

**SUPPLEMENTAL AGREEMENT NO. 2
TO
AGREEMENT OF MARCH 21, 2012
FOR
ENGINEERING SERVICES for
Fort Bend Grand Parkway Toll Road, Segment D**

This Supplemental Agreement No. 2 is made and entered into this 17th day of April, 2013, and modifies the ENGINEERING SERVICES AGREEMENT by and between Terra Associates, Inc. and Fort Bend Grand Parkway Toll Road Authority, dated March 21, 2012, for engineering services for the Fort Bend Grand Parkway Toll Road, Segment D, as amended by Supplemental Agreement No. 1 dated October 17, 2012.

The agreement is hereby modified as follows:

1. The first sentence of Section 2.a is replaced with the following sentence:

“The Maximum Compensation under this contract is \$89,256.50.”

2. The second paragraph of Section 2.a is replaced with the following paragraph:


“Compensation for performance of services within the Scope of Services described in Attachment A will be as follows: The lump sum compensation shall be increased by \$39,540.75, for the additional work shown in Attachment A. The maximum amount payable under this agreement shall not exceed \$89,256.50, 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 the agreed upon milestones of completion in the reasonable opinion of FBGPTRA.”

3. The Scope of Services shown in Attachment A shall be expanded to include Exhibit A-2, attached hereto.
4. The Compensation for Scope of Services shown in Attachment B shall be expanded to include Exhibit B-2, attached hereto.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, this Supplemental Agreement is hereby executed as of the
date first set forth above.

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

By: 
James Condrey
Chairman, Board of Directors

ATTEST:

By 

Terra Associates, Inc.
ENGINEER

By: 

Name: LYLE HENKEL

Title: PRESIDENT

**EXHIBIT A-2
ATTACHMENT A
ADDITIONAL SCOPE OF SERVICES
Supplemental Agreement No. 2**

**FORT BEND GRAND PARKWAY TOLL ROAD (SH 99) – SEGMENT D
DESIGN SERVICES**

TRAFFIC SIGNAL DESIGN SERVICES (SECTIONS 3 & 10)

Project Limits: Sandhill Drive, US 90A, FM 1464, FM 1093 Intersections

GENERAL DESCRIPTION

The work to be performed by the Engineer under this scope of work consists of providing traffic signal design engineering services for Sections 3 and 10 at the intersections of SH 99 and Sandhill Drive, US 90A, FM 1464, and FM 1093. The following is a detailed list of tasks which will be performed by the Engineer for this portion of Segment D.

1) TRAFFIC SIGNAL DESIGN

a) General notes and specifications

b) Plan sheet(s)

- 1) Use existing topographic survey between the frontage roads and supplement it by drawing pavement edges, conduit, ground boxes, electrical service, and signal and pedestrian poles based on aerials and field visits.
- 2) Re-wire existing intersection, using existing conduit and ground boxes, including all pedestrian and vehicle heads, pedestrian push buttons, and VIVDS cameras.
- 3) Install new cabinet and controller with battery backup and GPS (specifications to be provided)
- 4) Replace all signal heads changed to black 12" LED with black shield if currently not existing (TxDOT standard)
- 5) Existing utilities (based on utility files provided)
- 6) Relocate traffic signal cabinet at the intersections of SH 99 at US 90A and FM 1093 to raise cabinet out of depressed roadway section to avoid flooding of cabinet equipment in the event of a TxDOT pump station malfunction. Locating the cabinet to natural ground level is desirable.

c) TxDOT Standards

- 1) Select TxDOT standard sheets for items such as conductors and signal equipment
- 2) Controller Foundation standard sheet (Provided)

d) Quantity take-offs and quantity summary for each intersection

1) Quantity Summary by Intersection

e) Preparation and submittal of PS&E

1) 50%

2) 90%

3) Final

2) PROJECT MANAGEMENT

a) Project file set up, coordination, invoicing, and overall management of the project

DELIVERABLES

1. 11"x17" paper plots of Signal drawings along with notes and quantity take off, cost estimate and specifications for 50% submittal
2. 11"x17" paper plots of Signal drawings along with notes and quantity take off, cost estimate and specifications for 90% submittal
3. 11"x17" paper plots of Signal drawing along with notes, quantity take off, cost estimate and specifications for Final submittal

SCHEDULE

1. Signal drawings for 50% submittal milestone will be submitted in four (4) weeks from the date we receive finalized CAD files of all the three intersection configuration with existing conditions from Brown & Gay.\
2. Turnaround time for 90% submittal is three (3) weeks from the date we receive all the red line comments on 50% submittal.
3. Turnaround time for Final (mylar) submittal is two (2) weeks from the date we receive all the red line comments on 90% submittal.

SUPPLEMENTAL AGREEMENT NO. 2

EXHIBIT B-2

ATTACHMENT B

COMPENSATION FOR SCOPE OF SERVICES

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

TERRA ASSOCIATES, INC.

TRAFFIC SIGNAL DESIGN SERVICES (SECTIONS 3 & 10)

Project Limits: Sandhill Drive, US 90A, FM 1464, FM 1093 Intersections

TASK DESCRIPTION	NUMBER OF SHEETS	PROJECT MANAGER	EIT	CADD TECH	CLERICAL	TOTAL LABOR HRS & COSTS
LABOR RATE PER HOUR		\$195.00	\$99.00	\$87.00	\$69.00	
TRAFFIC SIGNAL DESIGN						
GENERAL NOTES & SPECIFICATIONS			9	16		25
PLAN SHEETS			65	117	4	186
TxDOT STANDARDS			4	8		12
QUANTITY TAKE OFFS & SUMMARIES			12	24	4	40
PREPARATION & SUBMITTAL OF PS&E			12	23	8	43
PROJECT MANAGEMENT						
PROJECT SET UP, COORDINATION, INVOICING & PROJECT MANAGEMENT		59				59
SHEETS & HOURS SUBTOTAL	0	59	102	188	16	365
SUBTOTAL LABOR COSTS		\$11,505.00	\$10,098.00	\$16,356.00	\$1,104.00	\$39,063.00

DESCRIPTION	QUANTITY	RATE	UNIT	TOTAL DIRECT EXPENSES
DIRECT EXPENSES				
PHOTOCOPIES (8.5 X 11)	20	\$0.15	EA	\$3.00
PHOTOCOPIES (11 X 17)	500	\$0.30	EA	\$150.00
MYLAR (11 X 17)	50	\$3.00	EA	\$150.00
MILEAGE	250	\$0.555	MI	\$138.75
PHOTOGRAPHS	40	\$0.40	EA	\$16.00
CD ARCHIVE	1	\$20.00	EA	\$20.00
SUBTOTAL DIRECT EXPENSES				\$477.75

TOTAL CONTRACT AMOUNT	\$39,540.75
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