



## **AGENDA MEMORANDUM**

**CONTACT:** CLIF CUSTER

**SUBJECT:** NORTH WATER PLANT BOOSTER STATION (CHANGE ORDER)

### **SUMMARY:**

WW Payton's SCADA subcontractor, Mercer Controls included a product submission to Strand Associates for a magnetic flow meter that would serve best for the tracking of water pumped from the storage tank at the North Water Plant. In the interim between the product submission to Strand for review and the purchasing of the meter, the price of the meter increased dramatically.

In addition to the increased cost of the magnetic flow meter, an upgrade to Richwood's current PLCs at other SCADA sites in town are required to ensure serviceability and communication between water plant sites for years to come.

### **BACKGROUND INFORMATION:**

Cherrell Mercer of Mercer Controls brought to my attention the increased cost of the magnetic flow meter being a situation of Force Majeure because the specific increase of the flow meter cost could not be foreseen, nor the cost increase from the manufacturer be controlled.

Additional increases included in the Change Order fund upgrades of programmable logic controllers (PLCs) at Richwood's SCADA sites for future communication integrity and serviceability.

A **programmable logic controller (PLC)** is an industrial computer that has been ruggedized and adapted for the control of manufacturing processes, such as assembly lines, machines, robotic devices, or any activity that requires high reliability, ease of programming, and process fault diagnosis. The PLCs utilized in Richwood's SCADA system ensure dependable automatic function of Richwood's water plants to fill water storage tanks to maintain water distribution pressure as well as an abundant water supply.

For years Richwood has utilized Allen-Bradly components within the SCADA system because of their excellent service record. Currently, Allen Bradley PLC Model 1400 is in service throughout Richwood's SCADA sites. It has recently been discovered that the model 1400 PLC will no longer

be supported by the manufacturer. The manufacturers suggestion was to upgrade to the next generation PLC known as Model 850. The downfall to this option is that the Models 1400 & 850 will not communicate therefore requiring a full system upgrade to ensure future communication between SCADA sites. The upgrade to the Model 850 PLC will also ensure compatibility between all SCADA sites and Richwood's master panel allowing Richwood to receive all additional SCADA options outlined in the original construction contract.

**ISSUE:**

None

**FISCAL IMPACT:**

**\$20,595.00**

This will increase the amended contract price from \$1,871,000.00 to \$1,891,595.00. The overall North Water Plant construction cost totals \$3,990,909.50. Due to interest gains, Richwood currently has an additional \$74,000.00 more than the original \$4,000,000.00 of bond funds received.

**RECOMMENDATION:**

I recommend Council make a motion approving the North Water Plant Booster Pump Station Change Order #2 in the amount of \$20,595.00.