

**SUPPLEMENTAL AGREEMENT NO. 4  
TO  
ENGINEERING SERVICES AGREEMENT OF  
DECEMBER 11, 2018  
FOR  
FORT BEND GRAND PARKWAY TOLL ROAD AUTHORITY**

This Supplemental Agreement is signed in multiple counterparts to be effective on the date approved by the Fort Bend County Commissioners Court, and modifies the ENGINEERING SERVICES AGREEMENT dated December 11, 2018 (the “Agreement”) between the Fort Bend Grand Parkway Toll Road Authority, a Texas Local Government Corporation (the “Authority”), and Iteris, Inc. (the “Engineer”).

The Agreement is hereby modified as follows:

1. The first sentence in Section 1 is replaced with the following sentence:

“The Engineer shall render professional services to FBGPTRA related to the Project as defined in the Scope of Services in Attachment A, Attachment A-1, and Attachment A-2.”

2. Section 2.a is replaced with the following paragraphs:

“The Maximum Compensation under this Agreement is \$1,014,809.68. The amount paid under this Agreement may not exceed the Maximum Compensation without an approved supplemental agreement.

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 \$197,910.44, as shown in Attachment B.

Compensation for the performance of services within the Scope of Services described in Attachment A-1 will be paid as a lump sum amount not to exceed \$192,413.67, as shown in Attachment B-1.

Compensation for the performance of services within the Scope of Services described in Attachment A-2 will be paid as hourly labor rates, and material and labor expenses not to exceed \$25,000, as shown in Attachment B-2.

Compensation for the performance of services within the Scope of Services described in Attachment A-3 will be paid as hourly labor rates, and material and labor expenses not to exceed \$124,485.57, as shown in Attachment B-3.

Compensation for the performance of services within the Scope of Services described in Attachment A-4 will be paid as hourly labor rates, and material and labor expenses not to exceed \$475,000.00, as shown in Attachment B-4.

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

24. Statutory Terms Applicable To State Political Subdivisions

- a. Contractor certifies and agrees that it (i) does not, nor will not, so long as the Agreement remains in effect, boycott Israel, as such term is defined in [Chapter 808, Texas Government Code](#), (ii) does not engage in business with Iran, Sudan, or any foreign terrorist organization pursuant to Subchapter F of [Chapter 2252 of the Texas Government Code](#); (iii) is not identified on a list prepared and maintained under Sections [806.051](#), [807.051](#), or [2252.153, Texas Government Code](#); (iv) does not, nor will not, so long as the Agreement remains in effect, boycott energy companies, as such term is defined in Chapter 809, Texas Government Code; (v) does not, nor will not, so long as the Agreement remains in effect, have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association, as such term is defined in 2274.001(3), Texas Government Code; and (vi) is not (a) owned or controlled by (1) individuals who are citizens of China, Iran, North Korea, Russia or any designated country (as such term is defined in 113.003, Texas Business & Commerce Code); or (2) a company or other entity, including a governmental entity, that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, of any designated country; or (b) headquartered in China, Iran, North Korea, Russia or a designated country.
- b. Prior to execution of this Agreement by FBGPTRA, the Engineer will be required to submit a Texas Ethics Commission Form 1295. Please see this website for details related to this disclosure:  
[https://www.ethics.state.tx.us/whatsnew/elf\\_info\\_form1295.htm](https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm)
- c. In accordance with Section 176.0065, Texas Local Government Code, a list of local government officers of FBGPTRA may be obtained by contacting the FBGPTRA’s records administrator at (281) 500-6050.

This Supplemental Agreement does not alter, modify, or otherwise change any part of the Agreement, except as specifically stated in this Supplemental Agreement.

IN WITNESS WHEREOF, this Supplemental Agreement is hereby executed as follows:

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

By: James D. Rice

Name: James D. Rice

Title: Chairman

ITERIS, INC.  
Engineer

By: Scott Carlson Digitally signed by Scott Carlson  
Date: 2023.05.11 08:55:35 -05'00'

Name: Scott Carlson

Title: Vice President and General Manager

**EFFECTIVE DATE**

THIS AGREEMENT IS EFFECTIVE ON THE DATE IT IS APPROVED BY THE FORT BEND COUNTY COMMISSIONERS COURT, AND IF NOT SO APPROVED SHALL BE NULL AND VOID.

DATE OF COMMISSIONERS COURT APPROVAL: \_\_\_\_\_

AGENDA ITEM NO.: \_\_\_\_\_

## **ATTACHMENT A-4 SCOPE OF SERVICES**

The work to be performed by the Engineer (Iteris), in support of Toll System IP network design and integration services for tolled roadway facilities, shall consist of providing additional engineering services, as outlined in the following tasks. Approximate project boundaries include **three segments**:

- The first segment extends along SH-99 from (I-69 to Westpark Corridor).
- the second segment extends along Westpark Tollway from (Harris County Line to Texas Heritage Pkwy).
- The third segment includes Fort Bend Parkway between (Sienna Ranch and BW 8)

Engineering Services (Overview) Include:

- Fiber Maps and Diagrams for integration with TxDOT and HCTRA to assist with MOU creation. Assist with additional Technical Expertise when called upon, as part of general discussions
- Design and Integration services for the migration of 15 existing camera sites onto new fiber, and cancellation of existing cellular connections.
- Engineering services for the connectivity of existing fiber along Fort Bend Parkway, and integration onto TxDOT fiber, and cancellation of existing Comcast connections. This engineering work is to supplement conduit boring and fiber connectivity performed by others.
- Network Integration services for Five (5) DMS signs, designed by others, along the three segments
- Additional PS&E fiber design, along Westpark Tollway, to extend the fiber communication trunk from the existing terminus (West side), to approximately Texas Heritage Pkwy (approx.. 2.5 miles), including connectivity to the proposed roadside devices, as outline below.
- Additional PS&E fiber design, along Fort Bend Parkway to extend fiber communication trunk from the existing terminus (CCTV at Sienna Parkway), to the proposed Toll Gantry locations along the proposed extension to Sienna Ranch (approx.. 1.0 miles), including connectivity the Toll Gantries.

Detailed task descriptions are as follows:

### **Task 1 – Project Coordination**

Project coordination services include associated correspondence and planning for engineering activities and various design tasks. These activities include meetings and discussions, as necessary, for the completion of the communication elements along tolled facilities. Other elements include as follows:

- Providing input and create diagrams for MOU's between project stakeholders, and assisting as requested by FBCTRA and the GEC consultant.
- Coordination for design and network integration activities as necessary.
- Continued coordination with TransCore for network requirements.
- Other general project input as needed/requested.

**Task 2 – Design Services, Additional Network Discovery and IP Plan**

- 1) Technical diagrams/drawings for overall fiber connectivity, as it relates to the MOU agreements between FBCTRA, TXDOT and HCTRA. Create “Ask Statements” for fiber needs, to be inserted into MOU documents. Coordinate with the various stakeholders to ensure everyone is in agreement.
- 2) Additional work for As-Built drawings and newly added CCTV cameras, along Westpark Toll Corridor and inclusion into overall network diagrams as necessary.
- 3) Additional field/engineering work for discovery of existing infrastructure along Fort Bend Parkway, between Fondren Toll Plaza and BW8, and create associated drawings for network connectivity. Coordination with TransCore for actual fiber assignments and update communication diagrams
- 4) Verify additional CCTV camera infrastructure (15 sites) and provide design drawings and requirements for the migration from Cellular Communication and connection to the new fiber backbone. This subtask includes coordination with third party installer/maintainer to determine their connectivity and the network.

**15 existing CCTV locations are as follows:**

**Westpark: 2 Cameras**

- 001 FM 1463
- 002 Cinco Terrace Relocation

**Fort Bend Parkway: 2 Cameras**

- 001 Sienna Parkway
- 003 Knights Road

**Grand Parkway: 11 Cameras**

- 017 Bella Terra Pkwy
- 015 Peek II
- 014 Peek I
- 013 North of W. Belfort
- 011 Waterview Meadow
- 009 Red Gully
- 008 Windsor Estates
- 006 Sandhill
- 004 North of Brazos River
- 003 Levy at River Park
- 001 River Park Dr 2

- 5) Provide plans, as needed, for converting power and network connection(s) as necessary. This subtask includes field surveys to verify commercial utility availability, conduit paths and electrical voltage drop calculations, as necessary, for connectivity. This subtask also includes the verification and details for converting Solar Assemblies to commercial power and associated hardware.
- 6) Modify network diagram, assign additional IP addresses and integrate the existing CCTV cameras to FBGPTRA system. This portion of the scope includes adding the existing CCTV cameras to the network diagram, discovering existing CCTV cameras with fiber optic connection, assigning fiber optic connection and IP addresses. Iteris staff will integrate the existing CCTV cameras to the fiber optic network and provide support after the integration. New diagrams will be provided to document all new devices.
- 7) Construction support for 15-camera site integration. Iteris staff will work with the contractor during the construction of power and fiber optic connections to the existing CCTV cameras.

#### **Deliverables**

- a.) Complete power and fiber optic connection plans, including plan sheets with quantities, notes, details, fiber optic schematic and standards.
- b.) Plan-set layout and detail sheets to add a fiber connection between Fondren Toll Plaza and BW8 HCTRA Hub building.
- c.) Network diagrams with devices and assigned IP addresses, including future roadside devices in Visio and MicroStation formats.
- d.) Fiber assignment and termination charts.

#### **Task 3 – Network Services**

This task includes coordination and re-configuration of the existing fiber connection infrastructure along **Fort Bend Parkway**, to ensure connectivity into the existing TxDOT/HCTRA between Fondren Toll Plaza and BW8.

Changes to connectivity for existing cabinets and IP configuration of associated switch equipment to separate data types (Tolling and ITS) onto dedicated fiber(s), utilizing 4 fibers total and 2 spares standby, and then connecting into existing HCTRA hub building.

**Assumptions:** TransCore will be responsible for pulling and splicing of any new fibers through the existing conduit path.

#### **Task 4 – DMS Integration Services**

This task includes supplemental design services for additional details, not included in the existing plans for Five (5) proposed DMS signs (done by others). Iteris staff will also create network diagrams for connectivity into the existing fiber network, and associated IP address scheme. Iteris will coordinate with construction contractors and TransCore for proper connectivity and turn-on.

### **Task 5 – Westpark Tollroad Fiber Extension Design (PS&E Package)**

The Engineering team will prepare a PS&E design package, ready for contractor bid, which includes all the necessary elements to extend the existing fiber communication trunk line within the project boundaries.

**Approximate Project Boundaries:** The fiber extension will begin from the last ground box/camera location (Westheimer Lakes Dr.), and extend West, to a proposed camera in the vicinity of Texas Heritage Parkway (Total length: 2.58 miles)

Connectivity to roadside devices are as follows:

- Proposed CCTV camera located between FM 1463 and Cross Creek Ranch
- Proposed CCTV located at Texas Heritage Terminus
- Proposed Toll Gantry (designed by others), located just East of FM 1463
- Existing (solar/cellular) CCTV camera located just West of Spring Green Blvd. (also identified in **Task 2**)
- Existing (solar/cellular) CCTV camera located at Westheimer Lakes N Dr. (also identified in **Task 2**)

This package will include design layouts for Four (4) CCTV cameras, and associated fiber/power connections. The engineering staff will coordinate with others to supplement the detailed design for fiber connectivity at the proposed Toll Gantry location and provide associated plan-sheets as required.

The PS&E design package will include plan sheets produced at 100 scale, and roadside device layout sheets at 40 scale. The Topo creation will consist of a combination Aerial photography, supplemented by any TOPO roadway alignment files (as provided by the Roadway design engineer). The PS&E package will include all associated quantities, standard details and Engineer's cost estimate.

This task also includes the coordination with the various stakeholders and TransCore for proper routing communication connectivity.

### **Task 6 – Fort Bend Parkway Fiber Extension**

The Engineering team will prepare a PS&E design package, ready for contractor bid, which includes all the necessary elements to extend the existing fiber communication trunk line within the project boundaries.

#### **Approximate Project Boundaries:**

Existing CCTV camera, along Fort Bend Parkway @ Sienna Parkway (East Side), extending to the proposed toll gantries adjacent to Sienna Ranch Road (Approx distance 1-mile).

The package will include design elements to extend conduit and fiber infrastructure from the existing camera to the proposed toll gantries and provide connectivity via the fiber backbone. The package will also contain provisions to add two (2) CCTV cameras at locations to be determined at a later date.

The PS&E design package will include plan sheets produced at 100 scale, and roadside device layout sheets at 40 scale. The Topo creation will consist of a combination Aerial photography, supplemented by any TOPO roadway alignment files (as provided by the Roadway design engineer). The PS&E package will include all associated quantities, standard details and Engineer's cost estimate.

This task also includes the coordination with the various stakeholders and TransCore for proper routing communication connectivity.

### **Task 7 – Misc. Services**

This task is for reserved time/budget for misc. tasks outside the services described in Tasks 1-3, as requested by the client. Typical activities might include, but not limited to additional coordination meetings, diagrams/drawings, material review(s), field work (as needed), unforeseen network services in addition to those described above.

### **Deliverables**

- a.) As needed for record.

TASK	ITERIS STAFF									Total Hours	ODCs	Total Cost										
	Principal	Project Manager	Network QA/QC	Project Engineer	Design Engineer	EIT	Engineering Tech	Admin/Clerical	ITERIS TOTAL													
<b>Maximum Hourly Rates</b>																						
		\$334.06	\$308.16	\$244.41	\$225.20	\$209.22	\$113.98	\$165.52	\$104.96													
<b>Task 1</b>	<b>Project Coordination</b>	8.00	122.00	0.00	4.00	0.00	0.00	8.00	8.00	\$43,332.06	150	\$0.00	\$43,332.06									
	Prepare Monthly Progress Reports and invoicing		10					8	8	\$5,245.37	26											
	Facilitate/Participate Project Progress Meetings		10							\$3,081.56	10											
	Prepare/Distribute/File Project Correspondence		4							\$1,232.62	4											
	Correspondence and input for MOU's (TxDOT and HCTRA)		18							\$5,546.80	18											
	Internal coordination for design and integration activities	4	16							\$6,266.73	20											
	Coordination with Transcore (Network components)		24							\$7,395.73	24											
	General Project Coordination as-necessary	4	40		4					\$14,563.24	48											
										\$0.00	0											
<b>Task 2</b>	<b>Design Services, Additional Network Discovery and IP Plan</b>	0.00	172.00	0.00	366.00	64.00	0.00	0.00	0.00	\$148,814.26	602	\$0.00	\$148,814.26									
1)	Technical drawings for MOU documents		20		20					\$10,667.03	40											
2)	As-Built Drawing(s) for newly added cameras into existing plans		12		60					\$17,209.62	72											
3)	Field work (Discovery of existing infrastructure Ft. Bend Parkway)		16		16					\$8,533.62	32											
3)	Associated Drawings (Ft. Bend Parkway)		16		32					\$12,136.76	48											
4)	Additional Field Work (15 camera sites)		32		32					\$17,067.24	64											
4)	PS&E Design Services (15 camera sites)		32		162					\$46,342.70	194											
5)	Power Coordination/Calculations/Conversion Requirements		16		4					\$5,831.27	20											
6)	Additional (associated) Network Configuration Activities		12		8	40				\$13,868.08	60											
7)	Construction Support (15 camera sites)		16		32	24				\$17,157.94	72											
										\$0.00	0											
<b>Task 3</b>	<b>Network Services</b>	0.00	28.00	0.00	4.00	68.00	0.00	0.00	0.00	\$23,755.84	100	\$0.00	\$23,755.84									
	Coordination with stakeholders for back-end system connection		16		4	16				\$9,178.73	36											
	Configure Individual Network Elements (in the Field)		8			40				\$10,833.89	48											
	Detailed Network Testing (Before Migration)		4			12				\$3,743.22	16											
										\$0.00	0											
<b>Task 4</b>	<b>DMS Integration Services</b>	0	60	0	80	60	0	0	0	\$49,057.97	200	\$0.00	\$49,057.97									
	Engineering Support for (5) Additional DMS Signs		60		80	60				\$49,057.97	200											
										\$0.00	0											
										\$0.00	0	\$0.00										
<b>Task 5</b>	<b>Westpark Tollroad Fiber Extension Design (PS&amp;E Package)</b>	0	69	0	298	16	72	0	0	\$99,924.90	455	\$0.00	\$99,924.90									
	<b>60% Design</b>										0											
	Prepare layout sheets, Legend, Title Blocks, SHT Numbers		2		24					\$6,021.01	26											
	Title Sheet		2		2		4			\$1,522.61	8											
	General Notes		2		12		4			\$3,774.57	18											
	Cost Estimate		2		8					\$2,417.88	10											
	Summary of Quantities/Electrical Data Sheet		2		8					\$2,417.88	10											
	CCTV, Fiber Optic Cable, Conduit Design Layouts		8		100		40			\$29,543.91	148											
	Toll Gantry Interconnect		4		16		8			\$5,747.57	28											
	Network one-line diagrams		4		16	16				\$8,183.21	36											
	Detail sheets		2		16		8			\$5,131.26	26											
	Standards		1		4		8			\$2,120.76	13											
	<b>100% Design</b>																					
	Design adjustments as needed from 60% review		8		40					\$11,473.08	48											
	Finalize Plan-set package details		16		24					\$10,335.19	40											
	Sign/Seal and Final Print		4		4					\$2,133.41	8											
											0											
	<b>Construction Support</b>																					
	Responding to RFI's		4		8					\$3,034.19	12											
	Field Inspection		8		16					\$6,068.38	24											
										\$0.00	0											
<b>Task 6</b>	<b>Fort Bend Parkway Fiber Extension (PS&amp;E Package)</b>	0	65	0	232	16	36	0	0	\$79,726.18	349	\$0.00	\$79,726.18									
	<b>60% Design</b>																					
	Prepare layout sheets, Legend, Title Blocks, SHT Numbers		2		24					\$6,021.01	26											
	Title Sheet		2		2		4			\$1,522.61	8											
	General Notes		2		2					\$1,066.70	4											
	Cost Estimate		2		8					\$2,417.88	10											
	Summary of Quantities/Electrical Data Sheet		2		8					\$2,417.88	10											
	CCTV, Fiber Optic Cable, Conduit Design Layouts		8		60					\$15,976.99	68											
	Toll Gantry Interconnect (2 ramp locations)		4		24		24			\$9,372.77	52											
	CCTV Interconnect 2-locations (if needed)		4		16		8			\$5,747.57	28											
	Network one-line diagrams		4		16	16				\$8,183.21	36											
	Detail sheets		2		16					\$4,219.44	18											
	Standards		1		4					\$1,208.94	5											
										\$0.00												
	<b>100% Design</b>																					
	Design adjustments as needed from 60% review		8		24					\$7,869.94	32											
	Finalize Plan-set package details		16		16					\$8,533.62	32											
	Sign/Seal and Final Print		4		4					\$2,133.41	8											
										\$0.00	0											
	<b>Construction Support</b>																					
	Responding to RFI's		4		8					\$3,034.19	12											
										\$0.00	0											
<b>Task 7</b>	<b>Misc. Services</b>	0	40	0	40	40	0	0	0	\$29,702.70	120	\$0.00	\$29,702.70									
	On-Call Services (As-Needed)		40		40	40				\$29,702.70	120											
										\$0.00	0											
<b>Task 99</b>	<b>ODE</b>	0	0	0	0	0	0	0	0	\$0.00	0	\$2,800.00	\$2,800.00									
	ODE									\$0.00	0	\$2,800.00										
										\$0.00	0											
<b>Total Labor Hours</b>											8	556	0	1024	264	108	8	8	\$474,313.89	1,976.00	\$2,800.00	\$475,000.00
											<b>TOTAL</b>											