

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

**SECOND AMENDMENT TO AGREEMENT FOR
PROFESSIONAL MATERIALS TESTING AND 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 Aviles Engineering Corporation, (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WHEREAS, the parties executed and accepted that certain Agreement for Professional Materials Testing and Inspection Services on February 23, 2016, pursuant to SOQ 14-025, (hereinafter "Agreement"), as amended by document dated December 12, 2017, (hereinafter "Amendment"); and

WHEREAS, the parties desire to further amend the Agreement for additional services to be provided for the construction of Phase 2A of the Project and increase the total Maximum Compensation for the completion of such additional services.

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

1. County shall pay Contractor an additional one hundred twenty-two thousand four hundred twenty-four dollars and no/100 (\$122,424.00) to complete the materials testing and inspection services as described in Contractor's Proposal Number 17-47 dated December 27, 2017, attached hereto as Exhibit "A" and incorporated herein for all purposes.
2. The Maximum Compensation payable to Contractor for Services rendered is hereby increased to an amount not to exceed four hundred fifty-two thousand four hundred twenty-four dollars and no/100 (\$452,424.00), authorized as follows:


 \$300,000.00 under the Agreement;
 \$30,000.00 under the Amendment; and
 \$122,424.00 under this Second Amendment.
3. In no case shall the amount paid by County for all Services under the Agreement, the Amendment, and this Second Amendment exceed the Maximum Compensation without subsequent 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

AVILES ENGINEERING CORPORATION

Robert E. Hebert, County Judge



Ronald E. Ortwerth, P.E., Sr. Vice President

Date

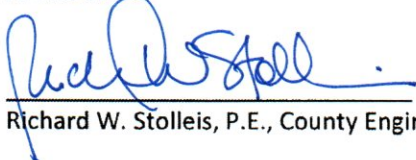
01/26/2018

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 Attorney

AUDITOR'S CERTIFICATE

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

Robert Ed Sturdivant, County Auditor

I:\Marcus\FM 1093-Westpark Tollway Project\Construction Mgmt\AEC\Amend 2 - CM Testing & Inspection Svcs.v2.docx.1/19/2018

EXHIBIT A



December 27, 2017

Fort Bend County
Fort Bend County Toll Road Authority
PO Box 1307
Richmond, Texas 77406
MikeStone@FBCTRA.com

Re: Construction Materials Testing and Inspection Services
Fort Bend County – FM 359/FM1093 Westpark Extension Phase II
Our Proposal Number: 17-47

Mr. Stone:

In response to your request, Aviles Engineering Corporation (AEC) has prepared this proposal and estimate for providing Construction Materials Testing and Inspection Services on the above referenced project for your review.

AEC proposes to provide experienced technical personnel to perform testing and inspection services in general accordance with Project Plans and Specifications, TxDOT or ASTM Standards or other applicable procedures when requested. AEC also proposes that the work be accomplished on a unit price basis in accordance with the attached Harris County Fee Schedule, Construction Materials Engineering Services, Labor and Unit Rates, Effective: March 31, 2015, Pages 1 through 11 of 16 and Harris County Fee Schedule "General Notes" - Effective: March 31, 2015, Pages 12 through 16 of 16.

AEC has also provided a 3 page estimate based on the services AEC provided on Phase I with the understanding the project is approximately 1/3 the size of the Phase I with the duration being somewhat longer. The actual project's fees would be determined by the actual amount of technical time expended for this project and the amount of laboratory testing performed.

AEC's proposed rates and general notes (Harris County Fee Schedule) are similar rates currently being used on another Fort Bend County Project and are similar to current rate schedules used by Harris County Flood Control District, Harris County Toll Road Authority, City of Houston, Coastal Water Authority and Port of Houston Authority. These rate schedules can be provided upon request.



Form 1295 is also included within this document.

Aviles Engineering Corporation appreciates the opportunity to offer its services to your project and looks forward to working with you during the construction phase.

Respectfully submitted,
Aviles Engineering Corporation
(TBPE Firm Registration No. F-42)

A handwritten signature in black ink, appearing to read "Ronald E. Ortwerth", is written over a series of horizontal lines.

Ronald E. Ortwerth, P.E.
Senior Vice President

Attachments: Construction Materials Testing & Inspection Estimate (3 Pages)
Harris County Fees Schedule and General Notes (17 Pages)
Form 1295

Aviles Engineering Corporation

Construction Materials Testing & Inspection Estimate

**Fort Bend County
FM 359/FM1093 Westpark Extension Phase II**

Soils Inspection and Testing

- AEC will assist with testing soils embankment fill and backfill, MSE Wall CSS installation, lime stabilization testing and abse testing when requested.

Concrete Inspection and Testing

- AEC primary duties as performed in Phase 1 include Concrete Mix Design reviews and testing required on Concrete Mix designs, testing on aggregates at concrete batch plants, inspection of batching at concrete batch plants when requested, sampling and testing of concrete and grout in the field and molding and compressive strength testing of concrete test cylinders, beams and cubes.

Bentonite Slurry Inspection and Testing on Drilled Shaft Foundations

- AEC will sample bentonite slurry from the tank and bottom of drilled shafts and perform field testing on bentonite slurry to verify compliance with Item 416 requirements.

Hot Mix Asphalt Testing

- AEC will perform Hot Mix Asphalt Mix Design Reviews, sampling and testing on Hot Mix asphalt sampled at the plant and either tested at the plant or at AEC's laboratory.

Field Testing Services

	<u>Unit Rate</u>	<u>Quantity</u>	<u>Amount</u>
Engineering Technician, ACI I or SB 101 or 102, per hour	\$ 51.00	174	\$ 8,874.00
Engineering Technician OT, per hour	\$ 76.50	62	\$ 4,743.00
Sr. Technician, TxDOT HMA 1A, 1B or SB 101&102, per hour	\$ 65.00	655	\$ 42,575.00
Sr Technician OT, per hour	\$ 97.50	106	\$ 10,335.00
Technician NICET II	\$ 65.00	60	\$ 3,900.00
Technician NICET II OT, per hour	\$ 97.50	4	\$ 390.00
Technician NICET III	\$ 75.00	12	\$ 900.00
Technician NICET III OT, per hour	\$ 112.50	2	\$ 225.00
		Subtotal	\$ 71,942.00

Estimate Continued on Next Page



Construction Materials Testing & Inspection Estimate, continued

Fort Bend County
FM 359/FM1093 Westpark Extension Phase II

<u>Soils, Hot Mix Asphalt and Concrete Tests</u>	<u>Unit Rate</u>	<u>Quantity</u>	<u>Amount</u>
Moisture Density Relationship (Tex-114-E), each	\$ 218.00	1	\$ 218.00
Moisture Density Relationship (Tex-113-E), each	\$ 239.00	1	\$ 239.00
Moisture Content of Soil, each	\$ 9.00	2	\$ 18.00
Atterberg Limits, each	\$ 62.00	2	\$ 124.00
Mech. Sieve through #200, each	\$ 57.00	2	\$ 114.00
Percent Passing #200 Sieve, each	\$ 48.00	2	\$ 96.00
Compressive Strength of CSS, each	\$ 71.00	6	\$ 426.00
Dry Sieve Analysis, each	\$ 54.00	10	\$ 540.00
Decant of Aggregates (minus No. 200), each	\$ 49.00	10	\$ 490.00
Spec Grav & Absorp of Fine Aggregate, each	\$ 99.00	2	\$ 198.00
Spec Grav & Absorp of Coarse Aggregate, each	\$ 81.00	4	\$ 324.00
Moisture Content of Aggregate, each	\$ 15.00	6	\$ 90.00
Sand Equivalent of Fine Aggregate, each	\$ 65.00	6	\$ 390.00
Organic Impurities of Fine Aggregate, each	\$ 48.00	2	\$ 96.00
Clay Lumpe and Friable Particles, each	\$ 55.00	4	\$ 220.00
Grout Compressive Strength (Cubes), each	\$ 23.00	18	\$ 414.00
Concrete or Grout Compression Tests (Cylinders), each	\$ 17.00	700	\$ 11,900.00
Theor Spec Garv of HMAC, each	\$ 91.00	9	\$ 819.00
Extraction / Gradation of HMAC, each	\$ 169.00	9	\$ 1,521.00
Molding HMAC Specimens, Set of 3	\$ 63.00	9	\$ 567.00
Density of HMAC Molded Speimens, Set of 3	\$ 54.00	9	\$ 486.00
Stability of HMAC Molded Specimens, Set of 3	\$ 95.00	9	\$ 855.00
		Subtotal	\$ 20,145.00

<u>Other Services and Equipment</u>	<u>Unit Rate</u>	<u>Quantity</u>	<u>Amount</u>
Field Sieve Analysis	\$ 12.00	3	\$ 36.00
Use of Nuclear Gauge per hour	\$ 10.50	20	\$ 210.00
Vehicle Charge, per hour	\$ 10.00	1075	\$ 10,750.00
		Subtotal	\$ 10,996.00

Estimate Continued on Next Page

Construction Materials Testing & Inspection Estimate, continued
Fort Bend County
FM 359/FM1093 Westpark Extension Phase II

<u>Engineering Services and Management</u>	<u>Unit Rate</u>	<u>Quantity</u>	<u>Amount</u>
Senior Engineer (Meetings), per hour	\$ 183.00	13	\$ 2,379.00
Review of Concrete Mix Design, each	\$ 250.00	10	\$ 2,500.00
Review of Asphalt Mix Design, each	\$ 218.00	2	\$ 436.00
Graduate Engineer or Geologist, per hour	\$ 101.00	2	\$ 202.00
Project Manager, per hour	\$ 101.00	10	\$ 1,010.00
Project Engineer, per hour	\$ 149.00	86	\$ 12,814.00
		Subtotal	\$ 19,341.00

ESTIMATED TOTAL FOR SERVICES AND TESTING = \$ 122,424.00

Notes:

Rates will be in accordance with Harris County Fee Schedule, Construction Materials Engineering Services, Labor and Unit Rates, Effective: March 31, 2015, Pages 1 through 11 of 16 and Harris County Fee Schedule "General Notes" - Effective: March 31, 2015, Pages 12 through 16 of 16

HARRIS COUNTY
OFFICE OF THE COUNTY ENGINEER

1001 Preston, 7th Floor
Houston, Texas 77002
(713) 755-5370

March 24, 2015

Honorable County Judge
& Commissioners

SUBJECT: Recommendation to Adopt a Corrected Rate Schedule for Construction Materials Engineering and Testing Effective Immediately to Replace and Supersede the Version Approved on September 23, 2014.

Dear Court Members:

It is recommended that Harris County adopt the corrected adjusted rate schedule for Construction Materials Engineering and Testing, effective immediately. This revision corrects minor discrepancies to the version previously approved by Commissioners Court

Sincerely,



John R. Blecht, P.E.
County Engineer

Attachments

cc: Mike Talbott
Gary Trietsch
Rich Elwood
Richard Scott

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

Code	Description	Unit	Current Fee
10100	Principal, P.E.	Hr.	208.00
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 Soil SB-101 or SB-102	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%

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

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

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

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	Linear Shrinkage & Thermal Coef (Bar)	C 531	Set 3	328.00
30600	Length Change of Hydraulic-Cement Mortar and Concrete	C 490 & C 157	Set 3	116.00
30700	Density of Structural Lwt. 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	In	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

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

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	Absor 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
42180	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

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

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	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	D 4138	Day	34.00
50900	Dry Film Thickness Equipment	D 7091	Day	34.00

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

Masonry

Code	Description	Standard	Unit	Current Fee
60100	Compressive Strength, Mortar Cubes	C 109	Set 6	140.00
60200	Compressive Strength, Mortar Cubes	C 109	Ea	23.00
60300	Compressive Strength, Mortar or Grout Cylinder	C 780/C 39	Ea	23.00
60400	Compressive Strength, Grout Prism	C 1019	Set 3	140.00
60500	Measurement, Brick	C 67	Ea	55.00
60600	Compressive Strength Test, Brick	C 67	Ea	33.00
60700	Flexural Strength Test, Brick	C 67	Ea	43.00
60800	Absorption of Brick, 24 hr.	C 67	Ea	72.00
60900	Absorption of Brick, 5 hr.	C 67	Ea	71.00
61000	Measurement, CMU	C 140	Ea	29.00
61100	Weight, CMU	C 140	Ea	81.00
61200	Moisture Content, CMU	C 140	Ea	81.00
61300	Compressive Strength, CMU	C 140	Ea	87.00
61400	Compressive Strength, CMU Hollow Prism	C 1314	Ea	136.00
61500	Compressive Strength, CMU Grouted Prism	C 1314	Ea	195.00

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2016**

Fireproofing

Code	Description	Standard	Unit	Current Fee
70100	Density of SFRM	E 606	Ea	38.00
70200	Cohesion/Adhesion of SFRM	E 736	Ea	29.00

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

Roofing

Code	Description	Standard	Unit	Current Fee
80100	Cut Out Roofing Sample Evaluation	D 2928	Ea	353.00
80200	Moisture in Mineral Aggregate for BUR	D 1864	Ea	59.00
80300	Analysis of New Built-Up Roof Membranes	D 3617	Ea	325.00
80400	Compressive Strength of Lwt. Insul. Concrete	C 495	Set of 4	114.00
80500	Compressive Strength of Lwt. Insul. Concrete	C 495	Ea	30.00
80600	Unit Weight of Lwt. Insul. Concrete	C 495	Set of 2	51.00

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

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 864	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 4284	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

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

Slip-Lining and Manhole Repair

Code	Description	Standard	Unit	Current Fee
100100	Coring/Drilling of Manhole Grout		Hole	61.00
100200	Coring and Strength of Gunite Panel		Core	122.00
100300	Flexural Strength/Modulus of Elasticity of Liner	D 790	Coupon	343.00

**Harris County Fee Schedule
Construction Materials Engineering Services
Labor and Unit Rates
Effective: March 31, 2015**

Subsurface Exploration

Code	Description	Standard	Unit	Current Fee
110010	Soil Boring, Intermittent 3-in. dia. (0 to 50')		Ft	19.00
110020	Soil Boring, Intermittent 3-in. dia. (50' to 100')		Ft	21.00
110030	Soil Boring, Continuous 3-in. (0 to 20')		Ft	21.00
110031	Soil Boring, Continuous 3-in. (20 to 50')		Ft	25.00
110032	Soil Boring, Continuous 3-in. (50 to 100')		Ft	35.00
110040	Soil Boring over 100' (Surcharge)		Ft	7.00
110050	Wash Boring		Ft	9.00
110060	Auger Boring		Ft	10.50
110070	Undisturbed/Split-Spoon in Wash/Auger		Ea	39.00
110071	Piezometer Installation		Ft	16.00
110072	Piezometer Abandonment		Ft	16.00
110080	Grouting of Completed Boring		Ft	10.00
110090	A.T.V. Surcharge		Ft	7.00
110100	Minimum Charge for the Exploration (to be used if charges are less than \$782.00)		LS	782.00
110110	Mobilization/Demobilization		LS	349.00
110120	TDH Cone Penetration Test		Ea	27.00
110130	ATV Mobilization Surcharge		LS	136.00
110140	Portable Rig Drilling (Crew of two)		Hr	177.00
110150	Standby (Crew of Two)		Hr	170.00

**Harris County Fee Schedule "General Notes" –
Effective: March 31, 2015**

1. General

- 1.1 All construction materials engineering services including sampling, field and laboratory testing, and inspection services ("Services") performed by Consultant for Harris County must be authorized by Harris County.
- 1.2 Services not specifically authorized by Harris County will not be paid for.
- 1.3 Failure to perform specified services in accordance with Harris County requirements may result in cancellation of Consultant's purchase order.
- 1.4 Harris County is using internet-based software "Capital Projects Management and Tracking System (CAPTRAC)" to maintain consistent administrative and technical control for its projects through the County.

The consultant is required to use CAPTRAC for reporting of "All reports relating to field sample, inspection, field and laboratory testing" in accordance with procedures provided (the user's Guide and Quick Reference Guide in Construct-it under Help link) by the County.

At no cost to the consultant, the County will provide system login account(s) and provide training for consultant personnel. The consultant must update CAPTRAC with any new or revised information within 24 hours of that information becoming known to consultant.

Subsection 1.4 does not apply to the Harris County Flood Control District.

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, Harris County 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 Harris County shall also compensate Consultant when Consultant's Engineer attends Project-related on-site and progress meetings at the request of the Harris County.
- 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 pre-fabricated 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 may be 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 Harris County and any approved specialty patching materials will be reimbursed by Harris County 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 Harris County.**
 - 3.3.7 Certified technicians shall carry their certification wallet cards with them on the Project.**
- 3.4 Harris County shall compensate Consultant for Services on a portal-to-portal basis between the Consultant's facility and the Harris County Project or other Project-related location.**

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 Harris County, an aggregate correction factor will not be determined for use in adjusting the aggregate gradation and asphalt content when testing HMA in accordance with ASTM D6307. Laboratory reports should include a note indicating that an aggregate correction factor was not used.**
- 4.3 Where the Engineer does not have current A2LA certification in an ASTM test procedure requested by Harris County, subcontracting the procedure to a qualified consultant shall be done only with prior written approval from the Harris County. The subcontractor must be certified in the general discipline for the type of required testing including one or more of the following: ASTM E 329 "Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction," ASTM C 1077 "Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation," ASTM D 3686 "Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials," and ASTM D 3740 "Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction." Upon proof of demonstrated competency in the appropriate discipline, subcontractor approval will be granted by the Harris County.**

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 Harris County 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 Harris County 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 Harris County 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 Harris County Project including Specimen Pickup.

6.3 All Reports must be received by the Harris County 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 Harris County within three (3) business days following the test date.

6.5 Failing laboratory test results must be reported to Harris County by telephone and by fax or email within one business day of the date of the failing test.

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 Harris County, between Consultant's facility and the Harris County Project.

7.2 The fees stated for laboratory tests are all inclusive with exception of project engineer for report review. No other charges shall be levied for personnel services and/or materials related to such testing, and to the report of such testing, except as specifically noted in these "General Notes."

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 work before 6:00 a.m. or after 6:00p.m., Monday through Friday, and any hours worked on Saturday, Sunday or a holiday or over 8 hours per day. Overtime rate is 1.5 times the standard rate.

- 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 Harris County 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 Harris County for services of a qualified subcontractor or consultant, authorized in advance by the Harris County, at cost plus 10%. When a field service or test procedure has been performed by an approved subcontractor, the rate paid for the service or procedure shall be the lower of the rate outlined in the attached fee schedule or the rate actually invoiced by the subcontractor + 10% unless approved otherwise.
- 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 Harris County. 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.