

## WORK AUTHORIZATION

WORK AUTHORIZATION NO. 2

PROJECT: Construction Observation and Material Testing Engineering Services for the Williamson County Exposition Center Project

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated December 3, 2015 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Alliance Geotechnical Group of Austin Inc. (the "Engineer").

Part 1. 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 \$15,000.

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 October 31, 2016. 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 28<sup>th</sup> day of APRIL, 20 16

ENGINEER:

Alliance Geotechnical Group of Austin Inc.

COUNTY:

Williamson County, Texas

By: 

Signature

WAYNE A. EDDINS

Printed Name

MANAGING PARTNER

Title

By: \_\_\_\_\_

Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
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**

1. County will provide project management.
2. County will provide a single point of contact, to be identified upon Notice to Proceed.

## **Attachment B - Services to be Provided by Engineer**

The scope of services to be provided by the Engineer is as defined in the enclosed April 22, 1016 letter from Alliance Geotechnical. The Engineer shall provide construction observation and materials testing services on the Taylor Exposition Center required by Chapter 17 of the International Building Code (2012 Edition), the plans and specifications of the Project and as directed by the County.



*of Austin, Inc.*

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

April 22, 2016

Williamson County Commissioners Court  
Attn: Mr. Robert B. Daigh, P.E., Senior Director of Infrastructure  
3151 SE Inner Loop  
Georgetown, Texas 78626

Re: WILCO / Taylor Exposition Center  
Taylor, Texas  
Alliance Geotechnical Group of Austin Project No. AC15-1202

Dear Mr. Daigh:

The attached proposal and anticipated scope of work are submitted for your review. It is anticipated the scope of work to be covered by Work Authorization #2 will include the following:

- Flexible Base Material Testing
- Reinforcing Steel Inspection
- Concrete Testing
- Mortar and Grout Testing
- Structural Steel Inspection

If there are question regarding the information included in this submittal, please contact the undersigned at your convenience. We appreciate the opportunity to be of continued service to Williamson County.

Respectfully,

**Alliance Geotechnical Group of Austin, Inc.**  
TBPE Firm No. 11290

Wayne A. Eddins  
Managing Partner

Attach: Exhibit B

Dist: Williamson County – Mr. Robert B. Daigh, P.E.  
Mr. Dale Butler, Project Manager

WAE/hk

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

Project Name: Williamson County Exposition Center  
 Project Number: AC15-1202  
 Estimated Budget: \$38,637.00  
 Date: April 22, 2016

I SECTION 31 00 00 - EARTHWORK

(Estimate 50 production days to complete cuts, construct building pads and construct earthen berms  
 (Estimate 30 miscellaneous trips for density testing (utility backfill, culvert backfill, utility tie-ins, manholes, etc.)

2	Moisture/Density Relationships (TEX 113-E)	@	\$300.00	/test	\$	600.00	
2	Moisture/Density Relationships (TEX 114-E)	@	\$250.00	/test	\$	500.00	
2	Atterberg Limits (TEX 104-E, TEX 106-E)	@	\$75.00	/test	\$	150.00	
2	Moisture Content Tests (TEX 103-E)	@	\$15.00	/test	\$	30.00	
2	Gradation (TEX 110-E)	@	\$75.00	/test	\$	150.00	
75	In Place Density Tests (TEX 115-E)	@	\$20.00	/each	\$	1,500.00	
25	Vehicle Charges	@	\$30.00	trip	\$	750.00	
25	NICET Certified Technician Reg. Hours	@	\$48.00	/hour	\$	1,200.00	
5	NICET Certified Technician OT Hours	@	\$60.00	/hour	\$	300.00	
8	NICET Certified Technician Saturday OT Hours	@	\$75.00	/hour	\$	600.00	
5	Administrative/Clerical	@	\$48.00	/hour	\$	240.00	
5	Project Manager Hours	@	\$95.00	/hour	\$	475.00	
10	Engineering Oversight/Report Review	@	\$25.00	/report	\$	250.00	
Sub-Total						\$ 6,745.00	\$6,745.00

II SECTION 31 00 00 - SITE CONCRETE

(Estimate 15 Misc. Placements for pavements, sidewalks, wing walls, etc.)  
 (Estimate approximately 750-900 cy site concrete)  
 (Estimate 35 Sets of 4 Cylinders each w/ Air, Slump, Temp)  
 (Estimate 10" Flexible Base beneath pavement & sidewalks)  
 (Estimate 3,500 lf of curb placements, 10 placements, 2 hours/placement 4 cylinders/placement)

16	Concrete Cylinders	@	\$16.00	/each	\$	256.00	
4	Air Content, Slump, Temp (TEX 414-1, 415-1 and 418-1)	@	\$20.00	/each	\$	80.00	
10	In Place Density Tests (TEX 115-E)	@	\$20.00	/each	\$	200.00	
0	Wet Ball Mill (TEX 116-E)	@	\$350.00	/each	\$	-	
0	Triaxial (TEX 117-E, TEX 118-E, TEX 131-E)	@	\$1,500.00	/each	\$	-	
12	NICET Certified Technician Density Testing	@	\$48.00	/hour	\$	576.00	
12	ACI Certified Tech. Reg. Hours (Casting & Sample p/up)	@	\$48.00	/hour	\$	576.00	
8	Reinforced Concrete Certified Tech (Reinforcing Steel Insp.)	@	\$48.00	/hour	\$	384.00	
4	Vehicle Charges (including cyl. p/up)	@	\$30.00	trip	\$	120.00	
4	Administrative/Clerical	@	\$48.00	/hour	\$	192.00	
2	Project Manager Hours	@	\$95.00	/hour	\$	190.00	
4	Engineering Oversight/Report Review	@	\$25.00	/report	\$	100.00	
Sub-Total						\$ 2,674.00	\$2,674.00

III SECTION 31 00 00 - ASPHALT PAVEMENT

(Estimate 68,000 sf of Asphalt Pavement Base Bid & Alt. 17)  
 (Estimate 68,000 sf of Flexible Base layer, total of 10" / 2 Lifts & 4 Trips per lift)  
 (Estimate 3 Days of Laydown Operations)

16	NICET Certified Technician Density Testing	@	\$48.00	/hour	\$	768.00	
24	TxDOT I-A Certified Technician (Reg. Hrs.)	@	\$56.00	/hour	\$	1,344.00	
8	TxDOT I-A Certified Technician (OT Hrs.)	@	\$70.00	/hour	\$	560.00	
24	TxDOT I-B Certified Technician (Reg. Hrs.)	@	\$56.00	/hour	\$	1,344.00	
8	TxDOT I-B Certified Technician (OT Hrs.)	@	\$70.00	/hour	\$	560.00	
75	In Place Density Tests (TEX 115-E)	@	\$20.00	/each	\$	1,500.00	
2	Extraction/Gradation (TEX 210-F, TEX 210-F, Part II)	@	\$175.00	/each	\$	350.00	
0	Hamburg Wheel (TEX 242-F)	@	\$600.00	/each	\$	-	
3	Maximum Theoretical (Rice) Gravity (TEX 227-F)	@	\$60.00	/each	\$	180.00	
3	Lab Density & Stability, Set of 3 (TEX 207-F, TEX 208-F)	@	\$50.00	/set	\$	150.00	
10	In-Place HMA Thickness/Density (TEX 140-E)	@	\$50.00	/each	\$	500.00	
12	Vehicle Charges	@	\$30.00	trip	\$	360.00	
4	Administrative/Clerical	@	\$48.00	/hour	\$	192.00	
4	Project Manager Hours	@	\$95.00	/hour	\$	380.00	
12	Engineering Oversight/Report Review	@	\$25.00	/report	\$	300.00	
Sub-Total						\$ 8,488.00	\$8,488.00

#### IV SECTION 03 30 00 - CAST-IN- PLACE STRUCTURAL CONCRETE

(Estimate 35,000 (+/-) SF of 6" Concrete Slabs on Ground in Base Bid)  
(Estimate 82,000 (+/-) SF of 4" & 6" Concrete Slabs on Ground in Add Alt. Bid Items)  
(Estimate 4 cys./75 CY or fraction thereof)  
(Estimate 1,500 cy (+/-) Concrete  
(Estimate total of 8 Concrete Slab Placements)  
(Estimate 12 Concrete Placements for Footings @ 2 Hrs. & 4 Cylinders Ea.)

12	Concrete Cylinders for Slabs/Beams	@	\$18.00	/test	\$	216.00	
12	Concrete Cylinders for Concrete Footings	@	\$18.00	/test	\$	216.00	
24	ACI Certified Technician Hours (Reg.)	@	\$48.00	/hour	\$	1,152.00	
5	ACI Certified Technician Hours (O.T.)	@	\$60.00	/hour	\$	300.00	
8	ICC Certified Structural Reinforced Concrete Tech. (Reg.)	@	\$48.00	/hour	\$	384.00	
8	Vehicle Charges (Including Cylinder p/up)	@	\$30.00	/trip	\$	240.00	
4	Administrative/Clerical	@	\$48.00	/hour	\$	192.00	
0	Project Engineer Hours for Mix Design Reviews	@	\$130.00	/hour	\$	-	
4	Project Manager Hours	@	\$95.00	/hour	\$	380.00	
8	Engineering Oversight/Report Review	@	\$25.00	/report	\$	200.00	
Sub-Total					\$	3,280.00	\$3,280.00

#### V SECTION 04 05 13 MORTAR & GROUT

(Estimate 30 Production Days for CMU Block Installation)  
(Estimate 3 Mortar Cubes & 4 Grout Cubes per day's production)

90	Mortar Cubes	@	\$16.00	/each	\$	1,440.00	
120	Grout Cubes	@	\$16.00	/each	\$	1,920.00	
50	NICET Certified Tech. Hours (Reg.) including Reinf. Steel	@	\$48.00	/hour	\$	2,400.00	
30	Vehicle Charges - including sample pick-up	@	\$30.00	/trip	\$	900.00	
15	Administrative/Clerical	@	\$48.00	/hour	\$	720.00	
10	Project Manager Hours	@	\$95.00	/hour	\$	950.00	
60	Engineering Oversight/Report Review	@	\$25.00	/report	\$	1,500.00	
Sub-Total					\$	9,830.00	\$9,830.00

#### VI SECTION 05 12 00 - STRUCTURAL STEEL WELDING/BOLTING INSPECTIONS (Periodic - as scheduled) (Estimate 10 Trips to the site, 5 hours per trip)

50	CWI (Sub-Consultant) Hours	@	\$85.00	/hour	\$	4,250.00	
10	Vehicle Charges (Sub-Consultant)	@	\$55.00	/trip	\$	550.00	
5	Administrative/Clerical	@	\$48.00	/hour	\$	240.00	
4	Project Manager Hours	@	\$95.00	/hour	\$	380.00	
10	Engineering Oversight/Report Review	@	\$25.00	/report	\$	250.00	
Sub-Total					\$	5,670.00	\$5,670.00

#### VII PROJECT OVERSIGHT

10	Project Principal Hours	@	\$195.00	/hour	\$	1,950.00	\$ 1,950.00
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TOTAL

\$38,637.00

#### NOTES:

- 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.
- All laboratory test fees are F.O.B. our laboratory; additional charge for sample pickup outside of Williamson County may apply.
- Project Engineer to review/evaluate/sign and seal reports will be billed at \$25/Report
- Additional tests not specified in this proposal will be quoted upon request.
- This proposal does not include any costs associated with stand-by, non-readiness charges, and/or trips for re-tests of the previous failing tests.
- An additional charge will be made for shop inspections made outside of Williamson County.  
A per diem charge of \$120.00 will be charged for any inspections that will require an overnite stay.



### **Attachment C - Work Schedule**

Work will be completed within the next year.

## Attachment D - Fee Schedule

<b><u>WILLIAMSON COUNTY EXPO CENTER UNIT RATE SHEET - 2015</u></b>			
<b><u>Personnel</u></b>	<b><u>Unit</u></b>	<b><u>Reg. Hr. Rate</u></b>	<b><u>O.T. Rate</u></b>
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 I-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.	\$ 25.00	
Vehicle Charge	Trip	\$ 30.00	
Vehicle Charge	Day	\$ 50.00	
<b><u>Testing Services - Soils</u></b>			
	<b><u>Unit</u></b>	<b><u>Unit Rate</u></b>	
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.	\$ 450.00	
Soil pH (Tex 128-E)	Ea.	\$ 50.00	
Permeability of Soil	Ea.	\$ 350.00	
Linear Bar Shrinkage	Ea.	\$ 75.00	
<b><u>Testing Services - Concrete</u></b>			
	<b><u>Unit</u></b>	<b><u>Unit Rate</u></b>	
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.	\$ 16.00	
3.25" x 6.25" Grout Prisms	Ea.	\$ 16.00	
CMU Block Prism Testing	Ea.	\$ 350.00	

V:\\_Documents\URS Office Docs\Contracts\PSAs\RFQ's\2015 RFQs\Geotech and Material Testing - Both\Material Testing and Inspection\RFQ 1507-015 - Expo Center

Original Date: 8/4/15

Revised Date: 4.26.16

<u>Testing Services - Hot Mixed Asphaltic Concrete (HMAC)</u>	<u>Unit</u>	<u>Unit Rate</u>
Sample Preparation	Ea.	\$ 50.00
Gradation (Tex 210-F, Part 1 & 2)	Ea.	\$ 200.00
Hamburg Wheel (Tex 242-F)	Ea.	\$ 600.00
Extraction/Gradation (Tex 236-F)	Ea.	\$ 225.00
Mixing (Tex 205-F)	Set of 3	\$ 75.00
IVEEM Stability (Tex 207-F, Tex 208-F)	Set of 3	\$ 50.00
Laboratory Molded Density (Tex 207-F, Part 1)	Set of 3	\$ 45.00
Max Theoretical (Rice) Specific Gravity (Tex 227-F)	Ea.	\$ 60.00
Thickness (Tex 140-E)	Ea.	\$ 50.00
% Air Voids - In Place	Ea.	\$ 75.00
% Theoretical Density - In Place	Ea.	\$ 75.00
Moisture Content (Tex 212-F)	Ea.	\$ 25.00
Coring Rig / Core Bit Charge	Ea.	\$ 175.00
6" $\Phi$ Core including Patching & Sample Prep up to 6" Thick	in.	\$ 90.00
6" $\Phi$ Core including Patching & Sample Prep from 6" to 10" Thick	in.	\$ 105.00
3" $\Phi$ Core(Per Inch)	in.	\$ 5.00
4" $\Phi$ Core(Per Inch)	in.	\$ 6.00
6" $\Phi$ Core(Per Inch)	in.	\$ 8.00
<u>Laboratory Testing Services - Flexible Base Material</u>	<u>Unit</u>	<u>Unit Rate</u>
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.	\$ 250.00
Texas Triaxial (Tex 117-E, Tex 118-E, Tex 131-E)	Ea.	\$ 2,250.00