

ITEM #:	42
DATE:	07-14-26
DEPT:	W&PC

COUNCIL ACTION FORM

**SUBJECT: WATER POLLUTION CONTROL FACILITY NUTRIENT REDUCTION
MODIFICATIONS PHASE 1 PROJECT - CHANGE ORDER #10**

BACKGROUND:

On August 13, 2024, City Council awarded a contract to Woodruff Construction for modifications to the Water Pollution Control Facility (WPCF) in the amount of \$53,370,000. These modifications are the first of two construction phases that will ultimately enable the facility to achieve the goals of the Iowa Nutrient Reduction Strategy.

As is common with large construction contracts, this project has required multiple change orders. To date, nine change orders have been approved for a combined total reduction in the contract price of \$72,011.36. Details regarding the scope and amounts of each change order are outlined below in Table 1.

A tenth change order has been prepared and is ready for Council approval. The largest single item (\$231,618.27) is to replace all six variable frequency drives (VFD's) in the Raw Water Pump Station (RWPS). The VFD's allow the speed of the pumps to be varied to more closely match the rate of flow entering the Water Pollution Control Facility. This avoids having frequent pump starts and stops and allows for a more consistent flow rate through the facility and a more uniform treatment effectiveness.

The existing drives have already exceeded their anticipated 15-year useful life. One of the drives has failed, and several others are in need of extensive repairs. **Because these VFD's serve the raw wastewater pumps, the facility's first and most critical pumping process, replacing them now reduces the risk of future failures and improves the long-term reliability of the treatment plant.** City staff requested that Woodruff, the general contractor, prepare a cost proposal for replacing these VFD's.

There are advantages to completing this work as part of the current project rather than under a separate future contract. In addition to having the contractor and electrical subcontractor already mobilized and familiar with the facility, the new VFD's will use the same Allen-Bradley controls platform, programming approach, enclosure design, documentation standards, and control components being provided elsewhere in the Nutrient Reduction project. This provides greater consistency for operations and maintenance staff and simplifies future troubleshooting, maintenance, and spare parts management.

To ensure that the City was receiving a fair, competitive cost proposal, staff requested the design engineer, Strand Associates, to evaluate the pricing. Even prior to receiving the proposal from the contractor, Strand prepared their own budget estimate range. Woodruff's proposal fell within the middle of that range. Strand also obtained

independent pricing from another manufacturer's representative and received pricing similar to Woodruff's costs. Based on that evaluation, staff believe that the change order pricing provided by Woodruff is fair and reasonable for the equipment and scope being provided.

Other minor changes includes in this change order are to add additional structural load transfer plates in the Raw Water Pump Station (\$2,902.25), substitute galvanized steel expansion joint hardware in lieu of stainless steel (credit of \$3,600), and a no-cost correction from Change Order No 9 where a subtotal was shown with two digits transposed (the total amount of the Change Order 9 was correct, and this does not adjust the overall contract amount).

Table 1: Change Order Summary

<u>Change Order #1</u> Credit for Enviromix, fire alarms, canopy; reroute gate power circuit; expansion joint changes.	(231,878.79)
<u>Change Order #2</u> Modifications to the ceiling and lighting in portions of the Administration Building.	(25,280.00)
<u>Change Order #3</u> Changes to Control Box A & B; changes to framing elements, reimbursement for special inspections.	10,835.86
<u>Change Order #4</u> Changes to door framing; changes to ceiling tiles; changes to electrical outlets; additional painting requested by staff.	13,459.25
<u>Change Order #5</u> Changes to valves & piping in Structure 10; changes to reinforcing and electrical at Structure 20; add booster fan; casework changes in admin building; add (2) well supply tanks and well control modifications; Deletion of gate valve in Control Box A (later restored as part of Change Order #9); misc changes in Structure 20.	(40,743.03)
<u>Change Order #6</u> Integrate doors into fire alarm in Admin; change paving to PCC for (8) parking stalls; credit for brass tags vs stainless; credit for rehab slide gate valves in Structure 10 versus replacement; Structure 200 berm elevation changes; corner guards in Structure 200; changes to the 4" DCW line near the RWPs.	\$71,844.57
<u>Change Order #7</u> Add asbestos and lead abatement for demolition of old admin building; add remote control for trolley hoist; misc electrical changes; add door holder/closer; extend water line in grit building; additional fencing; removal of unknown foundation under old admin building; add additional wireless access points.	\$44,527.37
<u>Change Order #8</u> Relocate overhead door; door hardware change; credit from water line relocation; door opener to Room 20012; add corner guards in admin building; substitute PLC type.	\$3,843.61

Change Order #9 - this action Credit for eliminating crimp connectors; install water supply, drain, and install owner-supplied sink in shop; credit for eliminating hangers on energy recovery unit duct; remove and replace gate door in Control Box A.	\$81,379.80
Change order #10 - this action Supply and install (6) new VFDs for the Raw Wastewater Pumps, add (4) load transfer plates, credit for expansion joint material change, no-cost correction to Change Order #9.	\$230,920.52
Total Approved Change Orders (Including this action) Percent of Original Contract	\$158,909.16 0.30%

Table 2 below summarizes the overall project budget, including the \$500,000 grant that was received earlier this year.

Table 2: Total Project Funding & Expenses

	Funding	Expenses
Prior Years		
FY 2023	1,000,472.42	
FY 2024	1,438,643.35	
FY 2025 Adjusted	26,610,884	
FY 2026	26,240,000	
FY 2027	7,250,000	
WTFAP Grant - Iowa Finance Authority	500,000	
Engineering		6,038,000
Construction		
Original Contract		53,370,000
Change Order #1		(231,878)
Change Order #2		(25,280)
Change Order #3		10,836
Change Order #4		13,459
Change Order #5		(40,743)
Change Order #6		71,845
Change Order #7		44,527
Change Order #8		3,844
Change Order #9		81,380
Change Order #10 - This Action		230,921
Owner Allowance (furnishings, etc.)		400,000
All Other Expenses		122,675
TOTAL	63,040,000	60,089,586
Available Contingency		2,950,414

The Clean Water State Revolving Fund (CWSRF) loan was approved in a not-to-exceed

amount of \$65,185,000 to provide a cushion for unanticipated project changes and prevent unnecessary issuance costs associated with increasing the not-to-exceed amount as a separate action, should it be necessary.

It should be noted that the SRF program is a reimbursement program, meaning that the City first spends the money, then the program reimburses for eligible expenses. This method ensures the City will only borrow for expenses the City Council has authorized and are necessary to complete the project, thus minimizing interest expense associated with the improvements.

ALTERNATIVES:

1. Approve Change Order #10 to the contract with Woodruff Construction for the Water Pollution Control Facility Nutrient Reduction Modifications Phase 1 Project in the amount of \$230,920.52.
2. Approve the change order minus the VFD replacements. It would leave one VFD in it's failed condition and leave others approaching failure. The VFD replacements could be scheduled in a future year CIP, but likely at a higher cost if done as a stand-alone project.
3. Do not approve the change order. This would reject the recommended changes to the contract documents.

CITY MANAGER'S RECOMMENDED ACTION:

The proposed changes are to maintain and improve the reliability and function of the Water Pollution Control Plant Modifications. The consultant, contractor, and City staff have worked closely together to come up with reasonable, cost-effective recommendations. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative 1 as described above.

Council should be aware that the VFD replacement would draw down the unencumbered contingency on the project. However, there would still be nearly \$3 million in available contingency funds for the balance of the contract.

ATTACHMENT(S):

[CO10&Encl. _to Owner.pdf](#)