Interoffice Memorandum

ORANGE COUNTY GOVERNMENT FLORIDA

July 22, 2019

TO: Mayor Jerry L. Demings and Board of County Commissioners

FROM: Raymond E. Hanson, P. E., Director Utilities Department

fluter

SUBJECT: BCC Agenda Item – Consent Agenda August 6, 2019 BCC Meeting Change Order Number 10 to Contract Y15-771-PH South Water Reclamation Facility Phase V Improvements Contact Person: Troy Layton, BCEE, Manager Utilities Field Services Division 407-254-9794

MWH Contractors, Inc., has submitted a price proposal for additional services under the terms of Contract Y15-771-PH. The project increases wastewater treatment capacity by 13 million gallons per day and is comprised of constructing three mechanical screening units, an activated sludge pump station, a blower building with three 800 horsepower blowers, seven disc filters, a reuse/equalization storage with pump station, an effluent transfer pump station, and a solids handling facility. In addition, the project includes improvements to the biological treatment units, pretreatment structure, clarifiers, miscellaneous upgrades, and site civil work.

The proposed Change Order Number 10, in the amount of \$629,133.54, provides for additional work due to unforeseen conditions. The pretreatment structure rehabilitation required utilization of slide gates that were inoperable, necessitating a complete piped bypass. The revised bypass plan creates the opportunity to replace the obsolete influent flow meters which are out of compliance with Florida Department of Environmental Protection regulations. This option was not previously feasible due to the prohibitive cost of bypassing which has now become a necessity. The 18 tie-in conflicts were unforeseen due to the congestion and size of the concrete encased duct banks, utilities, and piping in the area. In addition, the existing 54-inch ductile iron pipe is "out-of-round," requiring a custom saddle.

A summary of previous change orders is provided below.

Change Order No. 1, for a deduction of \$884,190.81, was approved September 2016 and removed plug valves to allow for owner purchase tax credit options.

Change Order No. 2, in the amount of \$95,605.61, was approved January 2017 and provided for the addition of aeration basin platforms with handrails for safe access to mechanical systems and grit collection system control corrections due to a design conflict.

Change Order No. 3, in the amount of \$814,775.58, was approved March 2017 and provided for the relocation of the exterior biosolids building control panels located in a corrosive location to inside the building, and the addition of coating protection for the all pump station influent channels that had not been included in plans.

Change Order No. 4, in the amount of \$19,252.35, was approved July 2017 and included the unforeseen coating repairs to the ground storage tank exterior surface and addition of operator local interface controls to the new pumps and valve actuators as only remote control had been designed.



Interoffice Memorandum

Change Order Number 10 to Contract Y15-771-PH South Water Reclamation Facility Phase V Improvements – August 6, 2019 BCC Consent Agenda July 22, 2019 Page 2

Change Order No. 5, in the amount of \$261,682.51, was approved December 2017 and provided for power rerouting for the guard house due to future conflict with the existing influent pumping station, additional operator interface for local control of panels 3B and 6A that had not been included in the design, unforeseen concrete repairs to the influent pump station channel 3. and unanticipated SCADA upgrades to communication issues with existing systems due to the new equipment software installed for the blower building.

Change Order No. 6, in the amount of \$106,879.61, was approved April 2018 and provided for the replacement of a damaged valve at influent barscreen 1, the addition of variable speed drives to the existing polymer system required for integration with the new centrifuge and redundant local operator control for the solids handling building at the process location.

Change Order No. 7, in the amount of \$563,297.35, was approved March 2019 and provided for modifications to the progressive cavity pumps required to maintain plant operations during construction, unforeseen concrete repairs in the influent pump station channel 1, process air flow changes to improve performance, addition of electrical conduits for future work which would be inaccessible after construction, additional pipe supports with expansion joints required for the air piping that was not shown on the drawings, and conflicts with the 54-inch connection at tie-in location 19 including a conflict with an existing abandoned structure and rerouting of existing process piping that was not shown on the drawings.

Change Order No. 8, in the amount of \$1,612,867.22, was approved April 2019 and provided for the replacement of additional slide gates at the pretreatment structure that had deteriorated beyond repair. The inoperable slide gates were not able to be utilized for the designed pretreatment structure isolation sequence and required a complete structure piped bypass which had not been anticipated.

Change Order No. 9, in the amount of \$432,065.26, was approved June 2019 and provided for the addition of a line stop due to an inoperable valve at the ground storage tank, repair of disc filters and restoration of area damaged by the ground storage tank overflow caused by existing equipment failure, and 54-inch force main piping rerouting under an existing large duct bank that was not shown on the plans.

The original contract was in the amount of \$63,112,275. The Change Orders increase the contract value by \$3,651,368.22 or 5.79%. The revised contract amount is \$66,763,643.22.

Action Requested: Approval and execution of Change Order Number 10, Contract Y15-771-PH, South Water Reclamation Facility Phase V Improvements, with MWH Contractors, Inc., in the amount of \$629,133.54, for a revised total contract amount of \$66,763,643.22.

District 6.

OF COUNTY COM	MISSIONERS		at descent at an			
AUG 06	2019 ORANGE	COUNTY UTIL		-S		
Contractor:	MWH Constructors, Inc.	Change Order Number	10	Page 1 of	1	
Vendor Code	1555-01	Date July 1, 20	019			
Contract No.	Y15-771-PH	Original Contract Amount		\$63,112,275.00		_
Project Name		Revised Contract Amount		\$66,763,643.22		

SOUTH WATER RECLAMATION FACILITY PHASE V IMPROVEMENTS

Engineer Black & Veatch Corporation

Sequence No.

BY-

BY-

Contractor's Signature

Kurt Koepf Project Manager

Accepted for Contractor By: Print Name

APPROVED BY ORANGE COUNTY BOARD

41285

Item No.	Quantities	Unit	Description	Unit Price	Additions	Deductions
RPC #65	1	LS	PTS - Influent Flow Meters	\$380,834.87	\$380,834.87	
RPC #68	1	LS	RFI #203/215 - Tie-in 18 Conflicts	\$248,298.67	\$248,298.67	

			Totals	\$629,133.54 \$0.00	
Percent			Net Dollars This Change		
Complete Time 90%	6 Percent Complete Cost:	85%	Order	\$629,133.54	
Total Time Previous	n.		Net Dollars Previous		
Change Orders	260	Days	Change Order	3,022,234.68	
Total Time This Change	9		Net Dollar Changes to		
Order	0	Days	Date	\$3,651,368.22	
			Original Contract Dollar		
Original Contract Time	1080	Days	Amount	\$63,112,275.00	
Device of Ocentry of Time			Revised Contract Dollar		
Revised Contract Time	1340	Days	Amount	\$66,763,643.22	
CONTRACTOR	0		ORANGE COUNTY UTILITIES		

By

This change order includes not only all direct costs of Approval Recommended: contractor such as labor, material, job overhead, and profit markup but also includes any costs for modifications or changes in sequence of work to be performed, delays rescheduling, disruptions, extended direct overhead, acceleration, material, or other escalation which includes wages, and other impact costs.

Dat

By Terre R

Chief Inspector

Mana

Director Utilities

Orange County Mayor

Date Name: Terra Reffitt

Date

7-19-19 Date_/

Date 6 aug 19

PRICE NEGOTIATION MEMORANDUM

.

This memorandum must be completed for non-competitive procurements exceeding \$100,000 and for change orders to existing contracts that will require Board approval. The purpose of this form is to create an audit record evidencing that negotiations were conducted with the contractor/consultant/vendor, the extent of such negotiations, and that the overall price offered is fair and reasonable.

[.	Sub	ject:	Project		Y15-771-I	РН
					Contract Nu	
				e ,		ater Reclamation Facility
				Pł	hase V Improv	
					Contract T	itle
II.	Inti	roductory	Summary:			
	Neg	otiations	for the purchase of:	Process Facility Ch	nanges (Piping	<u>, Process Equip.) CO 10</u>
					Product/Serv	vices
	Wei	re comple	ted on:		7/01/19	
					Date	
	Wit	h:		M	WH Construct	tors, Inc.
					ractor/Consult	
						nd the agreed upon price
	are	compared	below. Each figure i	is based on the contract	t being firm-fi	xed-price.
		County's	s Estimate	Contractors/Consulta Vendors Offer	ants/	Agreed Upon Price
				Add \$688,866.58	\$	\$629,133.54
				Deduct \$0		+ - y
[I .	Par	ticulars:				
	A.	Comple	ete Name and	MWH C	Constructors, In	nc.
		Addres	s of Company	300 Interlocken Blv	vd. Suite 300,	Broomfield, CO 80002
	B.	Lump S	Sum/Not-to-exceed	\$(66,763,643,22	2
	C.	Unit pr	ices (if annlicable) o	uoted and negotiated	If many attac	h as a schedule
	C.					
			Proposed		Negotiated	

Page 2

D. Name and titles of persons representing the contractor/consultant and the County in the negotiations, identifying the principal negotiators:

Name	Title	Organization		
Kurt Koepf	Project Manager	MWH Constructors Inc.		
Fernando Villanueva	Director	PMA Consultants LLC		
Terra Reffitt	Chief Utilities	O.C.U.		

IV. Procurement Situation:

A. Describe what was discussed, to include any outside influences and time pressures.

Discussed Contractor's scope of work and backup, which includes vendors quotes, labor,

materials, quantities associated with the individual RPCs, which includes Subcontractors

labor and materials with associated overhead.

B. Show the delivery schedule or period of performance. If there is a difference between the Schedule desired or required and that proposed by the Contractor/Consultant/Vendor discuss the resolution or compromise, if any.

CO #10 Work constructability unforeseen conditions, replace obsolete and unreliable raw

sewage influent flow meters at the PT Structure.

V. Negotiation Summary:

A. Summarize the Contractors/Consultants/Vendors pricing proposal, the County's negotiation objective and the negotiation results and the reasons the agreed upon price is fair and reasonable.

O.C.U. opens up individual R.P.C.s for Contractor to submit quotes with back up. O.C.U.

reviews this information submitted by Contractor's and any correspondence, bulletins or R.F.I.s

related to changes. O.C.U. then meets with Contractor to finalize negotiations if needed.

The contractor's/consultant's/vendor's proposal is considered fair and reasonable and execution of the contract/change order/amendment is recommended.

Terra Reffitt Full Name of Negotiator

Signature

10-July-19

Date