### **WORK AUTHORIZATION NO. 2**

### PROJECT: Expo Concession & Restrooms P475

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated September 17, 2019 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Alliance Engineering Group, Inc (the "Engineer").

- Part1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.
- Part 2. The maximum amount payable for services under this Work Authorization without modification is \$9,734.00.
- Part 3. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the Contract.
- Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on September 17, 2020. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.
- Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.
- Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.
- Part 7. This Work Authorization is hereby accepted and acknowledged below.

# EXECUTED this 17th day of September, 2019.

ENGINEER:	COUNTY:
ALLIANCE ENGINEEZING GROUP	Williamson County, Texas
Ву:	By: Bill Jamel
Signature	Signature
WAYUE A. Eppins Printed Name	Bill Gravel, Jr.
Printed Name	Printed Name
PRESIDENT	County Judge
Title	Title

### LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

## Attachment A - Services to be Provided by County

Williamson County will provide a Project Manager and any requested data that is in the County's control.

# Attachment B - Services to be Provided by Engineer



- GEOTECHNICAL ENGINEERING
- ENVIRONMENTAL CONSULTING
- CONSTRUCTION MATERIALS ENGINEERING
- CONSTRUCTION MATERIALS TESTING

July 31, 2019

Williamson County Commissioners Court Attn: Mr. Dwayne Gossett 3151 SE Inner Loop Georgetown, Texas 78626

Re: WILCO / Taylor Exposition Center Pavilion and East Concession & Restrooms

Taylor, Texas

Alliance Engineering Group Proposal No. P19-0711C

Dear Mr. Gossett:

The attached unit fee schedule and proposal for the construction observation and materials testing services on the Exposition Center Pavilion and East Concession and Restrooms building are attached for your review. The proposed scope of work, type and frequency of testing were based upon a review of the project plans and specifications dated May 24, 2019 and the Balcones Geotechnical Soils Report dated September 9, 2015.

This proposal does not include **re-testing or re-inspections required due to work or materials found to be non-compliant with the project plans and specifications**. If errors and/or omissions in the type and/or frequency of the observation and testing services are noted, please advise the undersigned at the earliest opportunity so that adjustments can be made to the scope and subsequent fees for the actual anticipated services needed.

We appreciate the opportunity to present this information for your consideration and look forward to an opportunity to be of service.

Respectfully,

Alliance Engineering Group, Inc.

TBPE Firm No. 11290

Wayne A. Eddins Managing Partner

Dist: Williamson County - Mr. Dwayne Gossett

WAE/hk

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- GEOTECHNICAL ENGINEERING
- ENVIRONMENTAL CONSULTING
- CONSTRUCTION MATERIALS ENGINEERING
- Construction Materials Testing

Project Name: Proposal No.: **Exposition Center Pavilion and East Concession Building** 

Proposal No.: Estimated Budget: P19-0711C \$47,137.00

Date:

July 31, 2019

### I CONCESSION STAND EARTHWORK

(Estimate 2,700 sf plus 5' overbuild)
(Estimate 11 Trips for density testing and 1 trip for proctor sampling)
(Estimate Min. 2 Hrs. & 3 Density Tests / Trip)

2 Moisture/Density Relationships (TEX 113-E)	@	\$300.00	/test	\$ 600.00	
2 Moisture Content Tests (TEX 103-E)	@	\$20.00	/test	\$ 40.00	
2 Atterberg Limits (TEX 104-E, TEX 106-E)	@	\$80.00	/test	\$ 160.00	
2 Sieve Analysis (TEX 110-E, Pt. 1)	@	\$50.00	/test	\$ 100.00	
2 Sample Preparation (TEX 101-E)	@	\$50.00	/sample	\$ 100.00	
33 In Place Density Tests (TEX 115-E)	@	\$20.00	/each	\$ 660.00	
12 Vehicle Charges	@	\$40.00	trip	\$ 480.00	
24 NICET Certified Technician Reg. Hours	@	\$48.00	/hour	\$ 1,152.00	
5 Administration Hours	@	\$48.00	/hour	\$ 240.00	
13 Project Manager Report Review	@	\$30.00	/report	\$ 390.00	
4 Project Manager Hours	@	\$95.00	/hour	\$ 380.00	
			Sub-Total	\$ 4,302.00	\$4,302.00

### II CONCESSION STAND CONCRETE / REINFORCING STEEL INSPECTIONS

(Estimate 1 Slab on Ground placement and 2 Miscellaneous Site Concrete Placements) (Estimate three sets of 4 cylinders each)

12 Concrete Cylinders	@	\$18.00	/each	\$ 216.00	
15 ACI Certified Tech. Reg. Hours (Casting & Sample p/up)	@	\$48.00	/hour	\$ 720.00	
5 Reinforced Concrete Certified Tech (Reinforcing Steel Insp.)	@	\$48.00	/hour	\$ 240.00	
6 Vehicle Charges (including cyl. p/up)	@	\$40.00	trip	\$ 240.00	
2 Administration Hours	@	\$48.00	/hour	\$ 96.00	
2 Project Manager Hours	@	\$95.00	/hour	\$ 190.00	
6 Engineering Oversight/Report Review	@	\$30.00	/report	\$ 180.00	
			Sub-Total	\$ 1.882.00	\$1,882.0

# III CONCESSION STAND CMU / MORTAR & GROUT (Estimate 10 Placements @ 3 Hrs. / Placement)

30 NICET Certified Technician Density Testing	@	\$48.00	/hour	\$ 1,440.00	
30 2' x 2' Mortar Cubes	@	\$18.00	/each	\$ 540.00	
20 Grout Prisms	@	\$18.00	/each	\$ 360.00	
12 Vehicle Charges	@	\$40.00	trip	\$ 480.00	
5 Administration Hours	@	\$48.00	/hour	\$ 240.00	
2 Project Manager Hours	@	\$95.00	/hour	\$ 190.00	
10 Engineering Oversight/Report Review	@	\$30.00	/report	\$ 300.00	
			Sub-Total	\$ 3,550.00	\$3,550.00

Concession Stand / Restroom Total

\$9,734.00



- GEOTECHNICAL ENGINEERING
- ENVIRONMENTAL CONSULTING
- Construction Materials Engineering
- Construction Materials Testing

### IV PAVILION EARTHWORK (Estimate 50,095 sf including Overbuild)

(Estimate 5 Feet of Removal and Replacement for Slab on Ground and 20 fdt / lift (Estimate 50,000 sf of 15" Thick Flexible Base Material - 3 lifts) (Estimate 15,000 sf Asphalt Pavement w/ 15" Flexible Base ) (Estimate 17 Trips for density testing and 3 trips for proctor sampling)

3	Moisture/Density Relationships (	ΓΕΧ 113-E)	@	\$300.00	/test	\$ 900.00	
3	Moisture Content Tests (TEX 103	3-E)	@	\$250.00	/test	\$ 750.00	
3	Atterberg Limits (TEX 104-E, TE	X 106-E)	@	\$10.00	/test	\$ 30.00	
3	Sample Preparation (TEX 101-E		@	\$50.00	/sample	\$ 150.00	
350	In Place Density Tests (TEX 115	-E)	@	\$20.00	/each	\$ 7,000.00	
20	Vehicle Charges		@	\$40.00	trip	\$ 800.00	
80	NICET Certified Technician Reg.	Hours	@	\$48.00	/hour	\$ 3,840.00	
12	Administration Hours		@	\$48.00	/hour	\$ 576.00	
34	Project Manager Report Review		@	\$30.00	/report	\$ 1,020.00	
6	Project Manager Hours		@	\$95.00	/hour	\$ 570.00	
					Sub-Total	\$ 15,636.00	\$15,636.00

### V PAVILION CONCRETE / REINFORCING STEEL INSPECTION

(Estimate 10 Footing Reinforcing steel and concrete placements @ 3 hrs. & 4 cyls. each)
(Estimate 4 Slab on Ground placements @ 350 cy, 8 hours & 16 cylinders each)
(Estimate 4 Slab on Ground Reinforcing Steel Inspections @ 4 hours each)
(Estimate 10 Miscellaneous Placements; sidewalks, ret. Wall, manure pad, repairs, etc. @ 3 hrs. & 4 cyls. Each)

104	Concrete Cylinders		@	\$18.00	/each	\$ 1,872.00	
78	ACI Certified Tech. Reg. Hours (	Casting & Sample p/up)	@	\$48.00	/hour	\$ 3,744.00	
16	Reinforced Concrete Certified Te	ech (Reinforcing Steel Insp.)	@	\$48.00	/hour	\$ 768.00	
30	Vehicle Charges (including cyl. p	/up)	@	\$40.00	trip	\$ 1,200.00	
14	Administration Hours		@	\$48.00	/hour	\$ 672.00	
5	Project Manager Hours		@	\$95.00	/hour	\$ 475.00	
38	Engineering Oversight/Report Re	eview	@	\$30.00	/report	\$ 1,140.00	
					Sub-Total	\$ 9,871.00	\$9,871.00

### VI PAVILION CMU / MORTAR & GROUT

(Estimate 15 Placements @ 3 Hrs. / Placement Including Reinforcing Steel Insp.)

45 NICET Certified Technician Density Testing	@	\$48.00	/hour	\$ 2,160.00	
45 2' x 2' Mortar Cubes	@	\$18.00	/each	\$ 810.00	1
60 Grout Prisms	@	\$18.00	/each	\$ 1,080.00	
30 Vehicle Charges (including sample pick up)	@	\$40.00	trip	\$ 1,200.00	
5 Administration Hours	@	\$48.00	/hour	\$ 240.00	
5 Project Manager Hours	@	\$95.00	/hour	\$ 475.00	
45 Engineering Oversight/Report Review	@	\$30.00	/report	\$ 1,350.00	
			Sub-Total	\$ 7,315.00	\$7,315.00



- GEOTECHNICAL ENGINEERING
- ENVIRONMENTAL CONSULTING
- CONSTRUCTION MATERIALS ENGINEERING
- Construction Materials Testing

# VII PAVILION STRUCTURAL STEEL WELDING/BOLTING INSPECTIONS (Periodic - as scheduled) (Estimate 5 Trips to the site, 6 hours per trip)

40 CWI Hours	@	\$95.00	/hour	\$ 3,800.00	
5 Vehicle Charges (Sub-Consultant)	@	\$75.00	/trip	\$ 375.00	
2 Administration Hours	@	\$48.00	/hour	\$ 96.00	
2 Project Manager Hours	@	\$95.00	/hour	\$ 190.00	
4 Engineering Oversight/Report Review Hours	@	\$30.00	/report	\$ 120.00	
			Sub-Total	\$ 4,581.00	\$4,581.00

Pavilion Total	\$37,403.00
Grand Total	\$47,137.00

### NOTES:

- 1. Overtime rates of 1.25 times the regular hourly rate will be charged for hours worked over eight (8) hours per day Monday thru Friday or any time before 7:00 a.m. or after 5:00 p.m. Service performed on Saturdays and Sundays will be billed at 1.5 times the regular hourly rate. Services performed on recognized holidays will be billed at 2.0 times the regular hourly rate.
- 3. All laboratory test fees are F.O.B. our laboratory; additional charge for sample pickup may apply.
- 4. Project Engineer to review/evaluate/sign and seal reports will be billed at 0.2 hours per report issued @ \$80/Hr.
- 5. Additional tests not specified in this proposal will be quoted upon request.
- This proposal does not include any technician stand-by, non-readiness charges, and/or trips or re-tests of the previous falling tests.
- An additional charge will be made for shop inspections made outside of Travis and Williamson Counties. A per diem charge of \$120.00 will be charged for any inspections that will require an overnite stay.

200 Mustang Cove · Taylor, Texas 76574 Tel: 512-281-4688 · Fax: 512-281-4191

### Attachment C - Work Schedule

Work shall begin immediately upon receipt of agreement between County and Alliance Engineering Group, Inc. Work schedules will be developed as work is assigned.

### Attachment D - Fee Schedule



- GEOTECHNICAL ENGINEERING
- ENVIRONMENTAL CONSULTING
- CONSTRUCTION MATERIALS ENGINEERING
- CONSTRUCTION MATERIALS TESTING

WILLIAMSON COUNTY EXPO CENTER PAVILION & EAST C	ONCESSIC	ON/RES	<u>STROOMS</u>		
<u>Personnel</u>	<u>Unit</u>	Reg	. Hr. Rate	<u>0.1</u>	. Rate
Principal	Hr.	\$	195.00		
Senior Professional Engineer	Hr.	\$	195.00	***************************************	
Professional Engineer	Hr.	\$	130.00		
Project Manager	Hr.	\$	95.00		
Laboratory Manager	Hr.	\$	95.00		
Engineer In Training (E.I.T.)	Hr.	\$	85.00		
Certified Welding Inspector (CWI)	Hr.	\$	85.00		
TxDOT Level I-A	Hr.	\$	56.00	\$	70.00
TxDOT Level 1-B	Hr.	\$	56.00	\$	70.00
NICET Certified Soils/Concrete Technician (C.E.T.)	Hr.	\$	48.00	\$	60.00
ACI Certified Strength Testing or Aggregate Testing Technician (C.E.T.)	Hr.	\$	48.00	\$	60.00
Administrative Assistant	Hr.	\$	48.00		
Project Engineer - Report Review	Rept.	\$	30.00		
Vehicle Charge	Trip	\$	40.00		
Vehicle Charge (also CWI Sub. Per trip)	Day	\$	75.00		
Testing Services - Soils	Unit	Ui	nit Rate		
		T			
Moisture Content (Tex 103-E)	Ea.	\$	20.00		
Tex 114-E Proctor	Ea.	\$	250.00		
Sieve Analysis (Tex 110-E, Pt. 1 Dry)	Ea.	\$	50.00		
Sieve Analysis (Tex 110-E, Pt. 2 Wet)	Ea.	\$	80.00		
Atterberg Limits (Tex 104-E, Tex 105-E, Tex 106-E)	Ea.	\$	75.00		
In-Place Density Tests (Tex 115-E)	Ea.	\$	20.00		
Hydrometer Analysis (AASHTO T-88)	Ea.	\$	300.00	***************************************	
Soil pH (Tex 128-E)	Ea.	\$	50.00		
Permeability of Soil	Ea.	\$	375.00		
Linear Bar Shrinkage	Ea.	\$	75.00		
Testing Services - Concrete	Unit	Uı	nit Rate		
Sieve Analysis of Fine & Coarse Aggregate (Tex 401-A, Tex 402-A)	Ea.	\$	80.00		
SSD Specific Gravity and Absorption of Aggregates (Tex 403-A)	Ea.	\$	80.00		
Unit Weight (Tex 404-A)	Ea.	\$	75.00		
Material Finer than No. 200 Sieve Analysis (Tex 406-A)	Ea.	\$	75.00		
Organic Impurities in Fine Aggregate (Tex 408-A)	Ea.	\$	85.00		
Los Angeles Abrasion Test (Tex 410-A)	Ea.	\$	350.00		
Concrete Cylinder Compressive Strength (Tex 418-A)	Ea.	\$	18.00		
Concrete Flexural Beam Strength Test (Tex 419-A)	Ea.	\$	25.00		
2" x 2" Mortar Cubes	Ea.	\$	18.00		
3.25" x 6.25" Grout Prisms	Ea.	\$	18.00		
CMU Block Prism Testing	Ea.	\$	450.00		



- GEOTECHNICAL ENGINEERING
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- CONSTRUCTION MATERIALS ENGINEERING
- Construction Materials Testing

Testing Services - Hot Mixed Asphaltic Concrete (HMAC)	Unit	Unit Rate	
Comple Drangerting	F-	6 50.00	
Sample Preparation Gradation (Tex 210-F, Part 1 & 2)	Ea.	\$ 50.00 \$ 200.00	
Hamburg Wheel (Tex 242-F)	Ea.	\$ 200.00	
Extraction/Gradation (Tex 236-F)	Ea.	\$ 250.00	
Mixing (Tex 205-F)		\$ 250.00	
HVEEM Stability (Tex 207-F, Tex 208-F)	Set of 3		
Laboratory Molded Density (Tex 207-F, Pex 208-F)	Set of 3 Set of 3	\$ 50.00 \$ 45.00	
Max Theoretical (Rice) Specific Gravity (Tex 227-F)	Set of 3	\$ 45.00	
Thickness (Tex 140-E)	Ea.	†	
% Air Voids - In Place	Ea.	\$ 50.00 \$ 75.00	
% Theoretical Density - In Place	Ea.	\$ 75.00	
Moisture Content (Tex 212-F)	Ea.	\$ 25.00	
Coring Rig / Core Bit Charge	Ea.	† · · · · · · · · · · · · · · · · · · ·	
6" φ Core Including Patching & Sample Prep up to 6" Thick	In.	\$ 175.00 \$ 90.00	
6" Φ Core Including Patching & Sample Prep from 6" to 10" Thick	In.	\$ 105.00	
3" $\Phi$ Core(Per Inch)	In.	\$ 5.00	
4" Φ Core(Per Inch)	In.	\$ 6.00	
6" Φ Core(Per Inch)	In.	\$ 8.00	
υ Ψ core(rei ilicii)	177.	\$ 8.00	
Laboratory Testing Services - Flexible Base Material	<u>Unit</u>	Unit Rate	
T 442 F.D			
Tex 113-E Proctor	Ea.	\$ 300.00	
Sample Preparation (Tex 101-E)	Ea.	\$ 50.00	
Atterberg Limits	Ea.	\$ 75.00	
Sieve Analysis (Tex 110-E, Pt. 1 Dry)	Ea.	\$ 50.00	
Sieve Analysis (Tex 110-E, Pt. 2 Wet)	Ea.	\$ 80.00	
Moisture Content (Tex 103-E)	Ea.	\$ 20.00	
Thickness (Tex 140-E)	Ea.	\$ 50.00	
Wet Ball Mill Test (Tex 116-E)	Ea.	\$ 300.00	
Texas Triaxial (Tex 117-E, Tex 118-E, Tex 131-E)	Ea.	\$ 2,400.00	