



1202 Musser Street
Muscatine, IA 52761-1645
(563) 263-2752
Fax (563) 263-3720

WATER POLLUTION CONTROL

MEMORANDUM

To: Gregg Mandsager, City Administrator

CC: Nancy Lueck, Finance Director
Fran Donelson, Secretary

From: Jon Koch, WPCP Director

Date: January 8, 2014

Re: Bond & Schley Control Upgrade

INTRODUCTION: The WPCP has received two bids for the budgeted Bond & Schley Control Upgrade Project: ICS Healy-Ruff for \$32,260 and Automatic Systems for \$29,546. \$30,000 was budgeted for this project. This project should commence now during low flow season to avoid any complications during installation.

BACKGROUND: The 21 lift stations throughout the city operate by computer control to regulate flow, wet-well level and emergency notification (i.e. pump failure, control failure). The control of these stations is vital to ensuring there are no sewer overflows or basement back-ups. The current control system for 98% percent of the lift stations in town will no longer have service and parts from the manufacturer, Siemens, Inc. The WPCP started a six year program to replace all the old programmable logic control (PLC) systems with upgraded and easily replaceable controls. These PLC's have multiple vendors and are consistent with controls used at the plant.

RECOMMENDATION/RATIONALE: Staff recommends awarding the Bond & Schley Control Upgrade Project to ICS Healy-Ruff for \$32,260.00. ICS Healy-Ruff is more familiar with our system and performed the previous five station installations. Automatic Systems' bid was contingent on a visit from a programmer to verify whether they were able to complete the project. Programmer consistency reduces the risk of control failures and gives continuity to service when needed. The budget for this project will be revised to \$33,000.00 by pulling \$3,000.00 from a current approved line item.

BACKUP INFORMATION:

1. Staff memo
2. Vendor bill of materials and quote

**"I remember Muscatine for its sunsets. I have never seen any
on either side of the ocean that equaled them" — Mark Twain**

MEMORANDUM

DATE: December 19, 2013

FROM: Mike Beckman, Lift Station/Maintenance Supervisor

TO: Jon Koch, Director WPCP

SUBJECT: Bond & Schley Control Upgrade

In the current budget 2013-2014 we budgeted \$30,000 for this project. ICS Healy-Ruff price \$32,260.00 and Automatic Systems price \$29,546. After reviewing the quotes and discussing the quotes with each vendor I request we award the project to ICS Healy-Ruff even though there are \$2714.00 higher. My reasoning is ICS Healy-Ruff did the last 5 stations and knows our system, where Automatic Systems wants to make an appointment to have their programmer look at our system to get familiar with it. We do not want two different companies in our SCADA system. We have a very good 15 year working relationship with the techs at ICS Healy-Ruff. Staying with ICS Healy-Ruff will continue to give us the ability to contact them and guide us through problems that have occurred in the past, saving the expense of having a tech come here to fix the problem. We still have 11 stations to upgrade after these two are done.

ICS Proposal # 20130505

BILL OF MATERIALS

1. Control Panels Modifications A. Bond1. Removal of LC3000, Radio, Misc. Components (turned over to owner for disposal)
2. Allen-Bradley MicroLogix 1400 PLC with I/O and Memory Module
3. Data Radio Viper Ethernet Radio
4. Ethernet Switch
5. 24 VDC Power Supply
6. Battery Backup
7. Relays, Misc.
8. Antenna for New Frequency

- B. Schley 1. Removal of PLTU, Radio, Misc. Components (turned over to owner for disposal)
2. Allen-Bradley MicroLogix 1400 PLC with I/O and Memory Module
3. Data Radio Viper Ethernet Radio
4. Ethernet Switch
5. 24 VDC Power Supply
6. Battery Backup
7. Relays, Misc.
8. Antenna for New Frequency

2. SCADA A. Programming to Tie Existing Control Screens/Alarms to New Station Controllers listed above

B. (2) Kepware I/O Drivers for SCADA Computers – Better Polling Functionality

3. Services A. FCC Coordination

B. Engineering

C. Drafting

D. Documentation

E. PLC Programming

F. Installation

G. Testing

H. Startup

I. Warranty 1 Year

J. Freight, FOB Shipping Point

Total Price for the above materials, excluding sales tax is \$32,260.00 USD