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MEMORANDUM

WATER & RESOURCE RECOVERY FACILITY

To: Greg Jenkins, Interim City Administrator

CC: Nancy Lueck, Finance Director
Cinda Hilger, Secretary Duties

From: Jon Koch, WRRF Director

Date: December 26, 2019

Re: HSW Project Change Order #4

INTRODUCTION: Leander Construction, Inc. (LCI) has submitted a change order for extra work requested by the City for the High Strength Waste (HSW) project. The change order is for seven items (Leander Change #8016-#8022) totaling \$20,932.66. Now is the time to approve Change Order #4 to the HSW project.

BACKGROUND: Several items have been added together for Change Order #4 to the HSW project. These items have been compiled by City Staff and found to be appropriate to complete the project. See CO #4 attached for a detailed list for the extra work.

Change 8016 Vac Pad Sanitary Sewer Change: When the new vacuum truck dump pad (vac pad) was poured it was determined that the elevation drop of the drain pipe was too shallow for the material anticipated. The sewer line for the vac pad was redirected to an alternate manhole requiring more material when an obstruction was found in the new area for installation.

Change 8017 RC Fan Inspection: While removing the baler and filling in the baler pit, unknown electrical wires were cut that affected several pieces of existing equipment including the exhaust fans. Electricians were requested to confirm and disconnect damaged fan power to avoid fire and other hazardous situations (emergency call-in).

Change 8018 Fiberglass Piping to T42: Additional piping was requested by the City to accommodate clean-outs for the piping from the T42 separator to the tankers.

Change 8019 RC Troubleshoot Exhaust Fan: When the electrical line that was cut was made safe, further investigation was required to determine what equipment was affected and how best to reroute power to the breaker panel and restore power to existing equipment.

Change 8020 RC Exhaust Fan and Unit Heater: After investigation, the electrical was installed to regain power to the panel affected by the cut lines due to the baler pit work.

Change 8021 T42 Plumbing Relocations: When the T42 was assembled and the pump was placed, staff determined that the pump needed to be relocated to facilitate regular maintenance efficiency. This required moving the eye wash station and hose bib.

Change 8022 T42 Electrical Additions: Due to relocating the main pump and needing additional wiring to the wet end pump, additional conduit and wire was required to make the appropriate connections.

RECOMMENDATION/RATIONALE: Staff recommends approval of Change Order #4 to the HSW project in the amount of \$20,932.66.

BACKGROUND:

1. HSW project COR #4
2. Updated Extras List

CHANGE ORDER

No.: 004

	Part	Non-Part
Non-Substantial:	<input type="checkbox"/>	<input type="checkbox"/>
Substantial:	<input type="checkbox"/>	<input type="checkbox"/>
		<u>Dec. 12, 2019</u>
		Concurrence Date

Contract
Accounting ID No.: NA

County: Muscatine

Project No.: SCI Project Number: 25408.05.00

Kind of Work: High Strength Waste Receiving Station

Date Prepared: December 12, 2019

Contractor: Leander Construction, Inc.

You are hereby authorized to make the following changes to the contract documents.

A - Description of change to be made or extra work to be done:

This Change Order is written to cover the costs incurred by the Contractor (Leander Construction, Inc.) associated with the following:

- 8016: Vac Pad Sanitary Sewer Connection Change (Materials Only).
- 8017: Former Recycle Center Building, Fan Inspection.
- 8018: Fiberglass Piping to T-42.
- 8019: Former Recycle Center Building, Troubleshoot Exhaust Fan/Unit Heater.
- 8020: Former Recycle Center Building, Proposed Costs for New Exhaust Fan Unit Heater Electrical.
- 8021: Re-Locate Hose Bibb (HB-1), and emergency shower due to T-42 Pump locations.
- 8022: Conduit and wire required to install additional motors on the T-42 equipment.

B - Reason for change or extra work:

- 8016: Due to an unknown underground obstruction, the designed sanitary sewer needed to be re-routed.
- 8017: While removing the former baler pit, and installing the new trench, unknown buried, below the floor slab, electrical wires were cut resulting in lost power to the Recycle Building Exhaust Fan. The electricians were requested to confirm and disconnect damaged fan power; to avoid a building fire.
- 8018: Due to T-42 equipment relocations, some of the fiberglass piping required re-routing.
- 8019: The City requested the power be investigated to re-establish the best way to restore power to the Recycle Building Exhaust Fan.
- 8020: After the electrical investigation of the existing electrical power supply to the Recycle Building Exhaust Fan; costs were established to execute the re-establishment of revised power to the Recycle Building Exhaust Fan.
- 8021: Due to request by Water & Resource Recovery Facility staff to re-locate the T-42 equipment, several pieces of piping required relocation.
- 8022: Due to additional motors added to the T-42 equipment, additional conduit and wire was required to make the appropriate connections.

(Continued on Page 2)

Approved *Bill Alag* 12-20-2019
Construction Project Manager Date

Director Water & Resource Recovery Facility 12-20-2019
Date

Receipt is acknowledged of this change or extra work and terms of settlement are hereby agreed to.

Approved contingent upon funds being available under the existing project agreement or upon additional Federal aid funds being made available by a modified project agreement.

Leander Construction, Inc.
Contractor

By _____ 12-20-2019
Date

12-20-2019
Date

Mayor

Approved _____ 12-20-2019
City Administrator Date

DISTRIBUTION: Project Engineer - Forward original to District.
District - Non-Substantial - Forward original and one copy to the Office of Construction and two copies back to the Project Engineer.
- Substantial - Forward original and two copies to the Office of Construction.

C-1 - Settlement for cost of work to be made as follows:

Change Order No.: 004

- 8016: \$ 920.20 per the Contractor's COR 17, dated 11-04-2019. - 8017: \$ 1,617.21 per the Contractor's COR 18, dated 11-12-2019.
- 8018: \$ 2,244.63 per the Contractor's COR 19, dated 11-15-2019.
- 8019: \$ 443.39 per the Contractor's COR 21, dated 12-02-2019.
- 8020: \$ 7,960.72; per the Contractor's COR 22, dated 12-02-2019.
- 8021: \$ 5,702.97; per the Contractor's COR 23, dated 12-06-2019.
- 8022: \$ 2,043.54; per the Contractor's COR 24, dated 12-06-2019.

C-2 - Justification for cost(s):

These costs were based on the Contractor's and their Subcontractor's Standard Rates for their equipment and labor shown in the COR quotes attached, with the Contractor and their Subcontractors doing the Work. No Project change in the overall Project Schedule.

D - ITEMS INCLUDED IN CONTRACT

Change No.	Line Item Number	Unit Price .xxx	Quantity .xxx	Amount .xx
7				
7				
7				
7				
7				
7				
7				
TOTAL				

E - ITEMS NOT INCLUDED IN CONTRACT

Change No.	Item Description	Item Number	Function Code	Unit Price .xxx	Quantity .xxx	Amount .xx
8 016	Vac Pad Sanitary Sewer Change	0	1	\$920.200	1.000	\$920.20
8 017	RC Fan Inspection	0	1	\$1,617.210	1.000	\$1,617.21
8 018	Fiberglass Piping to T-42	0	1	\$2,244.630	1.000	\$2,244.63
8 019	RC Troubleshoot Exhaust Fan	0	1	\$443.390	1.000	\$443.39
8 020	New Exhaust Fan & Unit Heater	0	1	\$7,960.720	1.000	\$7,960.72
8 021	T-42 Plumbing Relocations	0	1	\$5,702.970	1.000	\$5,702.97
8 022	T-42 Electrical Additions	0	1	\$2,043.540	1.000	\$2,043.54
8						
TOTAL						\$20,932.66

HSW Project Equipment and Services. Items outside contractor bid known at this time and estimated costs

7/1/19

Item	Justification	Cost est	Status	Apprvd
T42 Turbo Separator	Depackaging machine	\$336,945	- Verbal order-June 2019 - Approved drawings, Lana will check them soon and move it to the shop 8-5-19	7/3/19
Koala Consulting	Project management, much cheaper than Stanley to perform minimal tasks i.e. paper work, pay submittals, RFI, change orders outside Stanley contract	\$18,500	Conducted pre-con On-going work	
Terra Con	Concrete testing, outside contract	\$4,500		
Lighting	Lighting in the recycling center was not included in the contract, very poor lighting, damaged lights, needed for product placement in machine	\$107,000 entire facility (Transfer, Recycle, offices, maint., outside) \$70,000 (Transfer, Recycle, outside)	7/30/19 met with auditor, cost for entire facility by them (PQL). \$65K for equipment, will be seeking others for install cost compare. \$215 per light, \$2K rebate, save \$24K/yr.	
Ventilation/heating	The recycling center ventilation is in need of an overhaul, upgrade. It has not been evaluated or worked on for years. Probably functional but needs work	\$20,000 \$40-\$50K (deferred for now)	7/30/19 seeking bid for radiant heat from contractor. Est \$40K-\$50K. Save \$5K-\$7K/mo during the winter	
End loader	To move material from the tip floor into the machine, looking for used to purchase per Finance	\$70,000 est for used	Updated 8/20 Updated 9/19, size needed for height of hopper is increasing cost	
Fork lift	Needed to move product out of trucks, with rotating forks to dump into machine. Looking to purchase used per Finance	\$20,000 est for used	Asking Raymond for donation	
Barrel loader attachment	For loading barrels with fork lift. Product from Heinz coming in barrels	\$1500	Seeking quotes, estimate from web	

			search	
Rotating fork assembly for fork lift	To load material into the hopper from pallets and material in bins	\$8,000 est used	Seeking quotes, estimate from web search	
Security cameras	Needed for vendor proof of destruction requirements and to keep stored food from being stolen for resale or personal use. Also monitoring off-loading at the WRRF, vac pad, septage camera replacement, compatible with current system. Current server is non-functioning, needed replacement 2 years ago. Vendor specific to tie to current system.	\$34,271 \$46,111	Updated 7/18/19 Xfer only Updated 7/31/19 for plant and Xfer To Council 8/15/19 Approved	8/15/19
Door locks	Door locks in recycling center in poor condition, needed for security during and after project	\$1,100	Installed, completed	
Aggregate	Base for the truck off-loading site at the WRRF. Earth work to be performed by City. May pave in the future but this saves cost of contractor performing work	\$20,000	Rough design by City engineer	
Pole building/FOG receiving	A building and pad are needed to house the liquid/FOG receiving bar screen for winter freeze protection. Two trucks will connect. This was removed in the project 3.0a to reduce cost to current contract 3.0b.	\$50,000 \$150,000 12/16/19 Change Order #5, paving entire area required, LCI to do work. Buidling deferred.	7/30/19 seeking bids for trough configuration 8/30/19 Leander bid \$81K 9/19/19 received alt bid \$15K for concrete. Seeking building bid, anticipate \$10K w/ install	
Hot water wash down	Hot water is needed to clean the greasy areas around the LWR and flush the line daily to avoid costly line jetting	\$11,000	8/16/19 Hotsy quote, per unit. Immediate need at LWR, future at Xfer. Seeking alt quote	

HSW Project Equipment and Services. Items outside contractor bid known at this time and estimated costs

7/1/19

Flow meters and piping	Meters to measure off-loading trucks for accurate billing.	\$7,000 (deferred)	Seeking quotes	
Bollards	Bollards to protect light poles, buildings, etc from new truck traffic at WRRF, Xfer	\$1,500	Xfer done with CO #1, LWR area to be done when aggregate installed	
Safety Kleen	Remove hydraulic fluid from old baler pit to fill and repair at the Xfer	\$1,000	Estimate 7/31/19 Completed 8/08/19	
Power wash RC building	Remove dirt and debris from construction before machine is installed	\$4700	Completed 9/13/19	
Shelter/Odor Control LWR Station	The LWR requires a shelter to direct odor vapors from being taken in by the lab HVAC	\$30,000		
Change Order #1		\$21,219.79	Approved 09/05/19	09/05/19
Change Order #2		\$35,642.86	To Council 10/03/19	10/03/19
Change Order #3		\$14,340.25	To Council 11/04/19	11/04/19
Change Order #4		\$20,932.66	To Council 01/02/20	
Change Order #5	LWR paving	\$148,984.00	To Council 12/19/19	12/19/19
Total		\$865,975.56 est	Updated 12/26/19	