

COUNCIL ACTION FORM

SUBJECT: BUDGET AMENDMENT TO REPLACE WATER PLANT CONTROL SYSTEM SERVER

BACKGROUND:

The Water Plant Supervisory Control and Data Acquisition (SCADA) system was installed in 2005. This control system has enabled staff to acquire vast amounts of information and more efficiently and more effectively operate the plant.

One critical part of the SCADA system is the server, which is where all historical data resides. **Recent performance issues with this server revealed that it is very close to reaching its storage capacity. Due to the server's age (eight years), it is more cost effective to completely replace the server and upgrade the associated software to maintain a reliable system.**

The Water Plant's SCADA system previously was maintained by plant staff separate from the rest of the division's computer equipment. The replacement server and operations system software will now be procured and installed by the City's Information Technology Division, who will also provide on-going support for this server and other SCADA workstations.

The most expensive portion of the upgrade is the control system software licensing. The control software originally installed with the SCADA system has already been upgraded once and will need to be reinstalled and upgraded as a part of the server replacement.

Staff is requesting Council approval of a budget amendment in the amount of \$53,700 to replace the SCADA server and software. The estimated project costs are shown below.

Estimated Project Expenses

Equipment	
Server hardware, license, and installation	\$4,723.36
Software	
Wonderware license upgrade	\$32,520.00
Control software installation services (estimate)	\$7,500.00
Contingency (~20%)	<u>\$8,956.64</u>
TOTAL ESTIMATED SERVER REPLACEMENT COST	\$53,700.00

The funding source for this project will be savings from the Water Plant Well Pump Variable Speed Drive project. The approved budget for that project is \$165,000. Through the use of a state energy efficiency grant program and an energy efficiency rebate from Ames Electric Services, the total expense to the Water Fund for that project is just \$1,500.

Available Funding

Authorized Budget	\$165,000
Construction	35,100
Minus ARRA Energy Efficiency Grant	(17,550)
Minus City of Ames Electric Rebate	(16,050)
<u>Total Expenses</u>	<u>\$1,500</u>
Remaining Authorized and Unencumbered Funds	\$163,500

ALTERNATIVES:

1. Approve an increase to the Water Plant operating budget in the amount of \$53,700 to replace the SCADA server and software; and reduce the authorized funding for the Well Pump Variable Speed Drive project by a corresponding amount.
2. Do not approve the Water Plant budget amendment at this time.

MANAGER’S RECOMMENDED ACTION:

To provide uninterrupted Water Plant control operations it is necessary to replace and upgrade the computer components as needed.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the Water Plant budget amendment in the amount of \$53,700.