



Rocha Controls - Municipal and Industrial Control Systems
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January 15, 2021

Glenn Whitcomb
Deltona Water Department
City of Deltona
255 Enterprise Road
Deltona, FL 32725

Re: Lift Station 21 Energy Savings Project

Glenn:

Rocha Controls (RC) is pleased to submit this proposal for providing design and construction services of energy savings project to install new variable-frequency drives (VFDs). The following services will be provided as part of this proposal:

1. **Project Management:** This work provides the development of the scope of work and design coordination with Deltona Water (DW). This work also includes project management for coordination of system installation, training, testing, billing and meetings.
2. **Preliminary Site Visit:** RC will conduct one site visit for the purpose of documenting existing conditions and determining scope requirement. We'll meet with City Staff to review the proposed work and discuss their project needs. We will submit a field report of our findings and document existing conditions that might impact the proposed design.
3. **Panel Design:** RC will provide a design for new VFD control panel for the existing pump control panel. Included with this design will be installing new a level transducer for monitoring station levels and using the existing floats for back-up control.

RC will submit draft shop drawings including bill of materials, mechanical and electrical drawings (wiring diagram, back panel details, and network architecture) for review and approval. We will address all written review comments and re-submit for the final plans. A final operation and maintenance (O&M) manual will be provided following panel fabrication.

NOTE: Our estimate includes a budget for the proposed work. The final panel material costs may change once the final design is complete. Rocha reserves the right to request additional funds should any changes requested increase the final design costs.

4. Programming: RC will provide programming services for the new SCADA, PLC and VFDs. We are planning to monitor VFD normal outputs, via SCADA, the pump speed, pump start/stops and voltage use.
5. VFD Panel Fabrication: Once the panel design and material release is approved then RC will order materials and begin shop fabrication of the panel.
6. Site Construction: RC will provide (1) 2-day trip for our electricians and programmer to install the VFD control panel, wire up panel and provide control wiring to level transducer and floats as needed.
7. Start-up, Training and O&Ms: RC will provide start-up and testing of the system with the Project Programmer and City Staff. We will provide operator training during the site construction.

The system is recommended to run for one week for operational check-out. Rocha will address any punch lists following the operation testing.

Additionally, during this period, RC will provide updated record drawings, hardware O&M manuals, and one year warranty documentation.

Limitations

- a. Installation of conduit and junction boxes external to the VFD panels is not included. All concrete cutting necessary for conduit installation is not included.
- b. RC is not providing any equipment or any labor or materials for the installation or removal of any equipment external to equipment supplied by us.
- c. RC is not providing any equipment terminal junction boxes or main power disconnect switches.
- d. RC is not providing any grounding systems external to equipment supplied by us.
- e. If needed, wastewater diversion and/or pump trucks will be the responsibility of the Owner.

Costs:

Materials:

New VFD Cabinet: \$12,590

Field Mounting/Wiring: \$2,470

Labor:

Design: \$8,620

Field Installation \$6,410

Sub-total \$30,090

Contingency: \$3,000

Total Cost \$33,090

Terms

1. This quotation is valid for ninety (90) days from date listed.
2. Terms are Net 30 for regular payment requests. The payment requests will be based upon an approved schedule of values.

If you have any questions on the details of this quotation, please email
mtyl@rochacontrols.com or call me on my cell phone at 813-924-3169

Sincerely,



Mark B. Tyl, P.E.
Director of Operations