

Valley Water District

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REQUEST FOR PROPOSALS

Alderwood Water System – Telemetry and SCADA

Closing Date & Time:

Proposals due by June 9, 2023 at 1:00 PM

NOTICE is hereby given that Valley Water District will receive sealed Proposals at the District's Offices, 14515 Pioneer Way E., Puyallup WA 98372 ("District Office"), for the project described below pursuant to RCW 39.04.270 Competitive Negotiation.

The District desires a new Pump Control Panel and Telemetry System at our Alderwood location. The District is requesting Proposals for design, build and installation for scope of work as described below:

General Scope:

- The Alderwood system has an existing pump control panel and telemetry panel, both with individual PLC systems that will be replaced. The new pump control panel will combine the features of both PLC systems within one panel and the telemetry panel will be revised to become a junction box only.
- The existing pump control panel will be modified to remove and replace the existing backpanel assembly and door operators with all new equipment as described in this RFP.
 - The existing control power transformer is mounted externally below the control panel. Abandon the external transformer in place and provide an internal control power transformer. Remove existing conduit and wire and plug the conduit knockout in the bottom of the enclosure.
 - The existing control panel utilizes current transducers to monitor motor current. Motor current monitoring is not required with the new control panel. Remove all current transducers and associated wiring from the existing control panel. Plug any holes remaining in the bottom of the enclosure.
 - The existing Flowtronex PSI pump control panel drawings are included for reference.
- Booster pump #2 will be changed from a motor starter to VFD control.
- The existing telemetry panel enclosure will remain in place and used as a terminal junction box for existing signals that will be re-routed to the new control panel. The existing internal backpanel with all components will be removed and turned over to the Owner. A new backpanel with terminal blocks will be installed to re-terminate the existing control signals and route to the new control panel. The existing TSI telemetry panel drawings are included for reference.

- The existing District SCADA system will communicate with the Alderwood system via a cellular modem connection. SCADA system programming will be provided by the District's programmer. All programming for the Alderwood system PLC and operator interface terminal will be provided by the District's programmer.
- All electrical installation and wiring is to be provided by the Proposer.

Pump Control Panel

- The control panel backpanel assembly will be UL-508A listed.
- Provide control panel parts as shown in attached control panel Bill-of Materials for required model numbers and quantities.
 - Model numbers specified as "No Equal" are to be supplied to match District standards. No products other than the exact model numbers specified for "No Equal" products will be acceptable.
- Wire all spare PLC I-O to terminal blocks for future field wiring connections.
- Submit design drawings, Bill-of-Materials, and equipment datasheets for review and approval. Submit equipment with long lead times for approval to release within 5 days of project NTP.
- Provide the following items installed on the new control panel door skin for operator controls and indicators:
 - PanelView OIT
 - HOA switch, running indicator (Green pilot light), and ETM for three (3) pumps
 - VFD HIM module, HOA switch, running indicator (Green pilot light), ETM, and manual speed potentiometer for one (1) pump
 - General alarm indicator (Red pilot light)
- Provide the following items installed within the control panel:
 - Main breaker with lockable rotary thru-door operator
 - 230VAC 3-phase surge protective device
 - 230VAC phase fail relay
 - MCP, contactor, and overload for two (2) 230VAC/30HP/80A pumps
 - MCP, contactor, and overload for one (1) 230VAC/5HP/15.2A pump. Note allow space for future implementation of a 5HP VFD for this pump, including line reactor.
 - MPCB, VFD, and line reactor for one (1) 230VAC/15HP/42A pump
 - 1kVA 230V/120V control power transformer
 - PLC
 - Ethernet switch
 - 24VDC power supply and DC-UPS
 - 15A GFCI utility receptacle
 - Cellular modem and coax surge arrestors.
 - Cooling fan and thermostat sized to maintain enclosure temperature below 100-degF with equipment listed above and on Bill-of Materials. Include future upgrade of the 5HP pump motor starter to a VFD. Provide panel cooling calculations with design submittal.
 - Relays, breakers, fuses, terminals, etc. as required for a complete functional control panel to match the function of the existing pump control panel.

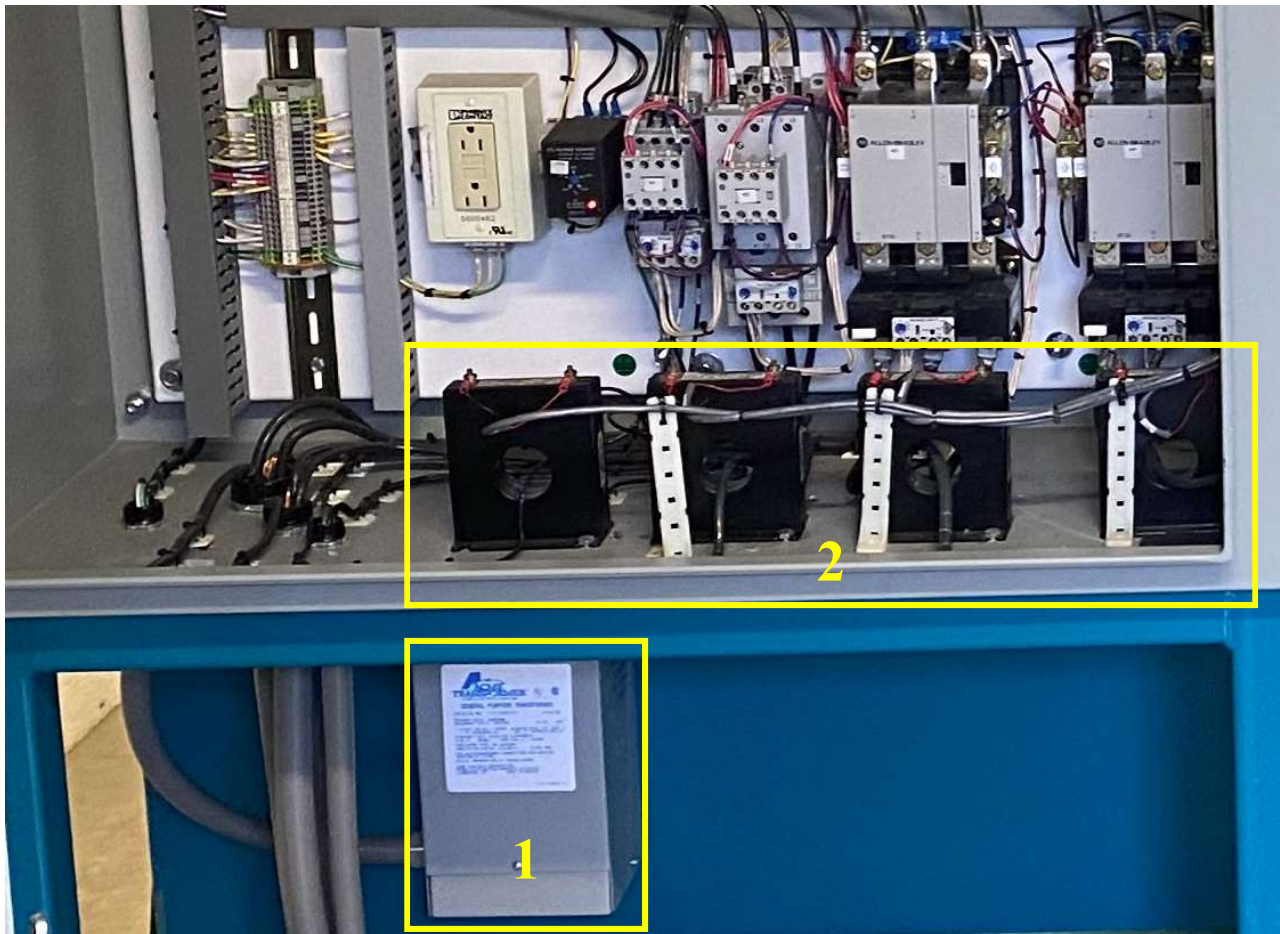
Cellular Communication

- Provide and install cellular antennas and coax cable. Mount antennas on existing radio mast and route coax cable to pump control panel. Cellular router configuration by District Programmer.

Installation and Testing Requirements

- Provide for up to 2 days of witnessed factory testing with the District's programmer to load and test program functionality and demonstrate all hardware functions.
- Provide all installation work required for removal of the existing control panel backpanel assembly, door modifications, new backpanel assembly.
 - All existing field wiring will be re-terminated to the new control panel.
 - The control panel layout shall be designed to allow all existing field wiring to be terminated to the new terminal locations without adding splices.
- The pump station shutdown must be coordinated with the District at least **2 weeks prior to the installation date**. The Alderwood system can be temporarily fed from the intertie to allow a complete shutdown of electrical service to the pump control panel and pump skid.
 - The shutdown duration cannot exceed 3 days.
 - Allow 4-hours for IO testing with District's programmer.

Installation Notes & Details



Existing Pump Control Panel:

1. Abandon existing control power transformer. Remove associated wiring.
2. Remove existing motor current transducers and associated wiring.



Existing Pump Control Panel: Replace internal backpanel assembly complete. Remove existing door devices and replace with new door skin and devices.



Existing Telemetry Panel: Remove complete internal backpanel assembly. Install new backpanel with terminal blocks for I-O signals that will be extended to the new pump control panel. Use existing conduit to route IO signals to new pump control panel PLC. Existing CAT-5e cable in conduit between telemetry panel and pump control panel to be removed.

Technical questions will only be accepted via email at brian@valleywaterdistrict.com and must be submitted no later than May 26, 2023 (8 days prior to the deadline for RFP responses). Changes and updates to the RFP with all questions and answers will be replied to by June 2, 2023 at 3:00 p.m.

Proposal Must Include:

- Describe how the project will be approached. Key components.
- Demonstrate clear understanding of the project elements to include special ideas, technologies, or suggestions to the planning process
- Submit estimated work schedule and anticipated completion date (given anticipated contract award date of June 19, 2023.)
- Provide list of qualifications of project lead and list of anticipated sub-contractors.
- Demonstrate company's qualifications and ability to successfully complete this project.
- Provide at minimum 3 references from similar projects
- Submit Lump Sum project cost
- The project cost shall include everything necessary for the completion of the contract including, but not limited to furnishing all materials, equipment, tools, freight charges, management, and labor
- The project cost shall include Washington state sales tax and Performance/Payment bond in the amount of one hundred percent of the contract price.

Selection Criteria:

This is a competitive negotiation process in accordance with RCW 39.04.270. The District will consider all the evaluation information obtained during the competitive negotiation process, and the District will consider the following significant evaluation factors (Each evaluation criteria will be rated on a scale of 1-10):

- The Proposer's ability to comply with the project specifications and scope of work.
- Familiarity with the Districts existing telemetry systems and software.
- Demonstrated proof that the Proposer, using its own employees or qualified subcontractors, is registered and certified in the design and installation of the product with sufficient training to adequately complete the project to the District's specifications.
- The Proposer's time frame and schedule for completing the project.
- The Proposer's Qualification Statement, specifically including, without limitation, prior experience on the same or similar projects, and references obtained from other project owners.
- Total proposal cost.

Although these are significant evaluation factors, the District reserves its unqualified right, without limitation, to consider any and all other factors that may significantly impact the project.

The District's technical evaluation team will review all submitted proposals based on the above criteria. The District's technical evaluation team will evaluate the proposals, and in the event of no clear selection, may elect to hold interviews of the two or three leading candidates regarding the candidates' ability to successfully complete the project. After receiving and reviewing the information provided during the evaluation process, the District will select the proposal that is most advantageous to the District with price and other pertinent factors considered.

The District reserves the right to reject any proposal that does not, in the District's opinion, meet the District's project requirements. Further, the District reserves the right to reject all proposals.

No proposer may withdraw its proposal for a period of ninety (90) days after the date of the proposal submittal.