
AGENDA ITEM SUMMARY

Subject: Resolution 26-21 to approve Change Order #4 with WRRF project.



Top Goals - 2019

Background Summary:

Resolution 26-21 approves Change order #4 associated with the Water Resource Recovery Facility Project (WRRF).

There are four items being addressed with this change order which would result in a project cost increase of: \$91,924.00 to the project. One is a reduction in cost and the remaining three are increases, the largest being the bringing in of a suitable clay material for the EQ basin, \$70,271.25. We've discussed these items on a staff level with Fox Engineering and Portzen construction and I am supportive of approving this Change Order.

Lance Aldrich, Fox Engineering, provided me with more detail for items #2 & #3 in the change order which I will list below. Lance will also be attending the meeting and can ask further questions.

Item 2: On this proposed change, the amount of available "space/memory" on the existing controllers is limited. With changes to the raw pump station over a few projects, the exact amount of space remaining is a little difficult to be certain of (as additions and deletions were made at different times and the historical documentation is not always precise). When the system integrators actually downloaded the existing programming early in the project construction, they realized that not enough space was available and the existing control system couldn't be expanded further. It's close, and some functionality could be removed to make the project work without this change order. Recommendation for the increase in cost is to maintain the originally intended functionality, will then provide room for any future control additions (instead of being at 100%), and provides increased redundancy to the operation of the pump station that, as designed, would not exist.

Item 3: This proposed change order does come down to some very specific details that weren't fully known/realized during design. The pump manufacturer significantly changed recently the protection devices for their larger submersible pumps (100 HP+). Historically, and still for smaller pumps, these protection devices (monitor moisture and temperature within the submersible pump motor) are relatively small and fit within existing control boxes or motor starters. What the pump manufacturer is requiring now to maintain pump warranty and proper pump protection for their 100 HP+ pumps is, effectively, its own pump controller which takes a fair amount of space. So the change order requires additional control boxes to house their pump controller. Since this no longer fits in the other control panels, requires a fair amount of field wiring and conduit runs.

RESOLUTION NO. 26-21

*RESOLUTION APPROVING CHANGE/EXTRA WORK ORDER #4 FOR WATER
RESOURCE AND RECOVERY FACILITY PROJECT, CHARLES CITY, IOWA*

WHEREAS, the City Council of the City of Charles City, Iowa has by prior resolution awarded a contract to Portzen Construction for the Water Resource and Recovery Facility Project as set forth in the preamble hereof, and

WHEREAS, this change order reflects the change in contract price of a net increase of \$91,924.00 for the following items: deduct \$3500 for restrained joints, add \$11,437.65 for raw pump PLC control, add \$13,715.10 for equalization pump control system and add \$70,271.25 for imported material for EQ clay liner, and

WHEREAS, the Project Engineer recommends the approval of the above change order as being in the best interest of the citizens of the City of Charles City, Iowa.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Charles City, Iowa, meeting in regular session on this 16th day of February, 2021, that a change order for a net increase of \$91,924.00 is hereby approved.

COUNCIL MEMBER moved the adoption of the foregoing Resolution;

COUNCIL MEMBER seconded the motion to adopt, and on roll call the voting was as follows:

AYES:

NAYS:

Passed and approved this 16th day of February, 2021.

Dean Andrews, Mayor

Attest:

Trudy O'Donnell, City Clerk

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| Date of Issuance: 1/26/2021 | Effective Date: 2/1/2021 |
| Owner: City of Charles City | Owner's Contract No.: |
| Contractor: Portzen Construction, Inc. | Contractor's Project No.: 19-18 |
| Engineer: FOX Engineering | Engineer's Project No.: 2389-15A |
| Project: 2019 Activated Sludge Plant, WRRF | Contract Name: |



The Contract is modified as follows upon execution of this Change Order:

Description:

- Item 1** Restrained Joints: Contractor requested to not install select piping systems fully restrained as required per project specifications. Change Proposal Request (CPR) 2. **Deduct \$3,500.00.**
- Item 2** Raw Pump PLC Control and Addition: Existing MicroLogix PLC does not have capacity to add all the proposed equipment at the raw pump station (SPCP-B). Add new AB MicroLogix 1400 PLC connected via Ethernet per Field Order 13. CPR 18R. **Add \$11,437.65.**
- Item 3** Equalization Pump Control System: Submersible equalization pumps, as originally supplied, have a more complex protection system and would not function independently thus having a single point of failure which could prevent the operator from running pumps in Hand per RFI 36. Systems integrator intends to design/build enclosure for pump manufacturer's protection devices. CPR 19R. **Add \$13,715.10.**
- Item 4** Imported Material for EQ Clay Liner: Suitable "clay" material to form a secondary seal for the flow equalization basin was not available onsite. Contractor hauled approximately 8,100 CY of clay material to the site. See attached FOX letter "2020 12 30 Change Proposal Requests No 2", CPR 21 and CPR 22. **Add \$70,271.25.**

Attachments: CPR 2, CPR 18R, CPR 19R, CPR 21, CPR 22
FOX Letter "2020 12 30 Change Proposal Requests No 2"

| CHANGE IN CONTRACT PRICE | CHANGE IN CONTRACT TIMES |
|---|---|
| Original Contract Price: \$ <u>16,948,000.00</u> | Original Contract Times: Milestone 1: <u>May 28, 2021</u> Substantial Completion: <u>December 1, 2021</u> Ready for Final Payment: <u>May 31, 2022</u> days or dates |
| Increase from previously approved Change Orders No. 1 to No. 3: \$ <u>306,867.96</u> | Increase from previously approved Change Orders No. 1 to No. 3: Milestone 1: <u>95 days</u> Substantial Completion: <u>176 days</u> Ready for Final Payment: <u>92 days</u> days or dates |
| Contract Price prior to this Change Order: \$ <u>17,254,867.96</u> | Contract Times prior to this Change Order: Milestone 1: <u>August 31, 2021</u> Substantial Completion: <u>May 26, 2022</u> Ready for Final Payment: <u>August 31, 2022</u> days or dates |
| Increase of this Change Order: \$ <u>91,924.00</u> | Increase of this Change Order: Milestone 1: <u>0 days</u> Substantial Completion: <u>0 days</u> Ready for Final Payment: <u>0 days</u> days or dates |
| Contract Price incorporating this Change Order: \$ <u>17,346,791.96</u> | Contract Times with all approved Change Orders: Milestone 1: <u>August 31, 2021</u> Substantial Completion: <u>May 26, 2022</u> Ready for Final Payment: <u>August 31, 2022</u> days or dates |

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| RECOMMENDED: | | ACCEPTED: | | ACCEPTED: | |
| By: <u></u> | By: _____ | By: <u></u> | | | |
| Engineer (if required) | Owner (Authorized Signature) | Contractor (Authorized Signature) | | | |
| Title: <u>Project Manager</u> | Title _____ | Title <u>Project Manager</u> | | | |
| Date: <u>Jan 26, 2021</u> | Date _____ | Date <u>01/26/2021</u> | | | |