶 🛼				
	Description 1	Amount	- Unit	Rate/Unit	Cost
1	Principal Engineer	46	Hour	\$171.93	\$7,908.78
2	Project Engineer	148	Hour	\$100.95	\$14,940.60
3		215	Hour	\$90.00	\$19,350.00
4	Drafting/CADD	12	Hour	\$57.00	\$684.00
5	Clerical	8	Hour	\$57.90	\$463.20
	Subtotal for Engine	and the second second second second second second			\$43,346.58
		TOTAL E	STIMAT	ED COST =	\$183,250.98

ATTACHMENT B-1 COMPENSATION FOR ADDITIONAL SERVICES FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) – SEGMENT D

MAXIMUM LOADED SALARY RATES

JobiDescholon.	g, Maximum Hourly Rate
Principal Engineer	\$171.93
Senior Engineer	\$150.00
Project Engineer	\$100.95
Staff Engineer	\$90.00
Field Technician	\$54.75
Drafting/CADD	\$57.00
Clerical	\$ 57.90

DIRECT EXPENSE RATES

item	i Unit	- · Fate/Unit
Mileage	Mile	IRS allowance
Deliveries (FedEx/Courier)	Each	Cost + 10%
Miscellaneous Expenses	Each	Cost + 10%

DRILLING CHARGES

item	i sylnit	Rate/Unit:
Mobilization/Demobilization	Each	\$300.00
ATV Mobilization Surcharge	Each	\$117.00
Drill and Sample, 0 to 50 feet	Foot	\$16.00
Drill and Sample, 50 to 100 feet	Foot	\$18.00
ATV Drilling Surcharge	Foot	\$6.00
THD Cone Penetration Test	Each	\$23.00
Grouting Borings	Foot	\$5.00
Drill Crew Stand-by	Hour	\$146.00
Pavement Coring and Patching	Each	\$100.00

LABORATORY TESTING CHARGES

ltem		Rate/Unit
Liquid and Plastic limit	Each	\$53.00
Unconsolidated Undrained Triaxial	Each	\$54.00
Unconfined Compressive Strength	Each	\$39.00
Moisture Content	Each	\$8.00
Percent finer than No. 200 Sieve	Each	\$41.00
Sieve Analysis	Each	\$49.00
Sieve Analysis w/ Hydrometer	Each	\$110.00
Consolidation	Each	\$500.00

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."