



City of Flint

Department of Purchases & Supplies

Sheldon A. Neeley

TO: All Proposers
FROM: Jennifer Ryan
Deputy Finance Director
DATE: **May 14, 2021**
SUBJECT: **Addendum #02 – Bid# 22000030 – East Pumping Station Washer Compactor**

This addendum has been issued because of the following:

1. Attached are Revised Questions and Answers
2. Listed below is the Google Meet information for the bid opening date – Tuesday, May 18, 2021 at 11:00 a.m.

Join with Google Meet

meet.google.com/muv-koon-bnj

Meeting ID

meet.google.com/muv-koon-bnj

Phone Numbers

(US)+1 617-675-4444

PIN: 325 251 761 3705#

All other bidding terms, requirements, and conditions continue as indicated in the remaining original bid documents.

The Deputy Finance Director, Jennifer Ryan, is an officer for the City of Flint with respect to this RFP.

In the submission of their proposal, Proposer must acknowledge receipt of this addendum. Proposer shall acknowledge this addendum by signing and returning one copy of this notice with their submission.

Company Name: _____

Address: _____

City / State / Zip: _____

Telephone: _____ Fax: _____ Email: _____

Print Name: _____ Title: _____

Signature: _____ Date: _____

Thank you.


Jennifer Ryan
Deputy Finance Director



QUESTIONS RECEIVED IN THE DIVISION OF PURCHASES & SUPPLIES
For East Pumping Station Washer Compactor
BID# 22000030

1. During review of the bid documentation Duperon noted that it mentions performance and material payment bonds. These are often not required in an “equipment only” bid such as this one and I did not see a specific call out in the purchasing check list requiring a Bond and do not believe one is required for this project. Can you please confirm this?
A bond is not required.

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Section 2.4.B.1.f
 - Please advise if PLC and Ethernet functionality is required for the site.
 - Relay based and Hard Contacts to SCADA are satisfactory for the functionality of the Washer Compactor**Relay and hardwire to SCADA would be acceptable if they can give a detailed description of how that will work with the existing Bar screen. The current Duperon bar screens run all of the time due to their size and will increase or decrease based upon the upstream and downstream level sensors.**

3. Attached please find the details of the control interface between the existing Duperon Screens and proposed new Duperon Washer Compactor.
See Attachment.

Mechanical Screen/Washer Compactor Process Control Narrative for Flint P9450

Process Description

The existing facility houses two mechanical bar screening channels. All channels have manually operated slide gates at their inlet and outlet for channel isolation and/or hydraulic control. Two submersible level transducers are mounted in each channel upstream and downstream of the existing mechanical screen for screen control and alarming. Ideally, the screens will run continuously any time there is at least one foot of influent level in the channel and the screens will speed up based on a high influent level or high differential level signal.

A new washer-compactor will receive screenings from the existing Conveyor to the new washer compactor inlet hopper, and will wash, compact, and convey the screenings to a site provided disposal bin. Drainage / wash water will return to the screening channel by gravity and will be plumbed by others.

Operation

The mechanical screens are controlled by the Screening Main Control Panel with PLC logic and door-mounted operator interface located in the control room of the Headworks building. The Screening Main Control Panel has a Hand/Off/Auto selector, elapsed run-time meter, main disconnect and indication for 'Power On', 'Forward', 'VFD Fault', and 'Motor Overtemp'. It also contains a variable frequency drive to control the speed of the multi-rake, adjustable on/off cycle timers, and hard contacts/Ethernet communication for SCADA interlock. In Hand Mode, the screen utilizes input signals from the local pushbutton panel. A local control push-button station is located directly adjacent to the multi-rake bar screen, and includes 'Forward', 'Jog Reverse' and 'E-Stop' buttons. These buttons enable the operator to reverse the direction of the rake movement to address service issues, and allow for emergency shut-down. In Auto Mode, the mechanical screens are controlled by the Screening Main Control Panel. Under normal flow conditions, when the differential level, as measured by the two submersible level transducers, is between the low (level TBD) and high (level TBD, less than 12") set points, the screens operate continuously at a normal speed/speed proportional to the differential. If the differential level is below the low set point, the screens will operate intermittently, as controlled by a cycle timer in the Main Control Panel at an operator-adjustable interval. If the differential level exceeds the high set point, the screen will move to high speed operation in an attempt reduce blinding. When the upstream channel level exceeds the high channel level setpoint, the screen will start (if not already running based on differential level) and operate at high speed. An alarm is also sent to SCADA, as this could indicate a blockage in the mechanical screen or abnormal flow condition that requires operator attention. The motor thermostat will shut down the equipment if motor over-temperature condition occurs.

The existing Conveyor located behind the screens runs when either screen is running and has an off delay timer to continue running for a period of time once both screens have shut off. The conveyor will deposit the screenings into the new washer compactor inlet hopper. The washer-compactor will be controlled by it's own Washer Compactor Main Control Panel to be located in the control room of the building. The Washer Compactor Main Control Panel will be Relay Logic based and include a

Hand/Off/Auto selector, speed controller, elapsed run-time meter, push-to-test indicator lights for 'Power On', 'Forward', 'VFD Fault', and 'Motor Overtemp'. It will also contain a variable frequency drive to control the speed of the augers, and hard contacts for SCADA interlock. In Hand Mode, the washer-compactor will utilize input signals from the local pushbutton panel. A new local pushbutton panel for the washer-compactor will be located adjacent to the washer-compactor, and will include 'Forward', 'Jog Reverse' and 'E-Stop' buttons. In Auto Mode, the washer-compactor will be controlled by the Washer Compactor Main Control Panel, and will operate whenever the existing conveyor is operating. The speed of the compactor augers will be controlled by a user adjustable VFD and will be set to run from the factory at a normal speed of (30Hz). The wash water solenoid valve will be open whenever the washer compactor is running to wash and flush the washer compactor perforated plate strainer. In the absence of an input signal or upon receiving a stop signal in Auto mode, an off-delay timer allows debris to finish depositing, including upon cessation of mechanical screen operation. The motor thermostat will shut down the Washer Compactor if motor over-temperature condition ever occurs as well as send an alarm to SCADA.