



Hundred Twenty Nine Thousand Six Hundred Fifty Six and 79/100 Dollars (\$1,729,656.79) specifically allocated to fully discharge any and all liabilities County may incur under the Agreement.

Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of the Agreement, that the total Maximum Compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor under the Agreement shall not under any conditions, circumstances, or interpretations thereof exceed One Million Seven Hundred Twenty Nine Thousand Six Hundred Fifty Six and 79/100 Dollars (\$1,729,656.79).

3. **Time of Performance.** Time for performance of the Services under this Agreement, as amended, shall begin with receipt of the Notice to Proceed from County and shall end no later than 11:59 pm on December 31, 2026. Contractor shall complete the tasks described in the Scope of Services and in Exhibit "A-1" attached hereto, within this time or within such additional time as may be extended by County.
4. **Certain State Law Requirements for Contracts.** The contents of this Section are required by Texas law and are included by County regardless of content For purposes of Sections 2252.152, 2271.002, and 2274.002, Texas Government Code, as amended, Contractor hereby verifies that Contractor and any parent company, wholly owned subsidiary, majority-owned subsidiary, and affiliate:
  - A. Unless affirmatively declared by the United States government to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions regime relating to a foreign terrorist organization, is not identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 806.051, 807.051, or 2252.153 of the Texas Government Code.
  - B. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Contractor does not boycott Israel and is authorized to agree in such contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in § 808.001 of the Texas Government Code.
  - C. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Contractor does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the term of such contracts. "Boycott energy company" has the meaning provided in § 809.001 of the Texas Government Code.
  - D. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Contractor does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association

and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in § 2274.001(3) of the Texas Government Code. "Firearm entity" and "firearm trade association" have the meanings provided in § 2274.001(6) and (7) of the Texas Government Code.

5. **Recitals.** The recitals set forth above are incorporated herein by reference and made a part of the Agreement.
6. **Human Trafficking.** BY ACCEPTANCE OF THIS AGREEMENT, CONTRACTOR ACKNOWLEDGES THAT FORT BEND COUNTY IS OPPOSED TO HUMAN TRAFFICKING AND THAT NO COUNTY FUNDS WILL BE USED IN SUPPORT OF SERVICES OR ACTIVITIES THAT VIOLATE HUMAN TRAFFICKING LAWS.
7. **Modifications and Conflict.** Except as modified herein, the Agreement, as amended, shall remain in full force and effect and has not been otherwise modified or amended. If there is a conflict among documents that make up the Agreement, this First Amendment shall prevail with regard to the conflict.

**{Execution Page Follows}**

**FORT BEND COUNTY, TEXAS**

**DANNENBAUM ENGINEERING CORPORATION**

\_\_\_\_\_  
KP George, County Judge

\_\_\_\_\_  
Authorized Agent - Signature



Nick Bokaie, P.E.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorized Agent- Printed Name

APPROVED:



\_\_\_\_\_  
Chief Operating Officer

\_\_\_\_\_  
Title

\_\_\_\_\_  
J. Stacy Slawinski, P.E., County Engineer

\_\_\_\_\_  
November 16, 2022

\_\_\_\_\_  
Date

**AUDITOR'S CERTIFICATE**

I hereby certify that funds are available in the amount of \$\_\_\_\_\_ to accomplish and pay the obligation of Fort Bend County, Texas under this Agreement.

\_\_\_\_\_  
Robert E. Sturdivant,  
County Auditor

August 31, 2022

Mr. Stacy Slawinski, P.E.  
Fort Bend County Engineer  
301 Jackson Street, 4<sup>th</sup> Floor  
Richmond, Texas 77469

**SUBJECT: SH 99 Grand Parkway Southbound Frontage Road  
from Fry Road to FM 1093**  
Supplemental Scope and Fee Proposal for Design Services

Dear Mr. Slawinski:

DE Corp. (DEC) is pleased to submit for your approval a supplemental scope and fee proposal for the SH 99 Grand Parkway Southbound Frontage Road (SBFR) Project from Fry Road to FM 1093.

This supplemental proposal covers additional design effort and plan revisions to address design modifications as directed by TxDOT. The primary design changes, as further described in Attachment B Scope of Services Modifications, are as follows:

- 1) New Braided Exit Ramp Bridge added to the project
- 2) Geotechnical Boring and Investigations for design of Braided Exit Ramp Bridge
- 3) PS&E Design Modifications to include SBFR plans with TxDOT's main lane project
- 4) ROW Mapping Update (Parcels 101, 102, and 103)
- 5) SUE QL A Test Holes (2) on Atmos and Dow Pipelines
- 6) Drainage Impact Analysis to document SBFR drainage design

Attached you will find our Fee Proposal (Attachment A) and Scope of Services Modifications (Attachment B) for the Project. We ask for your approval and execution of this supplemental contract as supported by the attached documents.

DEC appreciates the opportunity to provide you with our services. If I can be of any assistance or answer any additional questions, please feel free to contact me at (713) 527-6420 or at Nick.Bokaie@decorp.com. We look forward to working with you on this important Fort Bend County project.

Very truly yours,



Nick Bokaie, P.E.  
Principal, Houston Transportation Division  
DEC

Attachments

ATTACHMENT A  
SUPPLEMENTAL NO. 1

SH99 Grand Parkway Southbound Frontage Road  
Fry Road to FM 1093

August 2022

ADDITIONAL WORK ELEMENT	Engineering Fees
<b>Final PS&amp;E Engineering</b>	
Roadway Design (DEC)	\$ 6,244.22
Drainage Design (Sirrus)	\$ 16,740.00
Traffic - Signing & Pvmt Marking (DEC)	\$ 4,327.68
Misc & TCP (DEC)	\$ 1,947.46
Management (DEC)	\$ 12,735.74
<b>Extras</b>	
Survey (Weisser)	\$ 7,700.00
ROW Parcel Mapping (Weisser)	\$ 14,930.00
Geotechnical (Aviles)	\$ 66,717.89
Drainage Impact Report (Sirrus)	\$ 25,350.00
<b>Total Management &amp; Engineering Fees</b>	<b>\$ 156,692.99</b>

**ATTACHMENT B  
SUPPLEMENTAL NO. 1  
ADDITIONAL SCOPE OF SERVICES**

**SH 99 Grand Parkway Southbound Frontage Road Segment 2**

County: Fort Bend

Highway: SH 99 Grand Parkway Southbound Frontage Road (SBFR) Segment 2

Limits: FM 1093 to South of Fry Road (Approx. SBFR Station 2311+00 to 2360+00)

**1. Braided Exit Ramp Bridge**

Based on comments received at the May 2019 Public Meeting and subsequent meetings with TxDOT and Fort Bend County, the SBFR project design was revised to retain the existing entrance ramp south of Fry Road and add a braided exit ramp bridge over the existing entrance ramp. Additional Scope items associated with this change include the following:

- Braided Exit Ramp Bridge Design, including Bridge Layout (3), Estimated Quantities & Bering Seat Elevations (1), Foundation Layouts (2), Abutment Details (2), Bent Details (10), Aesthetic Details (2), Framing Plans (3), Slab Plans (3), IGND (1), Drainage Details (2), and Bridge Standards.
- Retaining Wall Design, including Retaining Wall Plan & Profile sheets (5), Design Data (1), and Retaining Wall Standards.
- Exit Ramp Roadway Plan & Profile Sheets (3)

**2. Geotechnical Borings and Investigations (FC 110) (by Aviles)**

The design change to add the braided exit ramp bridge required seven (7) new borings (Borings B-14 through B-20) for design of the bridge and retaining wall bridge approaches.

**3. PS&E Design Modifications**

Per direction from Fort Bend County and TxDOT, the SBFR plans were included with TxDOT's SH 99 main lane widening project under design by TxDOT's design consultant RPS. Changes include the following:

- Revise drainage design and in accordance with TxDOT's Drainage Study completed by their consultants RPS and CivilTech, including Drainage Area Maps, Hydraulic Computations, Drainage Plan & Profile Sheets, Drainage Details, and Storm Sewer Laterals.
- Revise the detention pond location in accordance with TxDOT's Drainage Study, including revisions to driveway locations, driveway table, SBFR Plan & Profile Sheets, Signing Sheets, Pavement Marking Sheets, and traffic control layouts.
- Meetings with RPS and TxDOT to incorporate plans into TxDOT's project.

#### **4. ROW Mapping Update (FC 130) (by Weisser)**

Following completion of ROW Mapping, Parcels Plats, and Property Descriptions in July 2019, TxDOT began design of the SH 99 main lane widening project. TxDOT's design required modification to the SBFR ROW documents to match their proposed roadway and drainage improvements.

ROW Mapping modifications will include:

- Update ROW Map of the Project certifying to a Cat. 1B, Cond. II ROW Survey to be delivered in PDF format.
- Update Parcel Surveys (Cat. 1A; Cond. II) - Prepare metes and bounds descriptions in accordance with TxDOT guidelines for property acquisition and add parcels to the ROW maps.

#### **5. Subsurface Utility Locate (Test Hole) Service (Quality Level A) (FC 130) (by Weisser)**

Locate two (2) test holes on Atmos and DOW pipelines to obtain precise horizontal and vertical position, material type, condition, size and other data that may be obtainable about the utility facility and its surrounding environment through exposure by non-destructive excavation techniques that ensures the integrity of the utility facility. Subsurface Utility Locate (Test Hole) Services (Quality Level A) are inclusive of Quality Levels B, C, and D.

## 6. Drainage Impact Report (FC 161) (by Sirrus)

Pursuant to a coordination meeting with TxDOT and Fort Bend County on July 11, 2022, and after an email clarification, TxDOT requested that Fort Bend County provide the following information for the SBFR project:

- TxDOT's Drainage Study completed by their consultants RPS and CivilTech shall cover the 100-year flood frequency analysis and reflect the frontage road nodes with the HGL information. TxDOT's Study shall be the basis for the SBFR storm sewer trunk line sizes.
- The County's SBFR Drainage Report shall provide the 10-year flood frequency analysis of the storm sewer system that conforms with the TxDOT Drainage Study, and include the following:
  - Brief Description of Project
  - Existing Drainage Pre-Construction
  - Existing Drainage Area Map
  - Proposed Drainage Area Map
  - SBFR Storm Sewer Layouts with Outfall locations and Headwater/Tailwater
  - 10-yr Computer Run of SBFR drainage system (in Geopak Drainage) with current Atlas 14 coefficients (as defined in the TxDOT Drainage Study)
- Additionally, the SBFR PS&E drainage design will require modification to conform with the TxDOT Drainage Study.
- Attend meetings with Fort Bend County, TxDOT, and Fort Bend County Drainage District, as needed.

ATTACHMENT A  
SUPPLEMENTAL NO. 1

SH99 Grand Parkway Southbound Frontage Road  
Fry Road to FM 1093

August 2022

ADDITIONAL WORK ELEMENT	Engineering Fees
<b>Final PS&amp;E Engineering</b>	
Roadway Design (DEC)	\$ 6,244.22
Drainage Design (Sirrus)	\$ 16,740.00
Traffic - Signing & Pvmt Marking (DEC)	\$ 4,327.68
Misc & TCP (DEC)	\$ 1,947.46
Management (DEC)	\$ 12,735.74
<b>Extras</b>	
Survey (Weisser)	\$ 7,700.00
ROW Parcel Mapping (Weisser)	\$ 14,930.00
Geotechnical (Aviles)	\$ 66,717.89
Drainage Impact Report (Sirrus)	\$ 25,350.00
<b>Total Management &amp; Engineering Fees</b>	<b>\$ 156,692.99</b>

**ATTACHMENT A  
SUPPLEMENTAL NO. 1 FEE SCHEDULE (DEC)  
METHOD OF PAYMENT: LUMP SUM**

**PRIME PROVIDER NAME:** DEC  
**CONTRACT NUMBER:**  
**PROJECT NAME:** SH99 Grand Parkway Southbound Frontage Road  
**PROJECT LIMITS:** Segment 2 - North of Fry Road to FM 1093

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	SENIOR ENGINEER TECH	CADD OPERATOR	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>PROJECT MANAGEMENT (FC 145)</b>										
COORDINATION W/ SUBCONSULTANTS	8		4					12	N/A	N/A
COORDINATION WITH COUNTY AND TXDOT	16		8					24	N/A	N/A
COORDINATION WITH DEVELOPERS								0	N/A	N/A
PROGRESS MEETINGS (10 ESTIMATED)								0	N/A	N/A
PROJECT SCHEDULE AND COST ESTIMATE UPDATES	4		8					12	N/A	N/A
PREPARE INVOICES W/ PROGRESS REPORTS	4		4				8	16	N/A	N/A
									N/A	N/A
<b>HOURS SUB-TOTALS</b>	<b>32</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>64</b>		
<b>CONTRACT RATE PER HOUR</b>	<b>\$247.30</b>	<b>\$200.93</b>	<b>\$170.02</b>	<b>\$154.56</b>	<b>\$123.65</b>	<b>\$108.19</b>	<b>\$92.74</b>			
<b>TOTAL LABOR COSTS</b>	<b>\$7,913.47</b>	<b>\$0.00</b>	<b>\$4,080.38</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$741.89</b>	<b>\$12,735.74</b>		
<b>SUBTOTAL (FC150)</b>								<b>\$12,735.74</b>		

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	SENIOR ENGINEER TECH	CADD OPERATOR	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>ROADWAY DESIGN CONTROLS (FC160)</b>										
HORIZONTAL ALIGNMENT DATA SHEETS								0		
EXISTING TYPICAL SECTIONS								0		
PROPOSED TYPICAL SECTIONS								0		
ROADWAY PLAN AND PROFILE SBFR (SCALE: H 1"=100' V 1"=10')		4	4	8		16		32	5	6.4
CROSS STREET ROADWAY PLAN AND PROFILE (SCALE: H 1"=100' V 1"=10')								0		
INTERSECTION LAYOUTS								0		
DRIVEWAY DETAIL AND SUMMARY		2	2	4		4		12	1	12.0
MISCELLANEOUS ROADWAY DETAILS								0		
REMOVAL PLANS (SCALE 1"=100') (Double Banked)								0		
EARTHWORK CROSS SECTIONS								0		
ROADWAY STANDARDS								0		
SUMMARY OF ROADWAY QUANTITY SHEETS								0		
SUMMARY OF REMOVAL QUANTITY SHEETS								0		
SUMMARY OF EARTHWORK QUANTITY SHEETS								0		
DETERMINATION OF DESIGN EXCEPTIONS/WAIVERS								0		
<b>HOURS SUB-TOTALS</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>12</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>44</b>	<b>6</b>	
<b>CONTRACT RATE PER HOUR</b>	<b>\$247.30</b>	<b>\$200.93</b>	<b>\$170.02</b>	<b>\$154.56</b>	<b>\$123.65</b>	<b>\$108.19</b>	<b>\$92.74</b>			
<b>TOTAL LABOR COSTS</b>	<b>\$0.00</b>	<b>\$1,205.57</b>	<b>\$1,020.10</b>	<b>\$1,854.72</b>	<b>\$0.00</b>	<b>\$2,163.84</b>	<b>\$0.00</b>	<b>\$6,244.22</b>		
<b>SUBTOTAL (FC 160)</b>								<b>\$6,244.22</b>		

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	SENIOR ENGINEER TECH	CADD OPERATOR	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>DRAINAGE (FC161)</b>										
SW3P PLAN								0		
SW3P LAYOUTS (SCALE 1"=100') (Double Banked)								0		
SW3P STANDARDS								0		
SUMMARY OF SW3P QUANTITY SHEETS								0		
HOURS SUB-TOTALS	0	0	0	0	0	0	0	0	0	
CONTRACT RATE PER HOUR	\$247.30	\$200.93	\$170.02	\$154.56	\$123.65	\$108.19	\$92.74			
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
<b>SUBTOTAL (FC 161)</b>								<b>\$0.00</b>		

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	SENIOR ENGINEER TECH	CADD OPERATOR	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>SIGNING, PVMT. MARKING, &amp; SIGNAL (FC162)</b>										
PAVEMENT MARKING LAYOUTS (SCALE 1"=100') (Double Banked)		2	2			8		12	3	
PAVEMENT MARKING STANDARDS								0		
SUMMARY OF PAVEMENT MARKING QUANTITY SHEETS			2			2		4	1	
SMALL SIGNING LAYOUTS (SCALE 1"=100') (Double Banked)		2	2			8		12	3	
SUMMARY OF PROPOSED SMALL SIGNS			2			2		4	1	
SMALL SIGN DETAILS								0		
SIGNING STANDARDS								0		
HOURS SUB-TOTALS	0	4	8	0	0	20	0	32	8	
CONTRACT RATE PER HOUR	\$247.30	\$200.93	\$170.02	\$154.56	\$123.65	\$108.19	\$92.74			
TOTAL LABOR COSTS	\$0.00	\$803.71	\$1,360.13	\$0.00	\$0.00	\$2,163.84	\$0.00	\$4,327.68		
<b>SUBTOTAL (FC 162)</b>								<b>\$4,327.68</b>		

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	SENIOR ENGINEER TECH	CADD OPERATOR	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>MISCELLANEOUS (ROADWAY) (FC 163)</b>										
TITLE SHEET								0		
INDEX OF SHEETS								0		
PROJECT LAYOUTS								0		
SOIL BORING LAYOUTS								0		
SOIL BORING LOGS								0		
HORIZONTAL AND VERTICAL CONTROL INDEX								0		
HORIZONTAL AND VERTICAL CONTROL SHEETS								0		
RETAINING WALL LAYOUTS								0	5	0.0
RETAINING WALL STANDARDS								0	1	0.0
SUMMARY OF RETAINING WALL QUANTITY SHEETS								0	1	0.0
TRAFFIC CONTROL PLAN NARRATIVE								0		
CONSTRUCTION SEQUENCE LAYOUT								0		
PROJECT LIMIT SIGNING LAYOUT								0		
TRAFFIC CONTROL PLANS		2	4			8		14		
TRAFFIC CONTROL STANDARDS								0		

SUMMARY OF TRAFFIC CONTROL QUANTITY SHEETS									0		
TRAFFIC CONTROL WORKSHOP									0		
SAFETY REVIEW TEAM MEETING									0		
EPIC SHEETS									0		
COMPUTE & TABULATE QUANTITIES (30, 60, 90 & FINAL)									0		
CONSTRUCTION COST ESTIMATE & DCIS INPUT (30, 60, 90 & FINAL)									0		
GENERAL NOTES, SPECIFICATIONS AND PROVISIONS									0		
CONSTRUCTION TIME DETERMINATION (PRIMAVERA)									0		
QC & CONSTRUCTABILITY REVIEWS (30, 60, 90 & FINAL)									0		
PERMIT REVIEW FOR NEW DEVELOPMENT (MAX OF 2)									0		
HOURS SUB-TOTALS	0	2	4	0	0	8	0	14	7		
CONTRACT RATE PER HOUR	\$247.30	\$200.93	\$170.02	\$154.56	\$123.65	\$108.19	\$92.74				
TOTAL LABOR COSTS	\$0.00	\$401.86	\$680.06	\$0.00	\$0.00	\$865.54	\$0.00	\$1,947.46			
<b>SUBTOTAL (FC 163)</b>								<b>\$1,947.46</b>			

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	SENIOR ENGINEER TECH	CADD OPERATOR	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>BRIDGE DESIGN (FC170)</b>										
<b>SH 99 EXIT RAMP</b>										
BRIDGE LAYOUT								0	3	0.0
BRIDGE QUANTITIES								0	1	0.0
BEARING SEAT ELEVATIONS								0	1	0.0
FOUNDATION LAYOUT								0	2	0.0
FOUNDATION DETAILS								0	3	0.0
ABUTMENT PLANS (2 TOTAL)								0	4	0.0
BENT PLANS (6 TOTAL)								0	10	0.0
CONCRETE SLAB PLAN & DEFLECTIONS - 3 UNITS								0	3	0.0
CONCRETE FRAMING PLAN & BENT REPORT - 3 UNITS								0	3	0.0
PRESTRESSED CONCRETE BEAMS - IGND								0	1	0.0
ARCHITECTURAL DETAILS								0	2	0.0
DRAINAGE DETAILS								0	2	0.0
HOURS SUB-TOTALS	0	0	0	0	0	0	0	0		
CONTRACT RATE PER HOUR	\$247.30	\$200.93	\$170.02	\$154.56	\$123.65	\$108.19	\$92.74			
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
<b>SUBTOTAL (FC170) (DEC)</b>								<b>\$0.00</b>		

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	SENIOR ENGINEER TECH	CADD OPERATOR	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>CONSTRUCTION PHASE SERVICES (FC 309) - T&amp;M</b>										
ASSISTANCE AND SUPPORT DURING BIDDING								0		
PRECONSTRUCTION MEETINGS								0		
FIELD MEETINGS								0		
WEEKLY PROGRESS MEETINGS								0		

SHOP DRAWING REVIEW								0
RESPOND TO RFIS								0
RESPOND TO GENERAL QUESTIONS								0
PROVIDE CLARIFICATIONS								0
HOURS SUB-TOTALS	0	0	0	0	0	0	0	0
CONTRACT RATE PER HOUR	\$247.30	\$200.93	\$170.02	\$154.56	\$123.65	\$108.19	\$92.74	
TOTAL LABOR COSTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>SUBTOTAL (FC 163)</b>								<b>\$0.00</b>

DESCRIPTION							TOTAL MH BY FC	TOTAL COSTS BY FC
<b>SUMMARY</b>								
PROJECT MANAGEMENT (FC 145)							64	\$12,735.74
ROADWAY DESIGN CONTROLS (FC160)							44	\$6,244.22
DRAINAGE (FC161)							0	\$0.00
SIGNING, PVMT. MARKING, & SIGNAL (FC162)							32	\$4,327.68
MISCELLANEOUS (ROADWAY) (FC 163)							14	\$1,947.46
BRIDGE DESIGN (FC170)							0	\$0.00
CONSTRUCTION PHASE SERVICES (FC 309) - T&M							0	\$0.00
<b>SUBTOTAL LABOR EXPENSES</b>							<b>90</b>	<b>\$25,255.10</b>
<b>OTHER DIRECT EXPENSES</b>	<b>QUANTITY</b>	<b>RATE</b>	<b>UNIT</b>					
Mileage (# of miles) (0.550)		\$0.550	MI					\$0.00
Courier Services		\$30.00	EACH					\$0.00
Photocopies 8.5x11		\$0.10	EACH					\$0.00
Photocopies 11x17		\$0.25	EACH					\$0.00
Plot (Color on Bond)		\$3.50	SF					\$0.00
Mylars 11x17		\$4.00	SHEET					\$0.00
CD Archive		\$5.00	EACH					\$0.00
<b>SUBTOTAL DIRECT EXPENSES</b>								<b>\$0.00</b>

<b>SUMMARY</b>	
TOTAL COSTS FOR PRIME ONLY(includes multiplier)	\$25,255.10
NON-SALARY (OTHER DIRECT EXPENSES)	\$0.00
SUBCONTRACTS (includes labor costs and direct expenses)	\$0.00
<b>GRAND TOTAL</b>	<b>\$25,255.10</b>

**ATTACHMENT A  
SUPPLEMENTAL NO. 1 FEE SCHEDULE (SIRRUS)  
METHOD OF PAYMENT: LUMP SUM**

**PRIME PROVIDER NAME:** DEC  
**CONTRACT NUMBER:**  
**PROJECT NAME:** SH99 Southbound Frontage Road Segment 2  
**PROJECT LIMITS:** FM 1093 to South of Fry Road (Approx. SBFR Station 2311+00 to 2360+00)

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	DESIGN ENGINEER	SENIOR TECH	SENIOR CADD	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>DRAINAGE STUDY (FC161) UPDATE</b>									
<b>PRELIMINARY HYDROLOGIC/HYDRAULIC</b>									
VERIFY AND DOCUMENT DRAINAGE AREA BOUNDARIES FOR EXISTING ROADWAY w.r.t. TxDOT Stud	1	4	4	0			9		
<b>UPDATED FRONTAGE ROADWAY DOCUMENTATION</b>									
DETERMINE PROPOSED DRAINAGE AREA BOUNDARIES (DUE TO THE TxDOT REPORT) - PROPOSED CONDITIONS	1	4	8	0			13		
PERFORM HYDROLOGIC COMPUTATIONS FOR PROPOSED CONDITIONS OF THE ROADWAY - ATLAS 14	2	8	16	0			26		
SCHEMATIC LAYOUT OF THE FRONTAGE STORM SEWER WITH HEADWATER AND TAILWATER	1	6	12	0			19		
FINAL MEMO	2	4	4	0			10		
COORDINATION	2	2	0	0			4		
DESIGN CHANGES DUE TO TxDOT - REVISE PIPES AND RESTRICTOR DETAILS	2	8	16				26		
DESIGN CHANGES DUE TO TxDOT - JUNCTION BOX DETAIL	2	8	12				22		
COORDINATION OF THE DESIGN WITH TxDOT CONSULTANT	2	8	8				18		
<b>HOURS SUB-TOTALS</b>	15	52	80	0	0	0	147		
<b>CONTRACT RATE PER HOUR</b>	\$250.00	\$200.00	\$140.00	\$105.00	\$120.00	\$0.00			
<b>TOTAL LABOR COSTS</b>	\$3,750.00	\$10,400.00	\$11,200.00	\$0.00	\$0.00	\$0.00	\$25,350.00		
<b>SUBTOTAL (FC161)</b>							\$25,350.00		

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	DESIGN ENGINEER	SENIOR TECH	SENIOR CADD	CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>DRAINAGE DESIGN (FC 161)</b>									
DRAINAGE AREA MAPS	2	4	8	12			26	5	5
DRAINAGE PLAN AND PROFILE	2	4	8	20			34	5	7
MISCELLANEOUS DRAINAGE DETAILS	1	6	4	8			19	4	5
UPDATE STORM SEWER COMPUTATION/WINSTORM	2	8	4	4			18	5	4
LATERAL STORM SEWER PROFILE SHEETS	1	2	8	8			19	3	6
SHEET SUBTOTAL									
HOURS SUB-TOTALS	8	24	32	52	0	0	116	22	
CONTRACT RATE PER HOUR	\$250.00	\$200.00	\$140.00	\$105.00	\$120.00	\$0.00			
DIRECT LABOR COSTS	\$2,000.00	\$4,800.00	\$4,480.00	\$5,460.00	\$0.00	\$0.00	\$16,740.00		
<b>SUBTOTAL (FC 170)</b>							<b>\$16,740.00</b>		

DESCRIPTION							TOTAL MH BY FC	TOTAL COSTS BY FC
DRAINAGE STUDY (FC161) UPDATE							147	\$25,350.00
DRAINAGE DESIGN (FC 161)							116	\$16,740.00
<b>SUBTOTAL LABOR EXPENSES</b>							<b>263</b>	<b>\$42,090.00</b>
<b>OTHER DIRECT EXPENSES</b>	<b>QUANTITY</b>	<b>RATE</b>	<b>UNIT</b>					
Mileage (# of miles) (0.550)	0	\$0.550	MI					\$0.00
Courier Services	0	\$40.00	EACH					\$0.00
Photocopies 8.5x11 (Report 2 copies for TxDOT and DEC, one for Willfork & FBCDD)	0	\$0.10	EACH					\$0.00
Photocopies 11x17	0	\$0.25	EACH					\$0.00
Plot (Color on Bond)	0	\$3.50	SF					\$0.00
Mylars 11x17	0	\$4.00	SHEET					\$0.00
CD Archive (for Report TxDOT, DEC 2 copies, FBCDD, Willfork 1 each) Const 2	0	\$5.00	EACH					\$0.00
<b>SUBTOTAL DIRECT EXPENSES</b>								<b>\$0.00</b>

<b>SUMMARY</b>	
TOTAL LABOR EXPENSES (includes multiplier)	\$42,090.00
NON-SALARY (OTHER DIRECT EXPENSES)	\$0.00
SUBCONTRACTS (includes labor costs and direct expenses)	\$0.00
<b>GRAND TOTAL</b>	<b>\$42,090.00</b>

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**PROPOSAL AGREEMENT FOR PROFESSIONAL SERVICES**

Effective Date: July 26, 2022

Michael J. Kaspar, P.E.  
DEC Engineering  
3100 West Alabama St.  
Houston, TX 77098  
713-527-6374  
Michael.Kaspar@decorp.com

Proposal for Professional Services in Connection With: 2017 Fort Bend County Mobility Project No. 3-03, Grand Parkway (SH 99) Frontage Road – Segment 2, Fort Bend County, Texas

Weisser Engineering & Surveying is pleased to submit this proposal and terms of service (together, the “Agreement”) to DEC Engineering (the “Client”).

**I. SCOPE OF SERVICES**

**Surveying and Mapping**

The Surveyor shall evaluate the existing ROW envelope and make recommendations for the acquisition of ROW necessary for the Project including but not limited to roadway, corner cuts, sight distance triangles, detention, and outfalls, if necessary. The Surveyor shall establish a project baseline based on the centerline of the right-of-way. The Surveyor shall create an available existing utility list (Excel Format) including the type, owner, location, and contact information for available existing utilities within the project limits to be supplied to the Engineering Consultant to complete the identification of potential utility conflicts. The Surveyor shall sign and seal all survey documents.

**The specific survey limits are as follows:**

The linear topographic and right-of-way survey along Grand Parkway (SH 99) Northbound Frontage Road beginning approximately 350 feet north of S. Fry Road and 950 feet south of Westheimer Parkway for an approximate total of **5,600 linear feet**. (As Shown on the Attached Aerial Image)

**1. Existing Right of Way Mapping (Cat. 1B; Cond. II)**

- a. Update abstract survey; obtain deeds of records, and plats for Grand Parkway (SH 99) right-of-way, streets intersecting Grand Parkway (SH 99) and tracts of land adjoining Grand Parkway (SH 99).
- b. Update existing Right-of-Way Maps including re-walking the limits of the Project certifying to a Cat. 1B, Cond. II Right-of-Way Survey to be delivered in PDF format.
- c. Update Survey Control Sheet(s) for the project to be delivered in PDF format.

**COST: \$10,430.00 (non-taxable)**

**2. Level A Subsurface Utility Engineering**

- a. Two (2) Level A SUE investigation to locate Atmos and DOW pipelines that cross the proposed southbound frontage road. The locations will be agreed upon prior to field mobilization and must be accessible with the vacuum vehicle and necessary equipment.

- b. Weisser Engineering Company will be responsible for surveying all Level A SUE locates in the field and incorporating the data into the project survey. Survey data for each test hole will include elevations for Top of Pipe/Cable and nearby Ground Elevation. Final deliverable will be a SUE Test Hole Data Sheet signed/sealed by a Texas Professional Engineer.

**COST: \$7,700.00 (non-taxable)**

### 3. Additional Services

- a. **Revise Parcel Plats (Cat. 1A; Cond. II)** - Prepare metes and bounds descriptions in accordance with Fort Bend County guidelines for property acquisition and add parcels to the existing right-of-way maps.

**COST: \$1,500.00 per parcel (non-taxable)**

**(3 Tracts = \$4,500.00)**

## II. TERMS AND CONDITIONS

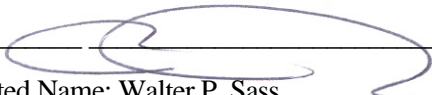
1. This Agreement may only be modified by a writing acknowledging agreement of modification by both parties.
2. The Responsible Party signing this Agreement agrees to be fully responsible for the timely and complete payment for Services within thirty (30) days of invoicing. Any requests for modification of this provision must be signed by an officer or department director of Weisser Engineering & Surveying.
3. Weisser Engineering & Surveying is an independent contractor. Nothing in this Agreement forms a partnership, joint venture, employment, franchise, master-servant, or agency relationship between Client and Weisser Engineering & Surveying.
4. WEISSER ENGINEERING & SURVEYING SHALL ONLY BE LIABLE FOR DAMAGE OR LOSS TO ANY PERSON OR PROPERTY TO THE EXTENT SUCH DAMAGE OR LOSS IS CAUSED BY WEISSER ENGINEERING & SURVEYING'S NEGLIGENT ACT OR OMISSION IN CONNECTION WITH THE SERVICES. WEISSER ENGINEERING & SURVEYING'S LIABILITY TO CLIENT OR ANY OTHER PARTY FOR CLAIMS OF ANY KIND, WHETHER BASED ON CONTRACT OR TORT OR OTHERWISE RELATING TO THIS AGREEMENT, SHALL NOT EXCEED THE COMPENSATION PAID OR OWED TO WEISSER ENGINEERING & SURVEYING FOR SERVICES UNDER THIS AGREEMENT.
5. Client shall not solicit Weisser Engineering & Surveying employees for purposes of employment during the course of the Agreement or for a period of twelve (12) months thereafter. Client acknowledges and agrees that breach of this provision may result in irreparable and continuing damage to Weisser Engineering & Surveying, for which there would be no adequate remedy at law, and that, in the event of such breach, Weisser Engineering & Surveying may be entitled to equitable or injunctive relief and/or a decree for specific performance, in addition to all such other and further relief as may be available at law, in equity, or otherwise.
6. Upon request, Weisser Engineering & Surveying may make electronic files of its CAD drawings available to Client on an "as is" basis for informational purposes only that may not be relied upon for any other purpose. ALL WARRANTIES AND REPRESENTATIONS OF ANY KIND WITH REGARD TO ELECTRONIC FILES ARE DISCLAIMED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. Since revisions or additions to design file drawings may occur at any time, Client agrees to indemnify, defend and hold harmless Weisser Engineering & Surveying, its officers, directors, agents, shareholders, and employees from and against any and all claims, suits, losses, damages or costs, including reasonable attorney's fees, arising from the use of outdated or amended design file drawings by Client or any third party, and such indemnification shall survive acceptance of said file(s) by Client or the termination of this Agreement. Client promises to notify any third party that the third party may not reasonably rely on electronic files, drawings, or documents not directly provided to such third party by Weisser Engineering & Surveying.

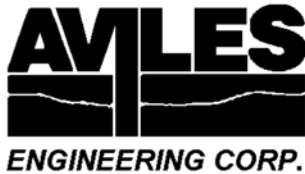
7. This Agreement shall be deemed entered into in Texas and shall be governed by and construed and interpreted in accordance with the laws of the State of Texas, without reference to any rules of conflict of laws. Venue shall be in Houston, Harris County, Texas.
8. In the event that any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provisions, and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in it.
9. This Agreement may be executed by facsimile or scanned and electronically transferred signatures. A copy of this Agreement bearing such a signature or signatures shall have the same force and effect as an original agreement with inked original signatures. Once signed, any reproduction of this Agreement made by reliable means (e.g., photocopy, scan, facsimile) is considered an original.
10. Client's failure to sign and return this Agreement to Weisser Engineering & Surveying within fifteen (15) days of Effective Date renders the Agreement voidable by Weisser Engineering & Surveying.
11. Notwithstanding anything to the contrary in this Agreement or any other ancillary documents, Weisser Engineering & Surveying shall not be responsible for delays caused by factors beyond Weisser Engineering & Surveying's reasonable control, including but not limited to delays because of strikes, lockouts, work slowdowns or stoppages, government ordered industry shutdowns, power or server outages, acts of nature, widespread infectious disease outbreaks (including, but not limited to epidemics and pandemics), failure of any governmental or other regulatory authority to act in a timely manner, failure of the Client to furnish timely information or approve or disapprove of Weisser Engineering & Surveying's services or work product, or delays caused by faulty performance by the Client or by contractors of any level. When such delays beyond Weisser Engineering & Surveying's reasonable control occur, Client agrees that Weisser Engineering & Surveying shall not be responsible for damages, nor shall Weisser Engineering & Surveying be deemed in default of this Agreement or any other agreement.

We appreciate the opportunity to provide this proposal. If you have any questions or comments, please do not hesitate to contact Laurie Young ([Lyoung@weissereng.com](mailto:Lyoung@weissereng.com)).

The Client, by signing below, represents that he or she has the authority to enter into this Agreement, agrees to the terms and conditions in this Agreement, is willing to be the Responsible Party, promises to pay the invoiced amount within thirty (30) days of invoicing, and authorizes Weisser Engineering & Surveying to proceed with the Services as described above.

**CLIENT**  
 DEC Engineering  
 By: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date of Acceptance: \_\_\_\_\_

**WEISSER ENGINEERING & SURVEYING**  
 By:  \_\_\_\_\_  
 Printed Name: Walter P. Sass  
 Title: Principal  
 Date of Acceptance: 7/26/2022



September 20, 2021

Mr. Michael Kaspar, P.E.  
DE Corporation  
3100 W. Alabama  
Houston, Texas 77098

Re: Revised Geotechnical Investigation Proposal  
Fort Bend County Precinct 3  
Exit Ramp Bridge from Southbound Grand Parkway to Frontage Road  
From Fry Road to FM 1093  
Fort Bend County, Texas  
AEC Proposal No. G2021-09-06 R1  
AEC Project G136-18

Dear Mr. Kaspar,

Aviles Engineering Corporation (AEC) is pleased to submit this geotechnical investigation proposal for additional borings for Fort Bend County Precinct 3's proposed Grand Parkway (SH-99) Southbound Frontage Road project from Fry Road to FM 1093, in Fort Bend County, Texas. According to the information provided by DE Corporation (DEC), an exit ramp bridge between the southbound lanes of Grand Parkway and the southbound frontage road has been added to the project scope. The bridge will be approximately 700 feet long, and the approaches will be supported by a combination of embankments and MSE retaining walls. As directed by DEC, the geotechnical investigation will be performed in accordance with Texas Department of Transportation (TxDOT) requirements, as presented in the TxDOT July 2020 Geotechnical Manual.

These additional borings will be incorporated into AEC's ongoing geotechnical investigation for this project, G136-18. As directed by DEC, AEC will drill a total of 7 borings (Borings B-14 through B-20) for the exit ramp bridge and approaches: 5 borings to 80 feet deep for the bridge abutments and interior bents, and 2 borings to 25 feet for the approaches. The combined total drilling footage is 450 feet. The boring locations are presented on the attached Boring Location Plan. AEC personnel will mark the boring locations along the alignment and contact Texas 811 to check for underground utilities. However, Texas 811 does not check for underground water line, storm sewer, and sanitary sewer. We request that the existing underground utility drawings be provided to AEC at the onset of the project.

Based on our previous site visits, a buggy mounted drill rig will be required to access the borings. The borings will be performed on grass areas between the SBML and SBFR; however, traffic control will be required, which includes traffic signs and a Truck Mounted Attenuator (TMA). Boring locations may also be adjusted in the field to accommodate drill rig access, depending on the swale/embankment slopes along Grand Parkway. Soil samples will be obtained continuously in the borings at 2 foot intervals from the ground surface to a depth of 20 feet in the borings, and then at 5 foot intervals thereafter to the boring termination depths. Texas Cone Penetrometer (TCP) tests will also be performed at intervals of 5 feet throughout the borings. Undisturbed samples will be obtained of cohesive soils by pushing a Shelby tube (ASTM D-1587). Standard Penetration Test samples will be obtained of granular soils (ASTM D-1586). We will note any visual evidence of odor indicating hazardous materials if encountered in the samples. Representative portions of all soil samples will be sealed, packaged and transported to our laboratory.



Water level readings will be noted during drilling and obtained upon completion of drilling. After completion of drilling the borings will be backfilled with bentonite chips.

Laboratory testing may consist of moisture contents, Atterberg limits, percentage passing No. 200 sieve, sieve and hydrometer analysis, dry density, unconfined compression (UC), and unconsolidated-undrained (UU) triaxial tests depending on the soil types encountered. In addition, AEC will perform a total of two consolidation tests for retaining wall settlement analyses. We will analyze the field and laboratory data and update AEC's geotechnical engineering report G136-18 to include: (i) soil boring logs depicting soil stratigraphy and groundwater depths; (ii) exit ramp bridge recommended foundation type, foundation axial load capacity, and L-Pile parameters; (iii) MSE wall allowable bearing capacity, lateral earth pressure soil parameters, minimum strap length to resist sliding and overturning, settlement analyses, and global (rotational) stability analyses; (iv) embankment fill material and compaction requirements, including side slope inclination (if required); and (v) geotechnical recommendations and dewatering guidelines for construction of the improvements.

The estimated lump sum fee for the services described in this proposal is **\$66,717.89**. The fee includes providing services as outlined in this proposal in the quantities indicated on the itemized fee estimate, which includes one mob/demob for a buggy rig, a site visit to mark the borings, and an electronic copy of the geotechnical reports. The fee is based on the following assumptions: (1) the field personnel will use Level D during the field exploration; (2) no standby time (weather-related or incurred due to reasons beyond AEC's control) are included; and (3) fence/gate removal, standby time, surveying, plan/specification review, environmental assessment and attendance at meetings are not included.

We plan to mark the boring locations and contact Texas 811 after notice to proceed and available drawings of existing underground utilities are provided. Weather permitting, and assuming no field delays, we will start the field exploration about one month after the borings are marked. Drilling will take approximately 1 week to complete, laboratory soil testing will take about 5 to 6 weeks to complete (due to consolidation tests), and the draft report will take approximately 2 weeks to complete. Assuming nominal comments and revisions, we anticipate the final report will be completed approximately 2 weeks after we receive all review comments. The provided time frame is an estimate based on AEC's current schedule at the time this proposal was written, and will remain valid for 60 days from the date of the proposal. If project authorization is received after 60 days, then the schedule estimated herein may be subject to change.

To authorize us to proceed with the proposed geotechnical services, you may sign and return a copy of this proposal to authorize AEC to proceed with the services or issue us a Professional Services Contract to proceed with the services clearly reflecting the scope of services to be performed and referencing this proposal. If any of the project details described in this proposal are incorrect or the scope described or the assumptions listed need to be revised, please inform us immediately so we can revise the proposal as necessary.

**AVILES ENGINEERING CORPORATION**  
(TBPELS Firm Registration No. F-42)

A handwritten signature in blue ink, appearing to read "Wilber Wang".

Wilber Wang, P.E.  
Senior Engineer



Attachments: Terms and Conditions, Itemized Fee Estimate, Proposed Boring Location Plan

AGREED TO THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_  
BY (Signature): \_\_\_\_\_  
NAME (Print): \_\_\_\_\_  
TITLE: \_\_\_\_\_  
FIRM: \_\_\_\_\_

## **GEOTECHNICAL INVESTIGATION TERMS AND CONDITIONS**

### **STANDARD OF CARE**

The CLIENT recognizes that actual subsurface conditions can vary from those observed and/or encountered at locations where borings, surveys, or explorations are made, and that site conditions may change with time. Data interpretations and recommendations by AVILES ENGINEERING will be based solely on information available to the AVILES ENGINEERING during the investigation. AVILES ENGINEERING is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.

The CLIENT should expect AVILES ENGINEERING to perform Services under this PROPOSAL/AGREEMENT in a manner consistent with the level of care and skill ordinarily exercised by members of the engineering profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, expressed or implied, is made.

### **SCOPE OF SERVICES**

AVILES ENGINEERING will develop a scope of services based on the project information provided by the CLIENT. AVILES ENGINEERING shall not be responsible for problems arising due to inadequate number of borings and/or depths dictated or required by others or inadequate engineering analyses, if the CLIENT reduces the scope of services and/or provides insufficient or invalid project or other relevant information to AVILES ENGINEERING. In the event the CLIENT or his representative orders work described in this PROPOSAL/AGREEMENT, that action shall constitute the CLIENT's acceptance of this PROPOSAL/AGREEMENT and its terms and conditions

### **SITE ACCESS AND SITE CONDITIONS**

The CLIENT will grant or obtain free access to the site for all equipment and personnel necessary for AVILES ENGINEERING to perform the services described in this PROPOSAL/AGREEMENT, as well as provide location data for all below and above ground structures, pipelines and utilities. For such items encountered, not called to the attention of AVILES ENGINEERING, the CLIENT shall assume responsibility for any resultant damages. AVILES ENGINEERING will take reasonable precautions to minimize damage to the site, but it is understood by the CLIENT that, in the normal course of work, some damage may occur and the correction of such damage is not part of this AGREEMENT. The CLIENT will notify AVILES ENGINEERING of any known toxic and/or hazardous materials on site and shall assume responsibility for the cost of occurrences due to unknown toxic and/or hazardous materials on site.

### **BILLING AND PAYMENT**

The CLIENT will pay AVILES ENGINEERING the lump sum amount(s) shown in the PROPOSAL/AGREEMENT. Invoices will be submitted to the CLIENT by AVILES ENGINEERING, and will be due and payable within thirty (30) days of the invoice date. CLIENT will pay an additional charge of 1.5 percent per month on any delinquent amount, and agrees to pay attorney's fees and/or other costs involved in any required collection activity.

### **LIMITATION OF LIABILITY / INDEMNIFICATION**

If at any time, there shall be or arise any liability on the part of AVILES ENGINEERING by virtue of this Agreement or because of the relation hereby established, whether due to the negligence of AVILES ENGINEERING (including gross negligence) or otherwise, such liability is and shall be limited to a sum equal in amount to the fee charged by AVILES ENGINEERING. AVILES ENGINEERING and CLIENT agree to indemnify each other from any claims, etc., including attorney's fees and litigation costs, to the proportionate extent caused by each party's own negligence. If AVILES ENGINEERING is found to be prevalent in any third party lawsuits relating to this AGREEMENT, the CLIENT shall pay all AVILES ENGINEERING costs, including legal fees, that were incurred as a result thereof.

**ATTACHMENT A**  
**FEE SCHEDULE (AVILES ENGINEERING CORPORATION)**  
**METHOD OF PAYMENT: LUMP SUM**

**PRIME PROVIDER NAME: DE CORPORATION**  
**CONTRACT NUMBER:**  
**PROJECT NAME: SH99 Southbound Frontage Road**  
**PROJECT LIMITS: Fry Road to FM 1093**

TASK DESCRIPTION	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEER TECH	ENGINEER TECH	GEOLOGIST	ADMIN/CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
<b>ROUTE &amp; DESIGN STUDIES (FC 110)</b>											
DATA COLLECTION AND FIELD RECONNAISSANCE									0	N/A	N/A
Project Initiation and Set Up Field Work				8	12				20	N/A	N/A
Utilities Clearance and Field Coordination for staking the soil borings				8	12				20	N/A	N/A
Drilling, Sampling, Logging, and Traffic Control Coordination						54			54	N/A	N/A
GEOTECHNICAL BORINGS									0	N/A	N/A
Review field boring logs and assign lab tests			4						4	N/A	N/A
Review lab test data and perform QA/QC			2	2					4	N/A	N/A
Input lab test data, prepare and review Wincore Boring Logs			8	32					40	N/A	N/A
Monitor Piezometers									0	N/A	N/A
REVIEW, SIGN, AND SEAL DEC'S BORING LOG SHEETS	0.5								0.5	N/A	N/A
ENGINEERING ANALYSIS	2	8	16	28					54	N/A	N/A
GEOTECHNICAL REPORT	1	8	12	20					41	N/A	N/A
									0	N/A	N/A
									0	N/A	N/A
									0	N/A	N/A
									0	N/A	N/A
									0	N/A	N/A
HOURS SUB-TOTALS	3.5	16	42	98	24	54	0	0	237.5		
CONTRACT RATE PER HOUR	\$205.02	\$175.73	\$123.25	\$98.00	\$115.46	\$92.55	\$92.55	\$61.51			
TOTAL LABOR COSTS	\$717.57	\$2,811.68	\$5,176.50	\$9,604.00	\$2,771.04	\$4,997.70	\$0.00	\$0.00	\$26,078.49		
<b>SUBTOTAL (FC 110)</b>									<b>\$26,078.49</b>		

DESCRIPTION								TOTAL MH BY FC	TOTAL COSTS BY FC
ROUTE & DESIGN STUDIES (FC 110)								237.5	\$26,078.49
<b>SUBTOTAL LABOR EXPENSES</b>								<b>237.5</b>	<b>\$26,078.49</b>
<b>OTHER DIRECT EXPENSES</b>	<b>QUANTITY</b>	<b>RATE</b>	<b>UNIT</b>						
Traffic Control Services, Traffic Signs and TMA - Small Project (includes labor, equipment, and fuel)	6	\$ 1,650.00	DAY						\$9,900.00
Mileage (# of miles) (0.560)	540	\$0.560	MI						\$302.40
Courier Services	0	\$45.00	EACH						\$0.00
Photocopies B/W 8.5x11	0	\$0.15	EACH						\$0.00
Photocopies B/W 11x17	0	\$0.25	EACH						\$0.00
Photocopies Color 8.5x11	0	\$1.00	EACH						\$0.00
Photocopies Color 11x17	0	\$1.25	EACH						\$0.00
CD Archive	0	\$2.00	EACH						\$0.00
<b>SUBTOTAL DIRECT EXPENSES</b>									<b>\$10,202.40</b>

**ATTACHMENT A**  
**FEE SCHEDULE (AVILES ENGINEERING CORPORATION)**  
**METHOD OF PAYMENT: LUMP SUM**

**PRIME PROVIDER NAME: DE CORPORATION**  
**CONTRACT NUMBER:**  
**PROJECT NAME: SH99 Southbound Frontage Road**  
**PROJECT LIMITS: Fry Road to FM 1093**

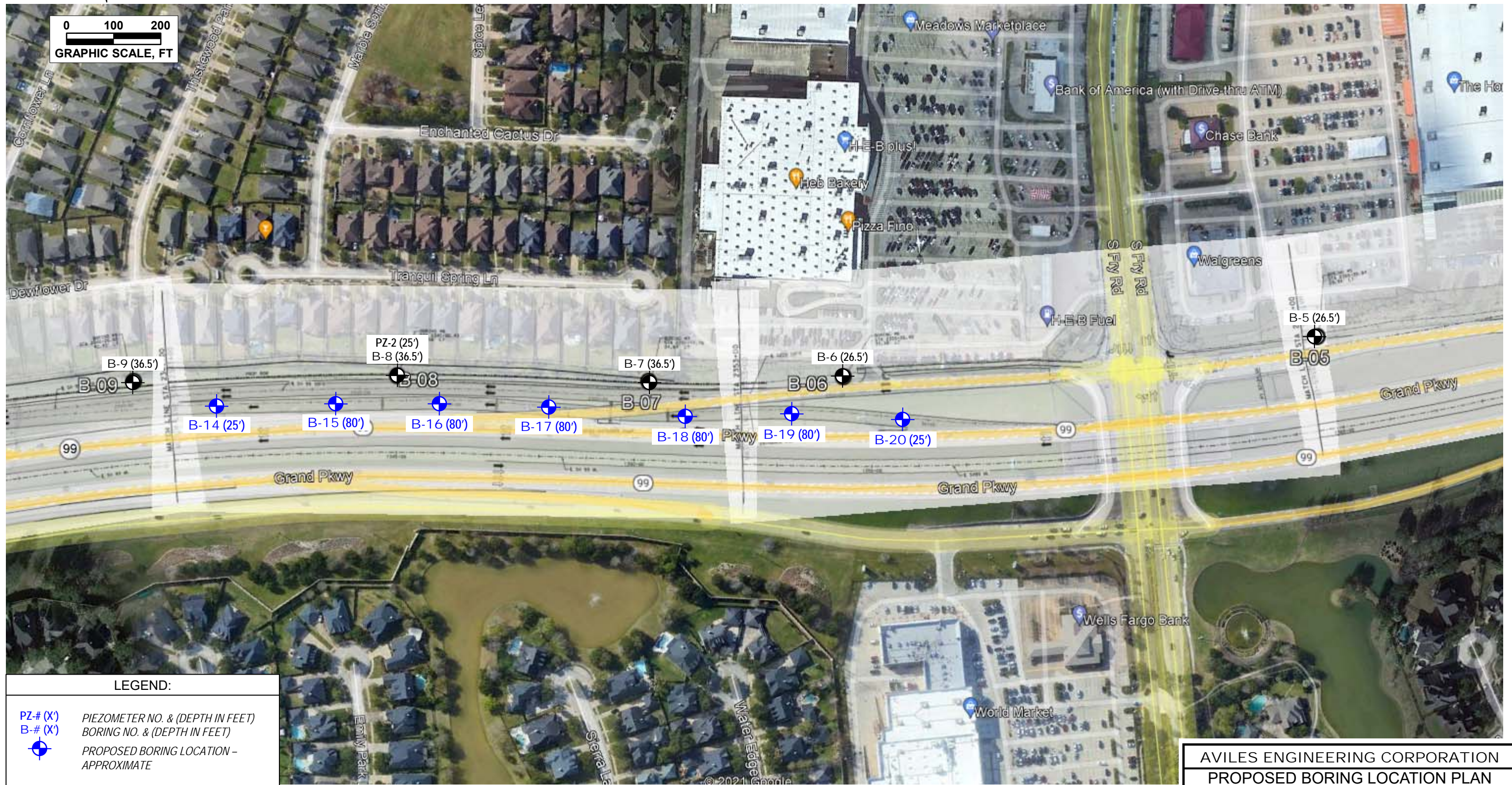
Unit Costs					
Services To Be Provided	Test Code	Unit	Rate	Quantity	Total
Mobilization and Demobilization of Drill Rig (within 100 miles from office to site)		each	\$600.00	1	\$600.00
Drill Crew travel to/from Job site per day (Crew of 3)		day	\$185.00	6	\$1,110.00
Dozer for Site Clearing for Soil Boring Access		day	\$1,975.00		\$0.00
Core/drill operator/technician and coring equipment used to drill flexible and rigid pavement (2-man crew)					\$0.00
(a) 4-in. diameter cores		each	\$119.00		\$0.00
(b) 6-in. diameter cores		each	\$170.00		
(c) 4-in. diameter cores (greater than 6-inch thickness)		Inch	\$14.00		\$0.00
(d) 6-in. diameter cores (greater than 6-inch thickness)		Inch	\$16.00		\$0.00
Soil Boring with TCP Test every 5 feet interval, (0'-50')		feet	\$33.00	300	\$9,900.00
Soil Boring with TCP Test every 5 feet interval, (50'-100')		feet	\$37.00	150	\$5,550.00
Surcharge for Drilling using Marsh Buggy		feet	\$8.00	450	\$3,600.00
Backfill Boreholes (Bentonite Chips)		feet	\$7.00	450	\$3,150.00
Water Stand Pipes (Piezometer)		feet	\$20.00		\$0.00
Steel Manhole Cover for Piezometer		each	\$60.00		\$0.00
Water Stand Pipes Plugging		each	\$450.00		\$0.00
Drilling Standby Time (Crew of 3)		hour	\$185.00		\$0.00
Site Cleanup		hour	\$185.00	3	\$555.00
Determination of Moisture Content in soils	ASTM D2216	test	\$9.00	90	\$810.00
Liquid Limit of Soils	ASTM D4318	test	\$33.00	22	\$726.00
Plastic Limit of Soils	ASTM D4318	test	\$33.00	22	\$726.00
Percent Passing #200 sieve	ASTM D1140	each	\$45.00	17	\$765.00
Sieve Analysis	ASTM D6913	each	\$62.00	5	\$310.00
Sieve Analysis w/Hydrometer	ASTM D7928	each	\$125.00		\$0.00
Unconfined Compressive Strength (Soil)	ASTM D2166	each	\$55.00	11	\$605.00
Unconsolidated Undrained Triaxial Compressive Strength of Soil	ASTM D 2850	each	\$60.00	11	\$660.00
Consolidated Undrained Triaxial Compression Test (Multi-stage, 1 sample)	ASTM D4767	each	\$1,600.00		\$0.00
One Dimensional Consolidation Properties of Soil	ASTM D2435	each	\$500.00	2	\$1,000.00
Hydraulic Conductivity	ASTM D5084	each	\$300.00		\$0.00
Sulfate Content	TEX-145E	each	\$65.00	4	\$260.00
Suction Test (Filter Method)	ASTM D5298	each	\$75.00		\$0.00
Specific Gravity of Soils	ASTM D854	each	\$55.00	2	\$110.00
Crumb	ASTM D6572	each	\$38.00		\$0.00
Double Hydrometer	ASTM D4221	each	\$160.00		\$0.00
<b>SUBTOTAL UNIT COSTS</b>					<b>\$30,437.00</b>

**ATTACHMENT A**  
**FEE SCHEDULE (AVILES ENGINEERING CORPORATION)**  
**METHOD OF PAYMENT: LUMP SUM**


PRIME PROVIDER NAME: DE CORPORATION  
CONTRACT NUMBER:  
PROJECT NAME: SH99 Southbound Frontage Road  
PROJECT LIMITS: Fry Road to FM 1093


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SUMMARY	
SUBTOTAL LABOR EXPENSES	\$26,078.49
SUBTOTAL DIRECT EXPENSES	\$10,202.40
SUBTOTAL UNIT COSTS	\$30,437.00
<b>GRAND TOTAL</b>	<b>\$66,717.89</b>



**LEGEND:**

PZ-# (X') PIEZOMETER NO. & (DEPTH IN FEET)  
 B-# (X') BORING NO. & (DEPTH IN FEET)  
 PROPOSED BORING LOCATION - APPROXIMATE

PZ-# (X') PIEZOMETER NO. & (DEPTH IN FEET)  
 B-# (X') BORING NO. & (DEPTH IN FEET)  
 EXISTING AUG 2018 BORING LOCATION - SURVEYED

**Notes:**

- 1) Existing boring locations have been surveyed.
- 2) Site plan is 'best fit' to aerial.
- 3) Boring locations may be adjusted in field as necessary for drill rig access.

**AVILES ENGINEERING CORPORATION  
 PROPOSED BORING LOCATION PLAN**

SH 99 SOUTHBOUND FRONTAGE ROAD  
 FROM FM 1093 TO S. FRY ROAD  
 FORT BEND COUNTY, TEXAS

AEC PROPOSAL NO.:	DATE:	SOURCE DRAWING PROVIDED BY:
G2021-09-06 R1	09-20-2021	GOOGLE/DE ENG
APPROX. SCALE:	DRAFTED BY:	PLATE NO.:
1" = 200'	WLW	PLATE 1