WORK AUTHORIZATION NO. 1

PROJECT: Construction Material Testing and Inspection for Williamson County North Campus Facilities

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated **November 10, 2016** and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **Raba Kistner, 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 \$131,000.00.
- 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 <u>September 30, 2017</u>. 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 day of	_, 20
	*
ENGINEER:	COUNTY:
RABA KISTNER, INC.	Williamson County, Texas
By: Daniel Culary Signature	By:Signature
Gabriel Ornelas, Jr., PE, PMP Printed Name	Printed Name
Vice President	
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

- 1. County will direct type of services to be provided.
- 2. County will provide timely reviews and decisions necessary to enable Raba Kistner, Inc. to maintain an agreed upon project schedule as developed in attached Attachment C.
- 3. County will provide points of contact, to be identified upon Notice to Proceed.
- 4. County will provide project management.

Attachment B - Services to be Provided by Engineer

To provide engineering services for construction material testing and inspection services for the Williamson County North Campus Facilities project; a collection of small industrial buildings ranging from 5,000 square foot to 50,000 square foot to be located at 3151 SE Inner Loop Georgetown, Texas.

To include, but not be limited to:

- Soil sampling and testing
- Earthwork inspection
- Reinforced Concrete inspection and testing,
- Structural steel inspection and testing
- Masonry inspection and testing
- S-ample and test concrete, asphalt, HMACP, crushed stone base
- Conduct inspection of structural items of construction
- Provide weld inspection and testing

Attachment C - Work Schedule

Work schedule is approximately 490 calendar days from notice to proceed.

Attachment D - Fee Schedule

Project Name: North Campus Facilities - Williamson County Project Location: 2910, 3153, 2 3189 \$.E. Inner Loop Contact Name: Dwayne Gossot Clint: Williamson County Address: 3101 \$E Inner Loop City/State /Zip Georgatown, Texas 78626 Phone Number:: 512-931-313 E-Mail: dossetist wilco.org TESTING/OBSERVATION ITEM UNIT OST UNIT ESTIMATED COST EXTENSION SOILS Inhoratory Testing Quantity Ministure Density Relationship, TXXXXII \$549.00 leach \$ \$ \$1,494.0 Attentory Limits \$9.00 leach \$ \$ \$1,494.0 Attentory Limits \$9.00 leach \$ \$ \$1,494.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$ \$498.0 Lime Series Curve \$ \$435.00 leach \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	COST ESTIMATE BREAKDOWN			Date	October 17, 201			
Perglect Loadion: 2910, 3151, 8, 3189 \$£, Immer Loop				Proposal Number:	PAD16-147-0			
Contact Name:	Project Name:	North Campus Fa	cilities - Williamson	County				
Contact Name:								
Client: Williamson County Address: 310.18 Inner Loop								
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City/State / Zip Georgatown, Totals 78626								
Phone Number:	Address:							
Fax Number:	City/State /Zip	Georgetown, Texas 7862	6					
E-Mail:	Phone Number::	512-943-1611						
Institution Cost	Fax Number:	517-930-3313						
Institution Cost	E-Mail:	danssett@wilco.crg						
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OST ESTIMATE BREAKDOWN Date:				October 17, 201
			Proposal Number:	PAD16-147-0
Project Name:	North Campus Fac	ilities - Williams	son County	
THROUGH WALL FIRESTOP CAULKING PENETRATION	DESERVATIONS			
Field Testing/Observation			32	\$1,600.00
Materials Technician	\$50.00		52	\$320.0
Vehicle Travel Charge	\$40.00	(3) D	8	\$1,920.0
Subtotal				51,920.0
STRUCTURAL STEEL INSPECTION				
Field Testing/Observation				
CWI Inspector	\$95.00		98	\$9,310.00
Non Destructive Testing (Littraspoic Testing)	\$104.50		8	\$836 00
Vehicle Travel Charge	\$40.06	trip	16	\$640.00
Subtotal				\$10,786.00
ASPHALT OBSERVATION, SAMPLING AND TESTING				
Laboratory Testing	\$459.00	Title	10	\$4,590.00
Bag Sample (Extraction, Gradation, A/C content, Molding Specimens, Laboratory Density of Molded	5459.00	eacry	10	34,336.00
Specimens, Stability Test, Hiveen, Maximust				
Theoretical Specific Gravity)	dr. oo		20	\$1,020.00
Density of Asphalt Cores	\$51.00	each	70	21,020:00
Field Testing/Observation	644.00		40	\$2,400.00
Materials Technician	\$60.00		10	\$920.00
Caring	\$92.00		10	\$0.00
Vehicle Travel Charge	540.00	trip		\$0.00
Subtotal				50.00
FLOOR FLATNESS TESTING (If required - no requireme				
foor Flatness Testing	\$400.00	each	Ö	\$0.00
Subtotal				\$0.00
PROJECT ADMINISTRATION				
Project Manager	\$175.00	heren	8	\$1,400.0
Project Manager Project Engineer (Review Reports)	\$135.00		30	54,050,0
Subtotal	9.50,000	11444	20	\$9,300.0
Suprotei				2×,31/2,01
Reporting and Report Distribution	tion 10% of total cost			\$0.0X
		GRAND TOT	AL	\$130,512.00

Add-Alternate No. 1				
SOILS				
Laboratory Testing				
Moisture Density Relationship, TxDOT or ASTM	\$249,(K)	each	g	\$0.00
Atterberg Umits	00.E82	each	0	\$13,13
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Lime Series Curve	\$435.00	each	0	50.04
Field Testing/Observation			A)	
Finid Lime Gradations	563.00	each	4	\$252,0
In-Place Nuclear Densities	\$25,00		22	\$550.04
Materials Technician	550.00	hour	36	\$2 800 CA
Vehicle Travel Charge	\$40.00	trìp	9	\$360.00
Subtotal				\$2,962.00
REINFORCING STEEL OBSERVATIONS				
Field Observation/Testing				
Materials Technician	\$50.00		0	\$0.00
Vehicle Travel Charge	\$40.00	trija	0	\$0.00
Subtotal				50.00

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Laboratory Testing	tan an		40	***************************************
Concrete Compressive Strength Cylinders	517.(6)	each	10	5170.0X
Fleld Testing/Observation				#FOR (I'
Materials Technician	\$50.00		10	\$500.0K
Non-Destructive Testing (Ditrasonic Testine)	\$85.00			\$0.00
Vehicle Travel Charge	550.00	Lik		\$0.00
Subtotal				50.02
ASPHALT				
Laboratory Testing				
lag Sample (Extraction, Gradation, A/C content,	5459.00	each	1	\$459,00
Molding Specimens, Laboratory Density of Molded				
Specimens, Stability Test, Hyeem, Maximum				
Theoretical Specific Gravity)				
Density of Asphalt Cores	\$51.00	each	2	\$102.00
Field Testine/Observation				
Materials Technician	\$50,00	hour	A)	\$200.00
Vehicle Travel Charge	\$40.00	tric	1	\$40.09
Subtotal				\$801.08
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PROJECT ADMINISTRATION				
Project Manager	5175.00		6	50.0
Project Engineer (Neview Reports)	\$135,00	hour	1	\$135.0
Subtotal				\$300.00
Reporting and Report Distribution				\$0.ū
		GRAND TOTAL		\$4,853.00

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Laboratory Testing				
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In-Place Nuclear Densities	\$25,00		18	54
Materials Technician	\$50,00		21	\$1,0
	\$40.00			52
Vehicle Travel Charge	340.047	(g)a)		\$2.0
Subtota!				52.0
REINFORCING STEEL OBSERVATIONS				
Field Observation/Testing				
Materials Technician	<u>दु जा , एरा</u>		0	
Venicle Travel Charge	\$46.00	T(:p)	0	
Subtotal				
CONCRETE				
Laboratory Testing				
Concrete Compressive Strength Cylinders	\$17,00	each	5	- 5
Fleld Testing/Observation	311,00	COCH		
Materials Technician	\$50.00	hour	6	33
Non-Destructive Testing (Editorsonic Testing)	\$85.00			
Vehicle Travel Charge	\$50.00			
Subtotal	\$3690	£1.20		
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Laboratory Testing				
Bag Sample (Extraction, Gradation, A/C content,	\$459.00	୧୫୯୭	1	54
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Specimens, Stability Test, Hyeem, Maximum				
Theoretical Specific Gravity)				
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Field Tasting/Observation				
Materials Technician	\$50,00	hour	4	52
Vehicle Travel Charge	\$40.00	Trip	1	5
Subtotal				58
PROJECT ADMINISTRATION	2777.50	G	0.0	
Project Manager	\$175.00 \$135.00		1	- 5
Project Engineer (Review Reports)	2132.00	Bon:	4	\$2
Subtotal				52
Reporting and Report Distribution	10% of total cost			
GRAND TOTAL				\$3,5

Add-Alternate No. 3				
Laboratory Testing Moisture Density Relationship, TSDDF of ASTM	\$249.00	27.27	0	\$0.0
Atterburg Smits	583,00		0	\$0.0
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Sieve Analysis washed through No. 200	583.00		9	50.0
uma Sailes Curve	5435.00	83 Co	- U	50.0
Field Testing/Observation				\$252.0
field time Gradations	\$63,00		4	\$700.0
n-Place Nuclear Densities	\$75, (M)		78	
Margnals Tecanician	550.00		32	\$1,600.0
Vehicle Travel Charge	\$40,01	£/132	- 57	\$320,0
Subtotal				\$2,872.0
REINFORCING STEEL OBSERVATIONS				
Field Observation/TestiAR		1		
Materials sectionician	\$50,00	pois	ō	\$0.00
Vehicle Travel Charge	540.00	trip	G G	50.0
Subtotal				\$0.0
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aboratory Testing	747.00			\$85.0
Concrete Compressive Strength Cylinders	\$17.00	сасл		\$03.0
Field Testing/Observation Materials Technician	\$50,00			5300.0
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Non Destructive Festing (Ultrasonic Festing)	\$85.00			50.0
Vehicle Travel Charge	\$50.00	tan		
Subtotal				50.0
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Laboratory Testing				
Bag Sample (Extraction, Gradation, A/C content	\$453,00	each	- 31	\$453.00
Malding Specimens, Lyboratory Density of Molded				
Specimens, Stability Test, Bycem, Waximum				
Phegretical Specific Gravity)				
Density of Asphalt Cores	\$51,00	each	2	5102 0
Field Testing/Observation				
Materials Technician	\$50,00	hour	4	5200.00
Jehicle Travel Charge	\$4(3,00)	स्राक	3	540 18
Subtotal				\$795.0
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PROJECT ADMINISTRATION	5275.00	besta	0	50.0
Project Manager	\$199.00		- 1	5135.0
Project Engineer (Review Reports)	37,00	TRACK	4	
hibtotal				\$245.0
Reporting and Report Distribution	10% of total cost			\$0.00
GRAND TOTAL				53,992.00

Add-Alternate No. 4				
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Laboratory Testing				
Moisture Density Relationship, TxQQT of ASTM	\$249 <u>.0</u> 0	each	٥	0.02
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Field Testing/Observation				
field Lime Gradations	\$64,00	nach	2	5126,0
Ig-Place Nuclear Densities	525,00		ă.	\$200,0
Materials Technician	\$50.00		Īĥ	\$800,00
Vehicle Travel Charge	\$40,00	trio	- 4	\$160.00
Subtotal				\$1,286.0
REINFORGING STEEL OBSERVATIONS				
Field Observation/Testing				
Materials Technician	550,00	hous	0	50.00
Vehicle Travel Charge	\$40.00		ò	\$0,00
Subtotal				\$0.00
CONCRETE				
Laboratory Testing	4-742			60.64
Concrete Compressive Strength Cylinders	\$17.00	each	0	\$0.00
Field Tasting/Observation	\$50.00		0	\$0.00
Materials Technician	\$50.00			\$0.00
Non Destructive Testing (Ultrasonic Testing)	\$85,00			50,00
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Subtotal .				\$0.00
ASPHALT				
Laboratory Testing				
Bag Sample (Extraction, Gradation, A/C content.	\$453.00	each	1	\$453.00
Molding Specimens, Laboratory Density of Molded				
Specimens, Stability Test, Hveem, Maximum				
Theoretical Specific Gravity)				
Density of Asphalt Cores	\$5,000	each	2	\$107.00
Reld Testing/Observation				
Materials Technician	550.00	haus	4	\$200,00
Vehicle Travel Charge	\$40.00	Kib	1	540.0
Subtotal				\$795.0
PROJECT ADMINISTRATION				
Project Manager	\$275.00	bour	0	ŚŪ.0
Project Engineer (Review Reports)	\$135.00		11	\$135.0
	277,00	siwū:		\$245.0
Subtotal				9493.0
		PANA CE COLUMN		\$0.0
Reporting and Report Distribution		10% of total cost GRAND TOTAL		

General:

- We understand that Williamson County will require the services of experienced engineering technicians as scheduled by you or your representatives. Client will incur a 3 hour minimum charge per each site visit. We request twenty-four (24) hour notification to properly schedule our work.
- 2. Service charges are based on the hourly rates stated herein and will be assessed from the time the Engineer or Technician leaves our office until he returns from the project.
- 3. A vehicle travel charge will be assessed for round trip travel from our office to the project site, material supplier, etc. and back to our office.
- 4. Our total cost of services is based upon the assumption that this project will require a technician on site during normal work hours. Services requested during days and/or hours requiring overtime rates may significantly increase the total cost of services shown herein. Normal work hours are defined as Monday through Friday, 7:00 am to 5:00 pm. Overtime rates at 1.4 times the normal hourly rate will be assessed after eight (8) hours of continuous work per day.