



# Fremont Sanitation District

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**To:** All Potential Respondents  
**From:** John Papen  
**Date:** April 12, 2023  
**Re:** Addendum No. 1, RFP 2023-02, SCADA System Replacement

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## **Addendum No. 1 to Request for Proposal 2023-02 “SCADA System Replacement” Fremont Sanitation District**

**Statements and Questions from the Mandatory Pre-Proposal Site Visit, 3/22/2023  
and the follow up visit on 3/29/2023.**

**1. Reference: Exhibit B, drawing E6**

**Q:** Please clarify the Air Conditioning System for the MCC Room. Please clarify if a Roof Top AC unit is desired, or a Ductless Split type AC Unit.

**A:** Exhibit B, drawing E6, Notes 1, amended as follows: Roof Top installation of AC unit is not mandatory. A Ductless Split type AC Unit will be allowed as an alternative to a Roof Top AC unit. In either scenario, mounting location of AC unit and air discharge location shall be Plant Staff approved. There will no condensation allowed in the MCC Room.

**Q:** Also, If we place the Condensing Unit on the roof, it’s going to require a large crane (Which would exceed the price of the AC Equipment) to reach that roof, along with a Roofer to cut the roof and place a curb. If we could wall mount the unit (if they go a ductless Split type unit), it would drastically cut the price.

**A:** Vendor’s Response shall propose the most cost-effective AC solution. Given the size and weight of a typical 1.5 Ton AC unit, it is not anticipated that a large crane would be necessary.

**Q:** Also, please clarify if that area has H2S Gas concentrations, if so – we would propose to have the unit coated in Blygold PoluAl treatment that prevents future leaks from the H2S Gasses that eat the copper away.

**A:** H2S Gasses at the location are minimal. Additional treatment of devices is not required.

2. Reference: Exhibit B, specification 16950, section 3.3

Q: Please clarify if Fremont Sanitation is planning on providing IO location by building/room. This was discussed at the conclusion of the 03/29/2023 site walk. This would be helpful to establish IO locations and estimate conduit and wiring requirements.

A: A document labeled SECTION 16950 PLC Tags Location.xlsx is included with this Addendum and available for download on the fsd.co\planroom webpage.

3. Reference: Exhibit B, specification 16900, section 3.3

Q: Please clarify if Fremont Sanitation desires any instruments to be procured as part of this RFP. The RFP provides instrument specifications but does not indicate if any instruments should be procured.

A: One instrument is to be added, procured by Owner and installed by Vendor:

Tag#	Description	Service	Scale	Provided Under Specification
DiG 1A & 1B	Radar Level Sensor	Level	0-18'	Equipment provided by Owner for Attachment to PLC

4. Reference: Exhibit B, specification 16950, section 3.3

Q: Please clarify if Fremont Sanitation desires to have any selector switches, push buttons, indicators lights and associated operator stations or the Main Instrument Panel to be replaced as part of this project. If not, please clarify if it is Fremont Sanitation's intention for all existing selector switches and indicator lights to be wired to new PLCs but left in their existing locations.

A: Owner desires to have the existing Computer Control room, Main Instrument Panel be removed, and a vendor supplied minimum 42U, 19" width, 4-post floor mounted rack installed in the Computer Control room to place RAS control meters, WAS control meters, along with Centrifuge Panel control and Security Camera system into the new rack.

5. General RFP Question

Q: Please clarify if the Main Instrument Panel will remain in place and be used as is with the new MCC-PLC or if will be removed or modified. If removed or modified, please indicate the nature of these changes and the impact to the existing wiring and conduit.

A: Owner desires to have the existing Computer Control room, Main Instrument Panel removed from its location. Some instruments are to be transferred to a new rack along with their wiring. All other wiring is expected to be removed along with the Computer Control room, Main Instrument Panel. (See Question 4 above.)

6. Reference: Exhibit B, specification 16950, section 2.2

Q: Please clarify the quantity and type of monitors that are desired to be provided as part of the HMI computer referred to in specification 16950, section 2, Part C.

A: No new computer monitors are necessary. There are currently two 43" LCD monitors with HDMI video connectors that can be reused for display with the HMI computer. Additionally, there is a 48" Dell enclosed rack that can house rackmount servers or computers with cabling that can also be reused with the new HMI computer.

7. Reference: Exhibit B, specification 16950, section 2.2

Q: Please clarify if Fremont Sanitation desires to have PLC - MCC and associated I/O cards as indicated in RFP specification 16950, section 2.2.A.2. a, purchased and enclosed in a new control panel. Please clarify if it is intended that this new control panel be a NEMA 12 floor mount panel. Additionally, please clarify if the I/O indicated for this panel shall be wired with new conduit and wire or if existing wire and conduit shall be reused to the extent possible.

A: The design specifications leave it up to the vendor to install new conduit and wire as needed. If the vendor doesn't want to investigate where existing conduits are that can be reused, then they are allowed to run new conduit. If they wish to take the time to see if there are existing conduits that could be reused, they are allowed to do that. The specification is to provide guidelines on what the wire installation requirements are regardless of which way the vendor decides to do it. If there are existing conduit where it is needed, it may be used. We realize, sometimes it may take more time to figure out if there is an existing conduit or not, so new conduit may be installed, if the vendor believes that is the more cost-effective way to do it. Furthermore, Maintaining existing SCADA functionality during implementation and minimizing SCADA downtime may also factor into Vendor's decision in this regard.

8. Reference: Exhibit B, specification 16950, section 2.2

Q: Please clarify if Fremont Sanitation desires to have PLC - UV and associated I/O cards as indicated in RFP specification 16950, section 2.2.A.2. b, purchased and enclosed in a new control panel. Please clarify the environment for this enclosure and if the panel should be a wall mount or floor mount and the desired NEMA rating for this enclosure. Additionally, please clarify if the I/O indicated for this panel shall be wired with new conduit and wire or if existing wire and conduit shall be reused to the extent possible.

A: Owner does not desire a new UV cabinet or new PLC equipment at that location. Owner does desire to incorporate the existing UV PLC equipment to be included in presentation on the new SCADA HMI software programming via existing Ethernet IP.

9. Reference: Exhibit B, specification 16950, section 2.2

Q: Please clarify if Fremont Sanitation desires to have the Federal Flow PLC and associated I/O cards as indicated in RFP specification 16950, section 2.2.A.2. c, purchased and enclosed in a new control panel. Please clarify the environment for this enclosure and if the panel should be a wall mount or floor mount and the desired NEMA rating for this enclosure. Additionally, please clarify if the I/O indicated for this panel shall be wired with new conduit and wire or if existing wire and conduit shall be reused to the extent possible.

A: Owner desires to have the Federal Flow PLC and associated I/O cards included in the new MCC PLC enclosure. Existing wiring and conduit may be used where available and new conduit may be installed at the vendor's discretion. The existing radio will be replaced as a part of this RFP.

**10. Reference: Exhibit B, specification 16951, section 2.2**

Q: Please clarify if any sequence of operations to instruct the programming of the PLC will be provided by Fremont Sanitation beyond what is described in specification 16951, Part 2, section 2.2.B

A: The vendor shall, using Schneider Electric CITECT SCADA v2018 existing Owner programming, along with FSD Staff input, program the new SCADA HMI program with no added control. Plant Operators will have the final input for new program operation.

**11. Reference: Exhibit B, specification 16951, section 2.2**

Q: Please clarify if the existing HMI application can be provided to the bidders to help determine the quantity of screens and programming methods desired by Fremont Sanitation. If not, please clarify if Fremont Sanitation can provide screen shots for all the existing screens in the current HMI application to help the bidders determine the level of effort needed to make the new SCADA/HMI application.

A: Screen shots from Schneider Electric CITECT SCADA v2018 existing implementation will be provided through email to the successful bidder for programming the new SCADA HMI interface.

**12. Reference: Exhibit B, Drawing E1**

Q: Please clarify what the requirements/specifications are for the Freewave radio that is desired to be replaced as indicated on drawing E1 for the Federal Flow Monitoring System.

A: The current transmitting radio in place is a Freewave Model # FGRO9SE 6-30V FCCID: KNY-6231812519. The receiving radio is a Freewave Long Range Ethernet Bridge. Model # FGR-115RE. The monitoring station flow meter produces a 4-20 mV signal to a Sixnet Ethertrak module and then through the radio's 900Mhz spectrum to transmit data directly to the Schneider Electric CITECT SCADA v2018 project at the Plant (approx. less that 2 miles direct line of site). The Vendor shall provide a replacement radio with the capability of these models or better.

**13. Reference: Exhibit B, Drawing E1**

Q: Please clarify if the existing power monitoring system equipment, currently installed in the existing PLC panel, shall be re-used and re-installed in the new PLC - MCC in the as is condition. Additionally, please clarify if a new Data Highway cable will be installed by the bidder to reconnect the power monitoring equipment or if any changes to this power monitoring system are desired to be made.

A: Owner desires the vendor to reuse the original existing Plant Main Power Current Transformer (CT) coils and wiring to provide connectivity and reporting to the new SCADA HMI interface. Owner also desires the vendor to "troubleshoot" the existing additional CT coils, that were installed at a later date, located on equipment in the MCC, to possibly include these into the new SCADA HMI interface.

**14. Reference: Exhibit B, Drawing E1**

Q: Please quantify the amount and type of data from each of the 8 remote flow monitoring sites that is desired to be represented on the new SCADA HMI application.

A: The 8 monitoring stations with remote flow data produce about 1 gigabyte of data combined. The monitoring station flow meters produces a 4-20 mV signal to a Sixnet Ethertrak module and then through a cellular modem provide a signal that is pulled into the Schneider Electric CITECT SCADA v2018 as an Internet Protocol signal and displayed on the appropriate screen. Owner desires to include this programming in the new SCADA HMI application.

**15. Reference: Exhibit B, Drawing E1**

Q: Please clarify if it is desired by Fremont Sanitation for any data from the State Prisons (Adams, Territorial, Brewster) to be programmed into the new SCADA HMI application.

A: Yes. Owner desires to include programming for all existing inputs and pages in the new SCADA HMI application, including State Prisons.

**16. Reference: RFP page 8, Exhibit B, Drawing E3, note 1**

Q: Please clarify if Fremont Sanitation desires the bidder to provide a Add Alternate for provide a new MCC bucket with 3P-90 A breaker and VFD to power pump AP-3 and move controls to AP-5

A: Owner has eliminated this request from the RFP, per Section 3, page 7 and Table, page 8.

**17. Reference: Exhibit B, Drawing E4**

Q: Please clarify the number of Mechanical Aerator Starters that shall be rewired according to the notes on drawing E4 and clarify that notes 1-4 are accurate for the scope of this project.

A: The notes are accurate for the scope of this project. There are eight Mechanical Aerator Starters that need to be rewired with new Hand/Off/Auto switches.

**18. Reference: Exhibit B, Drawing E4**

Q: Please clarify if the Notes 1-4 for rewiring controls for motor starters for Aerator pumps, air blowers, scum pumps, non-potable water pumps, sample pumps, circulating pumps, and air compressors are accurate and that these items are in the scope of this Project as indicated.

A: Yes, these items are in the scope of this Project. Wiring shall be modified or replaced in order to conform to the diagram and its corresponding Notes 1-4. The design specifications leaves it up to the vendor to install new conduit and wire as needed. If the vendor doesn't want to investigate where existing conduits are that can be reused, then they are allowed to run new conduit. If they wish to take the time to see if there are existing conduits that could be reused, they are allowed to do that. The specification is to provide guidelines on what the wire installation requirements are regardless of which way the vendor decides to do it. If there are existing conduit where it is needed, it may be used. We realize, sometimes it may take more time to figure out if there is an existing conduit or not, so new conduit may be installed, if the vendor believes that is the more cost-effective way to do it.

**19. Reference: Exhibit B, Drawing E4, Note 1**

Q: Please clarify if it is desired that wires shown in the UV Area PLC One Line Diagram are desired to be replaced or re-used and extended to the new PLC.

A: Owner desires to have new conduit and wiring for connecting the UV Area PLC.

**20. Reference: Exhibit B, Drawing E4, Note 2**

Q: Please clarify if it is desired that wires shown in the MCC PLC One Line Diagram are desired to be replaced or re-used and extended to the new PLC.

A: Owner requires new Ethernet wire to be used to connect the MCC PLC installation.

**21. Reference: Exhibit B, Drawing E7**

Q: Please clarify the details of the control console that is to be removed. Will the functions for this console be replaced? What is the intention for the wiring and conduit running into and out of this control console? Shall it be removed or re-used? If wiring and conduits are to be removed, please clarify what should be removed.

A: Owner desires to have the existing control cabinet removed and a 4-post floor mounted rack installed in the control room to place RAS and WAS control meters, along with Centrifuge Panel controls and Security Camera system into the new rack.

**22. Reference: Exhibit B, Drawing E2, E3**

Q: Please clarify what the intended scope is for the power feed to PLC-MCC indicated on drawing E2 as there is a separate power feed called for on drawing E3 to PLC-MCC.

A: The new Plant Generator powers the entire Plant in the event of Power Loss. Power for the MCC PLC cabinet can be drawn from the Main 1B breaker side.

**23. General RFP Question**

Q: Will new conduits, raceways and/or wiring be required?

A: The design leaves it up to the vendor to install new conduit and wire as needed. If the vendor doesn't want to investigate where existing conduits are that can be reused, then they are allowed to run new conduit. If they wish to take the time to see if there are existing conduits that could be reused, they are allowed to do that. The specification is to provide guidelines on what the wire installation requirements are regardless of which way the vendor decides to do it. If there is existing conduit where it is needed, it may be used. We realize, sometimes it may take more time to figure out if there is an existing conduit or not, so new conduit may be installed, if the vendor believes that is the more cost-effective way to do it.

**24. General RFP Question**

Q: Will electrical permits and inspections be required?

A: No electrical permits are anticipated to be required for work under this RFP. However, please not in the RFP under both Exhibit B, Section 16050, Part 1.5, Subsection C, and in Exhibit B, Section 16900, Part 1.2, Subsection A, it specifically is stated that the vendor is responsible to “Coordinate, obtain and pay for all permits, inspections and approvals of authority having jurisdiction.”

**25. General RFP Question**

Q: Please clarify available work hours during a normal work week.

A: The plant is manned 7 days a week between the hours of 6:30 a.m. and 5:00 p.m.

**26. General RFP Question**

Q: Is the State DOC radio to be replaced?

A: No

**27. General RFP Question**

Q: What level of submittals is required for Vendor’s Response to be considered complete?

A: Please reference RFP 2023-02 Section 4 Subsections 1-12 for additional clarifications.

**28. General RFP Question**

Q: What is the age of the existing wiring?

A: The Plant was built and wired in 1983 (up to the cabinet console). The Dewatering building was added in 2000 and additional wiring was added (inside the SCADA blue cabinet).

**29. General RFP Question**

Q: What is the maximum allowable SCADA down time during integration and system crossover?

A: Owner can operate the Plant without SCADA operation for two to four hours depending on daily influent flow. Exercising reasonable prior notification, Vendor must coordinate all SCADA shutdowns with Plant Staff.

**30. General RFP Question**

Q: What is the availability of “Ladder Logic” and “I-O” cards?

A: Owner's Plant operates using Schneider Electric CITECT SCADA v2018 program. The best way to describe its programming is with Visual Basic. Objects are created and controlled through the CITECT programming interface. A copy of the FSD Plant's "Project" will be provided to the vendor upon request.

**31. General RFP Question**

Q: Please give a count of the number of wires to be cleaned and tightened in the MCC.

A: There are 58 Breaker Buckets with three lugs each to be cleaned and tightened. A minimum of 174 wires in total.

**32. General RFP Question**

Q: Will the Vendor be responsible for the demolition/removal/disposal of existing wiring?

A: After the PLC panel and Control Console have been removed the wire between them shall be removed. Conduits shall be removed to a level flush with the floor.

**33. General RFP Question**

Q: Does all control wiring terminate in the blue Sixnet cabinet located in the lab?

A: Owner's understanding is that not all control wiring terminates in the SCADA blue cabinet.

**34. General RFP Question**

Q: Is there conduit access from the Sixnet cabinet to the MCC and can wiring in the Sixnet cabinet be rerouted back to the MCC?

A: There are at least two possible ways to route a conduit between the MCC and the cabinet. Two of the three existing conduits in the SCADA blue cabinet are nearly full of existing control wires. There is a third conduit in the SCADA blue cabinet that is not full and could be used for routing wire. The end point of the third conduit is undetermined. Additionally, there are routes overhead to install new conduit.

**35. General RFP Question**

Q: Where can power be drawn from for the new MCC PLC rack?

A: Panel P in the MCC contains adequate new breaker space, as shown in Plant Plans Full, Drawing E12 posted on fsd.co\planroom webpage.