AMENDMENT 1 to ADDENDUM NO. 30 TO THE AGREEMENT DATED AUGUST 3, 2018 BETWEEN GREATER ORLANDO AVIATION AUTHORITY AND TERRACON CONSULTANTS, INC.

Project:

Additional Well Abandonment Activities at the Former Test Injection Wells Located in the South Terminal Complex Area, Orlando International Airport

THIS AMENDMENT is effective this ______ day of _______, 20_____, by and between the GREATER ORLANDO AVIATION AUTHORITY ("Authority"), and TERRACON CONSULTANTS, INC. ("Consultant').

WITNESSETH:

WHEREAS, by Agreement dated August 3, 2018, Authority and Consultant entered into an agreement for Consultant to provide continuing environmental engineering consulting services; and

WHEREAS, under the Agreement, Consultant agreed to perform such additional services for the Authority as are contained in any additional scope of work established by the Authority in any addendum to the Agreement and accepted in writing by the Consultant; and

WHEREAS, the Authority and the Consultant desire to enter into this Amendment to the Agreement to provide for additional services to be rendered by the Consultant under the terms of said Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, the Authority and the Consultant do hereby agree as follows:

- 1. Consultant shall perform additional services in accordance with the terms of the Agreement and the attached Exhibit "A." Consultant shall be paid for such additional services according to the payment terms set forth in the Agreement.
- 2. Consultant shall be compensated for such additional services in the **NOT TO EXCEED** amount of **EIGHT THOUSAND SEVEN HUNDRED FIFTY AND NO/100 DOLLARS (\$8,750.00)**, broken down as follows:

Professional Fees: NTE: \$0.00
Professional Fees: LS: \$0.00
Reimbursable Expenses: NTE: \$8,750.00

Total: \$8,750.00

		mendment, the Agreement dated August 3,
2018 and all prior addenda will remai	n in full fo	orce and effect.
IN WITNESS WHEREOF, the parties executed this Addendum this	hereto b	y their duly authorized representatives, have f, 20
	GREA	ATER ORLANDO AVIATION AUTHORITY
	Ву:	David M. Patterson Director of Construction
Approved as to Form and Legality (for the benefit of GOAA only)		
By:, 20] By:, 20] NELSON MULLINS BROAD AND CASSEL, Legal Counsel Greater Orlando Aviation Authority	X	
	TERF	RACON CONSULTANTS, INC.
	Ву:	Signature (Duly Authorized Rep.) Mark Mulligan, P.G.
		Printed Name
		Principal
		Title



Orlando International Airport One Jeff Fuqua Boulevard Orlando, Florida, 32827-4392 (407) 825-2001

Memorandum

То:	Members of the Construction Committee				
From:	Dan Carrington, Environmental Manager				
Date	July 6, 2021				
Re:	Request for Approval of an Amendment to Addendum 30 to the Continuin Environmental Engineering Services Agreement with Terraco Consultants, Inc. to conduct Additional Well Abandonment Activities at the Former Test Injection Wells located in the South Terminal Complex area of Corlando International Airport				
\$87,701.00 that additional we located in Solat 1200 feet Consultant's per Florida A requirements	to the above-refe ell abandonment outh Terminal Cor and needs to b proposal, dated administration Cor s.	renced agreement. services are requiremplex (STC) at differ a bandon using a June 18, 2021. The de (FAC) and South	Since the distribution of the dept dept different wells are lorida V	oved Addendum 30 in the amount of at time, it has been discovered that of the nine wells. These wells are hs. One of the wells has a large void methodology which is described in a required to be properly abandoned Vater Management District (SFWMD)	
				construction Committee approval.	
				on (☑ all that apply):	
	nce	Available Person	nel	Current Workload	
	e	Equitable Distribu	ıtion	Other:	
		has been reviewed bation are attached.	y the Of	fice of Small Business Development.	
	rce verified by			d City of Orlando funds (005.Orlando). Construction Finance on06/_30_/21_	
Continuing I	Environmental En		greeme	nittee approve an Addendum to the nt with Terracon Consultants, Inc. for ow:	
Not to Exce			\$0.00		
Lump Sum I	Fees		\$0.00		
	ed Expenses		50.00		
TOTAL Paviawad b		\$8,7	'50.00		
I Reviewed h	$\alpha \alpha \alpha C$	j (



June 18, 2021

Greater Orlando Aviation Authority 5855 Cargo Road Orlando, Florida 32827-4399

Attn: Mr. Dan Carrington Phone: (407) 825-3463

Email: dcarrington@goaa.org

RE: Proposal for Packer Abandonment of Former Test Injection Well P-8

South Terminal Complex

Orlando, Orange County, Florida Terracon Proposal No. PH1207462

Dear Mr. Carrington:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to complete well abandonment activities at the above-referenced site. The purpose of this proposal is to permanently close former test injection well P-8 using a packer method to bridge a void encountered in the well. The original scope approved in Addendum 30 to the Continuing Environmental Engineering Services Contract dated August 3, 2018 assumed that the presence of bridging (obstructions), fractures or voids will not be encountered during well abandonment activities.

1.0 PROJECT INFORMATION

On January 12, 2021, Terracon's subcontractor RM Baker, LLC conducted bore scoping of the deepest well (Well P-8) prior to initiating permit application for well abandonment activities. The bore scoping consisted of a caliper and video log of the deepest well (P8) to evaluate the casing diameter and depth, borehole diameter and depth, and to evaluate the presence of bridging (obstructions), fractures or voids.

The video log indicated the presence of a large void at a depth of approximately 1,210 feet below land surface (BLS) and extends 60 feet to a depth of 1,270 ft BLS. The width of the cavern could not be determined without the use of sonar, and therefore the exact size of the chamber is not known at this time. It is not recommended or feasible to grout and/or rock (abandon) past the top of this void.

The South Florida Water Management District (SFWMD) permitting requires abandonment of the entire length of the borehole, therefore alternate abandonment methods had to be negotiated. Subsequent to discussion with FDEP and Orange County Department of Health, the video log was submitted to SFWMD, along with a well abandonment plan, for review and comment.

Terracon Consultants, Inc. 1675 Lee Road Winter Park, FL 32789
P 407.740.6110 F 407.740.6112 terracon.com

Terracon

Proposal for Packer Abandonment of Former Test Injection Well P-8 South Terminal Complex • Orlando, FL June 18, 2021 • Terracon Proposal No. PH1207462

2.0 SCOPE OF WORK

SFWMD concurred with the recommended abandonment plan for this well utilizing a packer to seal the bottom of the casing and abandonment of the cased section of the well. The proposed abandonment will consist of deploying a packer at the bottom of the casing at a depth of approximately 1,070 feet BLS. Once the packer is seated and secured, the bottom of the casing will be sealed and the casing grouted to the surface.

3.0 SCHEDULE AND COMPENSATION

The existing budget for abandonment of Well P-8 as provided in Addendum 30 to Terracon's Continuing Environmental Engineering Services Contract dated August 3, 2018 is \$25,000.00. Based on the evaluation of cost to utilize the packer method, the additional fee for the completion of abandoning Well P-8 will be \$8,750.00. The additional cost includes materials including 2-inch pipe, packer, ½-inch cable, fittings and associated labor.

Terracon is prepared to implement the above generally outlined scope of services immediately upon your notice to proceed. Our estimated cost to complete the project is a not to exceed amount of \$8,750.00, consisting of Reimbursable Expenses by the driller for the additional materials to complete P-8 well abandonment; and \$0.00 in Professional Service Fees. A breakdown of these costs including a summary of the DBE participation may be found on **Attachments A** and **B**, respectively. Please note, due to the specialized nature of the work DBE participation could not be achieved.

4.0 AUTHORIZATION

If this proposal meets with your approval, work may be initiated by issuing an Amendment to Addendum 30 to Terracon's Continuing Environmental Engineering Services Contract dated August 3, 2018.

Terracon appreciates the opportunity to be of continued service and we look forward to working with you on this project. If you have any questions or comments pertaining to the material presented herein, please contact the undersigned at [407] 740-6110.

Sincerely,

Terracon

Lydia Wing Senior Project Engineer Mark Mulligan, P.G.

Mark Apelligas

Environmental Department Manager

Attachment A – Estimated Costs

Attachment B - DBE Participation Schedule

ATTACHMENT A - ESTIMATED COSTS PACKER ABANDONMENT OF FORMER TEST INJECTION WELL P-8 SOUTH TERMINAL FACILITY

ORLANDO INTERNATIONAL AIRPORT ORLANDO, ORANGE COUNTY, FLORIDA

PROPOSAL NO. PH1207462 June 18, 2021

		QTY.		RATE	UNIT	Α	MOUNT
	REIMBURSABLE I	EXPENSE	S				
1.	DRILLER SERVICES - Well Abandonment (Henders	on Wilde	r D	rilling)			
	a. Packers and connecting piping for alignment	2	\$	196.00	Each	\$	392.00
	b. Cable and air wench	1	\$	3,028.00	Each	\$	3,028.00
	c. Additional pipe for setting and grouting packers	1000	\$	4.33	FT	\$	4,330.00
	d. Boom truck and air compressor for air wench	1	\$	1,000.00	Each	\$_	1,000.00
		Sub	tota	I Well Aba	ndonment	\$	8,750.00
		Total Pa	aim	bursable E	Evnances	\$	9 750 00
		i Otal IX	31111	Dui Sabie E	-xheiises	<u> </u>	8,750.00
	PROFESSIONAL SE	RVICE FI	EES	;			
I.	PROFESSIONAL SERVICES - Project Management	(Terraco	n)				
	a. Senior Project Manager	0	\$	169.00	Per Hour	\$	-
	b. Senior Engineer	0	\$	143.00	Per Hour	\$	-
	c. Admin/Clerical	0	\$		Per Hour	\$_	
		Subtota	al Pi	rofessional	Services	\$	-
		Tota	l Pı	ofessiona	I Services	\$	
~							
					Expenses		8,750.00
					rvice Fees		
	TOTA	L ESTIMA	ATE	D PROJE	CT COSTS	\$	8,750.00

ATTACHMENT B - DBE PARTICIPATION SCHEDULE

PACKER ABANDONMENT OF FORMER TEST INJECTION WELL P-8 SOUTH TERMINAL FACILITY ORLANDO INTERNATIONAL AIRPORT, ORANGE COUNTY, FLORIDA PROPOSAL NO. PH1207462 June 18, 2021

Name of Subconsultant	Address	Proposed Scope of Services	FEE	Proposed Participation
	- J.			
Total Proposed Participation			\$ -	0.0%

HENDERSON WILDER CONTRACTOR

1143 MEADOW LANE O ORLANDO FL 32807

OFFICE: 407-277-6079 © CELL: 407-948-6955 © FAX: 407-275-1339.

STATE CERTIFIED BLDG CONTRACTOR CBC 005988 © FL WATER WELL CONTRACTOR #2516

May 7, 2021

Lydia Wing Terracon Consultants, Inc. 1675 Lee Road Winter Park, Fforida 32789

Attached is the list of additional costs for abandoning the P-8 well by installing a packer in the casing and grouting with neat cement.

ADDITIONAL COSTS FOR ABANDONING OIA WELL P-8

				Unit Cost	Amount
1 P	Packers and connecting piping for alignment	2	EA	\$196.00	\$392.00
2 (Cable and Air Wench Rental ("Sunbelt Rentals")	1	EA	\$3,028.00	\$3,028.00
3 A	Additional pipe for setting & grouting packers	1000	FT	\$4.33	\$4,330.00
	Boom truck and air compressor to handle and operate Air Wench	1	EA	\$1,000.00	\$1,000.00
					\$8,750.00

Henderson Wilder 1143 Meadow Lane Orlando, Florida 32807

TRUTH IN NEGOTIATION CERTIFICATION

The Consultant hereby certifies, covenants, and warrants that wage rates and other factual unit costs supporting the compensation for this project's agreement are accurate, complete, and current at the time of contracting.

The Consultant further agrees that the original agreement price and any additions thereto shall be adjusted to exclude any significant sums by which the Aviation Authority determines the agreement price was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. All such agreement adjustments shall be made within (1) year following the end of the contract. For purposes of this certificate, the end of the agreement shall be deemed to be the date of final billing or acceptance of the work by the Aviation Authority, whichever is later.

Consultant	Terracon Consultants, Inc.
By: Mar	a afelligar
Print Name:	Mark Mulligan
Date:	June 18, 2021



GREATER ORLANDO AVIATION AUTHORITY

Orlando International Airport 5850-B Cargo Road Orlando, Florida 32827-4399

MEMORANDUM

To: Members of the Construction Committee

From: George I. Morning, Director of Small Business Development Department

Date: July 06, 2021

Re: Request for Approval of an Amendment to Addendum 30 to the Continuing Environmental

Engineering Services Agreement with Terracon Consultants, Inc. to conduct Additional Well Abandonment Activities at the Former Test Injection Wells located in the South Terminal Complex

area at Orlando International Airport

We have reviewed the qualifications of the subject contract's MWBE/LDB/VBE specifications and determined that, due to the specialized nature of the services to be provided, Terracon Consultants, Inc. does not propose small business participation on this Amendment.

Our analysis indicates that Terracon Consultants, Inc. is eligible for award of the subject Amendment.

REQUEST FOR APPROVAL OF AN ADDENDUM TO THE CONTINUING MEP ENGINEERING SERVICES AGREEMENT WITH SGM ENGINEERING, INC. TO PROVIDE ENGINEERING PERMIT DRAWINGS AND SPECIFICATIONS FOR THE ADDITION OF AIR CURTAINS ABOVE ENTRANCES AT CENTERFIELD, WESTFIELD, AND EASTFIELD STATIONS, AT THE ORLANDO INTERNATIONAL AIRPORT.

12. Mr. Daniels presented the attached memorandum, dated July 6, 2021.

The Office of Small Business Development has reviewed the qualifications of the subject contract's MWBE/LDB/VBE specifications and determined that, due to the limited and specialized scope of the required services, SGM Engineering, Inc. does not propose any small business participation on this Addendum.

Ms. Sharman asked if this is just for the design phase. Mr. Daniels answered yes, and added that an item will be brought back for the construction phase services once the design is complete.

Upon motion of Mr. Gilliam, second by Ms. Sharman, vote carried to approve an Addendum to the Continuing MEP Engineering Services Agreement with SGM Engineering, Inc. to provide Engineering Permit Drawings and Specifications for the Addition of Air Curtains Above Entrances at the Centerfield, Westfield, and Eastfield Stations, for the total lump sum amount of \$5,848.00, with funding from previously-approved Operation and Maintenance Funds.

REQUEST FOR APPROVAL OF AN AMENDMENT TO ADDENDUM NO. 30 TO THE CONTINUING ENVIRONMENTAL ENGINEERING SERVICES AGREEMENT WITH TERRACON CONSULTANTS, INC. TO CONDUCT ADDITIONAL WELL ABANDONMENT ACTIVITIES AT THE FORMER TEST INJECTION WELLS LOCATED IN THE SOUTH TERMINAL COMPLEX AREA, AT THE ORLANDO INTERNATIONAL AIRPORT.

13. Mr. Carrington presented the attached memorandum, dated July 6, 2021.

The Office of Small Business Development has reviewed the qualifications of the subject contract's MWBE/LDB/VBE specifications and determined that, due to the specialized nature of the services to be provided, Terracon Consultants, Inc. does not propose small business participation on this Amendment.

Chairman Patterson asked if this is the final step. Mr. Carrington answered yes, and added that additional work will need to be done to relocate the well to a better site.

Ms. Sharman asked if the City will pay for half of the project. Mr. Carrington answered yes, and added that he is in contact with them. Ms. Sharman also noted that this item is subject to the Construction Finance Oversight Committee (CFOC).

Upon motion of Ms. Sharman, second by Mr. Hunt, vote carried to approve an Amendment to Addendum 30 to the Continuing Environmental Engineering Services Agreement with Terracon Consultants, Inc. to conduct Additional Well Abandonment Activities at the Former Test Injection Wells located in the South Terminal Complex area, for the total not-to-exceed expense amount of \$8,750.00, with funding from previously-approved Capital Expenditure Funds and City of Orlando Funds; subject to the CFOC. [Subsequent to the Construction Committee, the CFOC consensed the funding at its meeting on July 12, 2021, as outlined above.]

REQUEST FOR APPROVAL OF CONTRACTOR'S FINAL PAYMENT TO GOMEZ CONSTRUCTION CO. FOR BP-00484, NORTH TERMINAL CENTRAL PLANT EQUIPMENT REPLACEMENT - COOLING TOWERS, AT THE ORLANDO INTERNATIONAL AIRPORT.

14. Chairman Patterson presented the attached memorandum, dated July 6, 2021, requesting the Contractor's Final Payment to Gomez Construction Co. for BP-00484, North Terminal Central Plant Equipment Replacement- Cooling Towers, at the Orlando International Airport. The Construction Contract for the referenced project has been completed and all issues involving the Contractor have been addressed and resolved.