STATE OF TEXAS

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COUNTY OF FORT BEND

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### SECOND AMENDMENT TO AGREEMENT FOR PROFESSIONAL ENGINEERING INSPECTION SERVICES

THIS SECOND AMENDMENT, is made and entered into by and between Fort Bend County (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and HVJ Associates, Inc., (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WHEREAS, the parties executed and accepted that certain Agreement for Professional Engineering Inspection Services on March 1, 2016, (hereinafter "Agreement"), pursuant to SOQ 14-025, as amended by document dated September 5, 2017, (hereinafter "Amendment"); and

WHEREAS, the parties desire to further amend the Agreement for additional Construction Materials Engineering and Testing Services to be provided for the construction of Phase 2A of the Project and increase the total Maximum Compensation to complete the additional services.

#### NOW. THEREFORE, the parties do mutually agree as follows:

- County shall pay Contractor an additional three hundred thirteen thousand three hundred fifty-nine dollars and no/100 (\$313,359.00) to provide all of the additional testing and inspection services as described in the Scope of Services and Fee Schedule for Construction Materials and Engineering and Testing dated December 18, 2017 attached hereto as Exhibit "A" and incorporated herein for all purposes.
- The Maximum Compensation payable to Contractor for Services rendered is hereby increased to an amount not to exceed seven hundred eighty-three thousand three hundred fifty-nine dollars and 00/100 (\$783,359.00), authorized as follows:

\$350,000.00 under the Agreement;

\$120,000.00 under the Amendment; and

\$313,359.00 under this Second Amendment.

- 3. In no case shall the amount paid by County for all Services under the Agreement and this Amendment exceed the Maximum Compensation without written amendment executed by the parties.
- 4. The Time of Performance under the Agreement is hereby extended to end no later than March 31, 2019.

Except as provided herein, all terms and conditions of the Agreement and the Amendment shall remain unchanged.

FORT BEND COUNTY	HVJ ASSOCIATES, INC
Robert E. Hebert, County Judge	Namondo Ndando, P.E., Vice President
Date	01/29/2018 Date
ATTEST:	
Laura Richard, County Clerk	
APPROVED:  Richard W. Stolleis, P.E., County Engineer	
APPROVED AS TO LEGAL FORM:	
Marcus D. Spencer, First Assistant County Attor	ney
AUDITOR'S	CERTIFICATE
I hereby certify that funds are availance accomplish and pay the obligation of Fort B	
	Robert Ed Sturdivant, County Auditor

E\Marcus\FM 1093-Westpark Tollway Project\Construction Mgmt\HW/\Amend 2 - PE Inspection Svcs.HVI.docx 1/19/2018

### **EXHIBIT A**



Houston Austin

Dallas

6120 S. Dairy Ashford Rd. Houston, TX 77072-1010 281.933.7388 Ph

San Antonio

281.933.7293 Fax www.hvj.com

December 18, 2017

Mr. Mike Stone, PMP, PSP General Manager Fort Bend County Toll road Authority Mike Stone Associates, Inc. PO Box 546 Richmond, Texas 77406

Re:

Scope of services and Fee schedule for Construction Materials Engineering and Testing for the proposed FM 359/FM 1093 Westpark Extension Phase II
Owner: Fort Bend County

#### Dear Mr. Stone:

We appreciate an opportunity to provide you scope of CMT services and other professional services for upcoming subject Fort Bend County project. HVJ Associates, Inc. prides itself on the quality personnel and testing services it provides to its clients. We are especially proud of our A2LA (American Association for Laboratory Accreditation) and accreditation and the certification of our technicians by the National Institute for Certification in Engineering Technologies (NICET), Texas Hot Mix Asphalt Association and the American Concrete Institute (ACI).

We have attached Exhibit A showing the anticipated scope of our CMT services and expected other professional services on this project. We have also attached Exhibit B providing hourly rate of our professional staff, certified field technicians and fees schedule of laboratory tests. From our past experience, Fort Bend County has historically adopted fees that Harris County in place. Attached fee schedule is similar to Harris county Fee schedule and recently adopted and approved on similar other Fort Bend County project.

We have also provided detail breakdown estimate of our scope of Material testing and inspection services of anticipated Phase II work of this project which is estimated nor to exceed \$313,359 based on estimated construction schedule of 12 months and construction cost of approximately 20M

We will look forward to work with project team on this valuable Fort Bend County project.

Sincerely

Hirendra (Harry) Patel, PE

CME Manager, Houston

Attachment:

### **EXHIBIT A**

### **SCOPE OF WORK**

#### **GENERAL DESCIPTION**

Construction of FM 359/FM 1093 Westpark Extension from west of Cross Creek Ranch Blvd to east of FM 1463/FM 359 consisting of grading, lime treated subgrade, Portland cement treated base, concrete pavement, storm sewers, structures, retaining walls, etc.

All work is to be inspected per Texas Department of Transportation (TX DOT) specifications (2014)

### **SCOPE OF SERVICES**

Scope of services covered in this proposal will consist of all required materials testing and inspection to ensure the work meets TX DOT specifications. The following services will be provided:

- Moisture/density relationship of soils / stabilized soils
- Compaction testing of subgrade soils, compaction testing of fill/ backfill
- Compaction testing for all types of Embankment soil
- · Compressive strength of cement stabilized sand
- Compaction test on materials backfilled over utilities

Working hours for testing and inspection staff will not be limited to 7 a.m. to 5 p.m. on weekdays, and may include night and weekend work.

Code	Description	Unit	Current Fee
10100	Principal, P.E.	Hr.	206.00
10200	Senior Engineer, P.E. (10 yrs experience)	Hr.	183.00
10300	Project Engineer, P.E. or Project Geologist, P.G.	Hr.	149.00
10400	Graduate Engineer and Graduate Geologist	Hr.	101.00
10500	Technician, NICET IV	Hr.	84.00
10600	Technician, NICET III, HMA-II	Hr.	75.00
10700	Technician, NICET II, ACI Construction Inspector, HMA-1A or HMA- 1B, NDT II, Logger or both: TxDOT Soil SB-101 and SB-102	Hr.	65.00
10800	Technician, ACI Field Grade I, TxDOT	Hr.	51.00
10900	Technician (Non-Certified)	Hr.	43.00
11000	Senior Welding Inspector, SCWI	Hr.	115.00
11100	Welding Inspector, CWI, ACCP II	Hr.	91.00
11200	Associate Welding Inspector	Hr.	65.00
11300	Inspector, ASNT III	Hr.	112.00
11400	NDT Inspector Level II with asst. (2 man crew)	Hr.	112.00
11500	Engineering Assistant	Hr.	60.00
15000	Vehicle Charge	Hr.	10.00
15100	Reimbursable Expenses		Cost + 10%
15200	Services provided by quotation		Cost + 10%

### Aggregates

Code	Description	Standard	Unit	Current Fee
20100	Sieve Analysis - Coarse Aggregates	C 136 - C	Ea	54.00
20200	Sieve Analysis - Fine Aggregates	C 136 - F	Ea	54.00
20300	Rel Density & Abs Coarse Aggregates	C 127	Ea	81.00
20400	Rel Density & Abs Fine Aggregates	C 128	Ea	99.00
20500	Bulk Density & Voids in Aggregate	C 29	Ea	38.00
20600	Absorption - Coarse Aggregates	C 127	Ea	45.00
20700	Absorption - Fine Aggregates	C 128	Ea	45.00
20800	Finer than 75-um (No. 200) Sieve	C 117	Ea	49.00
20900	Organic Impurities in Fine Aggregates	C 40	Ea	48.00
21000	L.A. Abrasion	C 131 / C 535	Ea	208.00
21100	Clay Lumps and Friable Particles	C 142	Ea	55.00
21200	Lightweight Particles	C 123	Ea	64.00
21300	Sand Equivalent	D 2419	Ea	65.00
21400	Na/Mg Sulfate Soundness (5 cycles)	C 88	Ea	354.00
21500	Na/Mg Sulfate Soundness (Add'l cycles)	C 88	Ea	204.00

### **Portland Cement Concrete**

Code	Description	Standard	Unit	Current Fee
30100	Compressive Str. (Cylinder)	C 39	Ea	17.00
30200	Flexural Str. (Beam)	C 78	Ea	27.00
30300	Split Tensile Str. (Incl prep)	C 496	Ea	109.00
30400	Time of Set by Penetration	C 403	Ea	320.00
30500 30600	Linear Shrinkage & Thermal Coef (Bar)  Length Change of Hydraulic-Cement Mortar and Concrete	C 531 C 490 & C 157	Set 3 Set 3	328.00 116.00
30700	Density of Structural Ltwt. Concrete	C 567	Ea	81.00
30800	Concrete Coring, Minimum Charge	C 42	Min	338.00
30900	Concrete Coring (4" diameter to 6" Thickness)	C 42	Ea	105.00
31000	Concrete Coring, 4", additional thickness (over 6" to 12")	C 42	In	9.00
31100	Concrete Coring, 4", additional thickness (over 12")	C 42	in	12.00
31110	Concrete Coring (6" diameter to 6" Thickness)	C 42	Ea	150.00
31112	Concrete Coring, 6", additional thickness (over 6" to 12")	C 42	In	13.50
31113	Concrete Coring, 6",additional thickness (over 12")	C 42	ln	18.00
31200	Preparation of Core, Cap & Test	C 42	Ea	78.00
31300	Measuring Length of Core	C 174	Ea	13.00
31400	Pachometer Survey (Magnetic Induction)	None	Day	91.00
31500	Probe Penetration Test Equipment (plus probes)	C 803	Day	92.00

### **HMAC**

Code	Description	Standard	Unit	Current Fee
40100	Mix Design Review		Ea	218.00
40200	HMAC Design (In-Place)		Ea	2177.00
40300	Trail Batch (up to 5 points)		Ea	1633.00
40400	Additional Points		Ea	235.00
40500	Extraction/Gradation	Tex-210F	Ea	203.00
40600	Specific Gravity	D 2041 & 201F	Ea	72.00
40700	HVEEM Stability	Tex-208F	Set	95.00
40800	Bulk Density - Lab Molded or Core	Tex-207F	Set	54.00
40900	Bulk Density Core	Tex-207F	Ea	48.00
41000	Molding Specimens	Tex-206F	Set	63.00
41100	Maximum Theoretical Specific Gravity	Tex-227F	Ea	91.00
41200	Apparent Specific Gravity	Tex-202F	Ea	68.00
41300	Abson Recovery	Tex-211F	Ea	327.00
41400	Moisture Susceptibility	Tex-531C	Ea	476.00
41500	Penetration	D 5	Ea	86.00
41600	Ductility	D 113	Ea	115.00
41700	Viscosity	D 2170	Ea	95.00
41800	Asphalt Coring, Minimum Charge		Min	338.00
41900	Asphalt Coring (4*Dia. to 6* Thickness)		Ea	93.00
42000	Asphalt Coring (4"Dia. over 6" Thickness)		In	8.00
42150	Asphalt Coring (6" Dia. to 6" Thickness)		Ea	140.00
42160	Asphalt Coring (6" Dia. Over 6" Thickness)		In.	12.00
42200	Measuring Thickness of Asphalt		Ea	8.00
42300	PMA Extraction/Gradation	D 2172	Ea	272.00
42400	PMA Extraction/Gradation	D 6307	Ea	169.00
42500	Asphalt Content	D 4125	Ea	81.00

### Structural Steel

Code	Description	Standard	Unit	Current Fee
50100	Radiographic Source, Iridium		Day	123.00
50200	Radiographic Source, Cobalt 60		Day	142.00
50300	Ultrasonic equipment	E 114, E 273, E 587, E 797	Day	91.00
50400	Magnetic Particle Inspection Equipment	E 709	Day	34.00
50500	Skidmore-Wilhelm Tension Indicator		Day	136.00
50600	Torque Wrench		Day	50.00
50700	Discontinuity (Holiday) Equipment		Day	95.00
50800	Dry Film Thickness Equipment (Tooke Gauge)	D 4138	Day	34.00
50900	Dry Film Thickness Equipment (Magnetic)	D 7091	Day	34.00

### Soils

Code	Description	Standard	Unit	Current Fee
90100	Liquid & Plastic Limits	D 4318	Ea	62.00
90200	Moisture Content of Soils by Mass	D 2216	Ea	9.00
90300	Moisture Content by Microwave	D 4643	Ea	30.00
90400	Sieve Analysis	D 422	Ea	57.00
90500	Sieve Analysis w/ Hydrometer	D 422	Ea	128.00
90600	Percent Passing #200 Sieve	D 1140	Ea	48.00
90700	Specific Gravity	D 854	Ea	59.00
90800	pH of Soils	D 4972	Ea	17.00
90900	Unconfined Compressive Strength	D 2166	Ea	45.00
91100	Unconsolidated-undrained Triaxial Compression	D 2850	Ea	63.00
91200	One-Dimension Consolidation	D 2435	Ea	361.00
91300	Consolidation, Additional Increment	D 2435	Ea	51.00
91400	Dispersive Characteristic by Pinhole Test	D 4647	Ea	286.00
91500	Dispersive Characteristic by Crumb Test	D 6572	Ea	38.00
91600	Double Hydrometer	D 4221	Ea	177.00
91700	Soil Suction - Filter Paper		Ea	57.00
91900	California Bearing Ratio	D 1883	Ea	215.00
92000	Soil Shrinkage Factors by Mercury Method	D 427	Ea	63.00
92100	Soil Shrinkage Factors by Wax Method	D 4943	Ea	76.00
92200	One-Dimensional Swell, Cohesive Soil	D 4546	Ea	292.00
92300	OMD Standard Compaction	D 698	Ea	204.00
92400	OMD Modified Compaction	D 1557	Ea	218.00
92500	Max. & Min. Density - Sand	D 4253/D 4254	Ea	212.00
92600	Percent Solids in Lime Slurry		Ea	43.00
92700	Optimum Lime Content - pH Method	D 6276	Ea	235.00
92800	Optimum Lime Content - PI Method		Ea	242.00
94100	Cement Sand Compressive Strength	D 1633	Ea	71.00
94200	Cement Content of Soil-Cement	D 806	Ea	313.00
94300	Sieve Analysis - Base Material	C 136	Ea	95.00
94400	Compressive Strength Treated Base	Tex-120E	Ea	258.00
94500	OMD Standard Compaction, Treated	D 698	Ea	225.00
94600	OMD Standard Compaction, Treated	D 1557	Ea	239.00
95100	Nuclear Density Gauge	D 6938	Hr	10.50

### Subsurface Exploration

Code	Description	Standard	Unit	Current Fee
11010	Soil Boring, Intermittent 3-in. dia. (0 to 50')		Ft	19.00
11020	Soil Boring, Intermittent 3-in, dia. (50' to 100')		Ft	21.00
11030	Soil Boring, Continuous 3-in. (0 to 20")		Ft	21.00
11031	Soil Boring, Continuous 3-in. (20 to 50')		Ft	25.00
11032	Soil Boring, Continuous 3-in. (50 to 100')		Ft	35.00
11040	Soil Boring over 100' (Surcharge)		Ft	7.00
11050	Wash Boring		Ft	9.00
11060	Auger Boring		Ft	10.50
11070	Undisturbed/Split-Spoon in Wash/Auger Borings		Ea	39.00
11071	Piezometer Installation		Ft	16.00
11072	Piezometer Abandonment		Ft	16.00
11080	Grouting of Completed Boring		Ft	10.00
11090	A.T.V. Surcharge		Ft	7.00
11100	Minimum Charge for the Exploration (to be used if charges are less than \$782.00)		LS	782.00
11110	Mobilization/Demobilization		LS	349.00
11120	TDH Cone Penetration Test		Ea	27.00
11130	ATV Mobilization Surcharge		LS	136.00
11140	Portable Rig Drilling (Crew of two)		Hr	177.00
11150	Standby (Crew of Two)		Hr	170.00

#### **General Notes**

### 1. General

- 1.1 All construction materials engineering services including sampling, field and laboratory testing, and inspection services ("Services") performed by Consultant for Fort Bend County Toll Road Authority must be authorized by Fort Bend County Toll Road Authority.
- 1.2 Services not specifically authorized by Fort Bend County Toll Road Authority will not be paid for.
- 1.3 Failure to perform specified services in accordance with Fort Bend County Toll Road Authority requirements may result in cancellation of Consultant's purchase order.

### 2. Engineering Services

- 2.1 Engineering Services shall be performed by a professional engineer licensed in the State of Texas and employed full-time by the Consultant ("Engineer").
- 2.2 All construction materials engineering reports ("Reports") relating to Services performed by the Consultant shall be reviewed and signed by Consultant's Engineer. The Consultant's Engineer does not need to sign specimen pick-ups or project cancellation reports.
- 2.3 For review of Reports by Consultant's Engineer, Fort Bend County Toll Road Authority will compensate the Consultant at the signing engineer's rate (Project Engineer) for ¼ (0.25) hour of engineering review time for each Report.
- 2.4 Fort Bend County Toll Road Authority shall also compensate Consultant when Consultant's Engineer attends Project-related on-site and progress meetings at the request of the Fort Bend County Toll Road Authority.
- 2.5 Overtime will not be allowed for any Engineering Service.

### 3. Field Services

- 3.1 "Sampling" is defined as the process of procuring materials for subsequent testing or examination that is performed by a certified technician with knowledge of appropriate sampling procedures.
- 3.2 "Specimen Pickup" is defined as the process of retrieving "specimens," usually prefabricated in the field such as cylinders, beams, or cubes, and transporting those specimens to the laboratory for subsequent testing or examination.
- 3.3 Field Services shall be performed by Consultant's certified engineering technicians in accordance with the Fee Schedule.
  - 3.3.1 A non-certified technician maybe allowed to assist a certified technician on a Project provided two or more technicians are required.
  - 3.3.2 Specimen Pickup shall be performed, whenever possible, as a part of a scheduled field trip or by the full-time technician assigned to the Project.
  - 3.3.3 Specimen Pickup not performed as a part of a scheduled field trip or by the technician assigned to the Project shall be compensated at the technician rate.

- 3.3.4 Field sieve analysis and lime slurry percent-solids determination shall be performed in the field as part of the field inspection without an additional testing charge.
- 3.3.5 The rates for coring of Portland cement concrete or asphaltic concrete are inclusive of the field representative's time, all equipment, and patching of the core hole with a conventional concrete mixture for concrete or cold-patching asphaltic materials for asphaltic concrete. The rates for coring do not include a Vehicle Charge. Patching with specialty materials (such as non-shrink repair mortar) must be approved in advance by Fort Bend County Toll Road Authority and any approved specialty patching materials will be reimbursed by Fort Bend County Toll Road Authority at cost plus 10%.
- 3.3.6 A minimum of 30-minute unpaid lunch shall be taken by the field technician for work over eight (8) hours unless otherwise approved in writing by the Fort Bend County Toll Road Authority.
- 3.3.7 Certified technicians shall carry their certification wallet cards with them on the Project.
- 3.4 Fort Bend County Toll Road Authority shall compensate Consultant for travel time between the Consultant's facility and the Fort Bend County Toll Road Authority's Project or other Project- related location. The maximum time compensated for this travel is 1 hour total / roundtrip (30 minutes each way)

### 4. Laboratory Services

- 4.1 Fees for laboratory tests are inclusive of sample preparation unless specifically noted in this Attachment. Compensation shall not be paid for personnel services and/or materials related to such testing, except as specifically noted in this Attachment.
- 4.2 Unless otherwise requested by Fort Bend County Toll Road Authority, an aggregate correction factor will not be determined for use in adjusting the aggregate gradation and asphalt content when testing HMAC in accordance with ASTM D6307. Laboratory reports should include a note indicating that an aggregate correction factor was not used.

#### 5. Other Services

- 5.1 Geotechnical Services
  - 5.1.1 All geotechnical borings shall be staked by Consultant and shall be compensated at the rate not to exceed that for a Graduate Engineer.
  - 5.1.2 Geotechnical logging shall be performed by a technician certified in soils or a Graduate Engineer or Graduate Geologist. Unless the services of an Engineer or Geologist are approved by Fort Bend County Toll Road Authority in advance, logging shall be compensated at the NICET Level II technician rate. Costs for logging services shall be in addition to fees for geotechnical drilling and sampling services.
  - 5.1.3 Geotechnical borings shall be drilled at increments of 5-ft.

### 5.2 Traffic Control

5.2.1 If traffic control is necessary during geotechnical field operations, qualified personnel or a qualified subcontractor should be engaged to provide traffic control. Proposed use of traffic control must be approved in advance by the Director.

### 6. Reporting

Consultant shall document all field and laboratory Services in a written report prepared in accordance with Project Specifications and standard methods.

- 6.1 Reports shall contain the following:
  - 6.1.1 Project Name, Consultant Report number, and Fort Bend County Toll Road Authority Job No.
  - 6.1.2 Personnel name and certification typed or printed legibly.
  - 6.1.3 Time of departure from Consultant's facility.
  - 6.1.4 Time of arrival at Project.
  - 6.1.5 Standby time, if any.
  - 6.1.6 Services requested and performed.
  - 6.1.7 Time of departure from Fort Bend County Toll Road Authority Project.
  - 6.1.8 Time of arrival at Consultant's facility.
  - 6.1.9 Overtime hours, if any.
  - 6.1.10 Appropriate Specification and/or Test Method.
  - 6.1.11 Signature of Engineer reviewing Report.
- 6.2 Reports shall contain hours of service for each visit to the Fort Bend County Toll Road Authority Project including Specimen Pickup.
- 6.3 All Reports must be received by the Fort Bend County Toll Road Authority within 14 calendar days of the original date of service or completion of required laboratory tests.
- 6.4 Final reports presenting strength test results shall be sent to Fort Bend County Toll Road Authority within three (3) business days following the test date.

### 7. Compensation and Invoicing

- 7.1 Compensation of Consultant for personnel performing sampling, testing, inspection, and traffic control services shall be as stated in the Fee Schedule and shall include reasonable travel time, as agreed to by Fort Bend County Toll Road Authority, between Consultant's facility and the Fort Bend County Toll Road Authority Project.
- 7.2 Fees for Services are inclusive of all tools, equipment and consumable supplies needed to perform the subject services, except as specifically noted in this Attachment.
- 7.3 Fees for Services performed on an hourly basis shall be recorded to the nearest ¼ (0.25) hour and will be compensated at the applicable rate.
- 7.4 Overtime for field services is applicable for any hours worked over 8 hours per day or over 40 hours per week. No overtime will be paid without prior approval from the Authority.
- 7.5 A minimum charge of four (4) hours for field technician, vehicle, and equipment (where charged on an hourly rate) shall apply to each visit to the Project site or to an authorized off-site location for sampling, observation, inspection, or testing as outlined in the Fee Schedule. The maximum Vehicle Charge shall be eight (8) hours at the rate outlined in the Fee Schedule.

- 7.6 All hourly services invoiced shall be accompanied by the Company representative's signed time sheet or daily report, including the name and classification of the individual. Hourly services shall be invoiced to the nearest 1/4 hour.
- 7.7 A minimum of 30-minute lunch shall be taken for continuous work of eight (8) hours or more on a single Project.
- 7.8 If a technician has departed for the Project, prior to receipt of a cancellation notice by Consultant, Consultant shall be compensated at the applicable technician rate for the time required to Consultant's facility plus applicable Vehicle Charge. A four (4) hour minimum shall apply.
- 7.9 If a technician/inspector is assigned to more than one Fort Bend County Toll Road Authority Project in one day, his or her actual time on both Projects shall be charged (i.e. no minimum charge for both Projects), provided the total time exceeds four (4) hours. All hours invoiced must be supported by copies of Reports and a signed time-sheet or daily activity report sheets, which contains the name of the personnel and their certification, shall be signed by third-party inspector or contractor, if available.
- 7.10 Consultant may be reimbursed by Fort Bend County Toll Road Authority for services of a qualified subcontractor or consultant, authorized in advance by the Fort Bend County Toll Road Authority, at cost plus 10%.
- 7.11 Reproduction charges shall be compensated at current commercial rates.
- 7.12 All reimbursable expenses of Consultant shall be supported by documentation acceptable to the Fort Bend County Toll Road Authority. Reimbursables such as photographs, reproduction material, delivery, background checks, safety training/orientation, traffic control, parking, and badging, etc., shall be invoiced and reimbursed at cost plus 10%. Receipts for reimbursable expenses must be submitted with the Consultant's invoice for the reimbursable expense.

### Fortbend County Westpark Extension PHASE II

CUENT:		Fortbend County C/o Mike Stone Associates, Inc.				
		PO Box 546 Richmond, Texas 77406				
PROPOSA	AL NO:	HC1710475		··		
QTY.	UNIT	SERVICES		JNIT PRICI	-	TOTAL
		Soil testing for Utility Backfill/Structure Backfill				
		Field Services				
250	Hour	Technician Time for Compaction Testing , Level II or SB102	s	65.00		16,250.0
50	Hour	Technician Time for Compaction Testing, OT	5			4,875.0
24	Hour	Technician Time for sample Pick up	\$	65.00	-	1,560.0
250	Hour	Nuclear Gauge	s	10.50	•	2,625.0
274	Hour	Vehicle Charge	s	10.00	•	
			•	Subtotal	<u> </u>	2,740.0 28.050.0
		Laboratory Services			•	20,030,0
4	Each	Standard Proctors (TEX114E or D-698)	\$	204.00	S	816.0
4	Each	Standard Proctor, stabilized or Treated (D-698 or TEX 113E)	\$	225.00	s	900.0
6	Each	Atterberg limits (ASTM D-4318,)	\$	62.00	•	372.0
4	Each	Sieve #200 (ASTM D-1140)	\$	48.00	•	192.0
120	Each	Cement Compressive Strength (ASTM D-1633)	S	71.00	-	8,520.0
			_	Subtotal		10,800,01
		Engineering Report Review			•	
40	Hrs	Engineering Report Review (0.25 hr per report)	s	149.00	\$	5,960.00
				Subtotal	_	5,960.00
		Soil testing for Utility Backfil	l/Structu	re Backfill	\$	44,810,00
		Soil testing for Embankment/subgrade/Base/Stabilized			_	
		Field Services	anograde	and sas	8	
150	Hour	Technician Time for Compaction Testing , Level III	s	75.00	\$	86,250.00
350	Hour	Technician Time for Compaction Testing OT	\$	112.50	•	39,375.00
40	Hour	Technician Time for sample Pick up	5	65.00	-	2,600.00
150	Hour	Nuclear Gauge	\$	10.50	-	12.075.00
190	Hour	Vehicle Charge	\$		s	11,900.00
_			•	Subtotal	<del></del>	152,200.00
		Laboratory Services			•	. 32,233.00
5	Each	Standard Proctors (ASTM D-698, TEX 114E)	\$	204.00	s	1,020.00
8	Each	Standard Proctor, stabilized or Treated (D-698, TEX 113 E)	Š	225.00	-	1,800.00
10	Each	Atterberg limits (ASTM D-4318, TEX 106E)	Š	62.00	-	620.00
5	Each	Sieve #200 (ASTM D-1140, TEX 111E)	S		s	240.00
24	Each	Cement Compressive Strength (ASTM D-1633)	\$	71.00	-	1,704.00
			•	•	\$	5,384.00
		Engineering Report Review				
30	Hrs	Engineering Report Review (0.25 hr per report)	\$	149.00	\$	11,920.00



### Fortbend County Westpark Extension PHASE II

PROJECT	NAME:	FM 359 / FM 1093 Westpark Extension Phase II				
CLIENT:		Forthend County C/o Mike Stone Associates, Inc.				
		PO Box 546 Richmond, Texas 77406	<del></del>			<del></del>
ROPOSA	L NO:	HC1710475	·			
QTY.	UNIT	SERVICES	UI	NIT PRICE		TOTAL
		Soil testing for Embankment/Structure backfill and	d other servic	ec		
		Field Services (Night Shifts)				
540	Hour	Technician Time for Compaction Testing , Level II OT	s	97.50		£3.450
200	Hour	Technician Time for Compaction Testing, Level III OT	\$		•	52,650
10	Hour	Technician Time for sample Pick up, Level II OT	·	112.50	•	22,500
740	Hour	Nuclear Gauge	\$	97.50	-	975.
740	Hour	Vehicle Charge	\$	10.50	\$	7,770.
	1.04	venicle Charge	\$	10.00	\$	7,400.
				Subtotal	\$	91,295.
		Nig	ght shift Servic	es Total	\$	91,295.0
		Project Management				
20	Hour	Project Engineer Material Submittal review	s	149.00	2	2,980.0
30	Hour	Project Engineer Site Visit/Project meetings	\$	149.00	•	4.470.0
30	Hour	Vehicle Charge	\$	10.00	\$	300.0
		Projec	t Managemer	t Total	\$	7,750.0
		TOTAL ESTIMATE	FOR CMT SEI	RVICES	\$	313,359.00

