

## 1804 E. LINCOLN HWY. DEKALB, IL 60115 PHONE (815) 787-0830 FAX (815) 787-0930

January 21, 2016

City of Aurora 1111 Aurora Ave. Aurora, IL 60506

## Filters 1-8

The original filter system which was installed in 1992 consists of an Allen Bradley PLC5 L5/25 processor and (1) single line LED data display screen located in filter console No. 1. The PLC5 L5/25 processor uses DH+ communications between remote I/O in filter consoles No. 2, 3, & 4. The PLC5 series has been a legacy product for a number of years. Parts for this series are no longer being manufactured. The water treatment plants filtration system is a vital part of this the overall plant operations. Staging of the replacement of the PLC will be done by installing (4) separate processors each controlling two filters. They will all communicate to each other for backwash control permissions. Filter console No.4 (filters 7 & 8) will be done first followed by filter consoles No. 3, 2 and then 1. All other filters will be on line while the each console is being upgraded. The backwash pumps are controlled by Filter console No. 1 that will remain since the wiring from the pumps goes to this console.

## Scope

- Furnish and install (4) Allen Bradley Compactlogix processors with I/O.
- Furnish and install (4) ethernet switches.
- Furnish and install (4) power supplies.
- Furnish and install (4) color touchscreens.
- Provide PLC programming in each new processor for the filter controls.
- Provide iFIX programming for this upgrade to existing SCADA screens.
- Remove existing DH+ communication link from filter consoles No. 1, 2, 3 & 4 and replace with Ethernet link to SCADA system.
- Assist Corey with routing of new Ethernet communication cabling between consoles and back to SCADA system server rack.
- Provide startup and training for new PLC equipment and control screens.

## **Material**

Price: Forty Five Thousand Eight Hundred (\$45,800.00) Dollars

Labor

Price: Thirty Three Thousand (\$33,000.00) Dollars

Total

Price: Seventy Eight Thousand Eight Hundred (\$78,800.00) Dollars

TRI-R Systems offers a 1 year warranty for all parts and labor under this proposal. Work to be completed by June 1, 2016

If you have any questions, please call.

Sincerely,

TRI-R Systems Incorporated