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Department of Utilities
Water Treatment Facility
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TO: Chairperson Meltzer and Members of the Utilities Committee

FROM: Utilities Director Chris Shaw

DATE: February 4, 2021

RE: *Award sole source purchase of Water Plant High Service Pump #5 Variable Frequency Drive (VFD) equipment and commissioning services to Werner Electric in the amount of \$49,794*

BACKGROUND:

The Appleton Water Treatment Facility (AWTF) utilizes six High Lift Service Pumps (HLSPs) to convey water from out of the water plant into the City's water distribution system. All HSLPs have variable frequency drive (VFD) capabilities which provides the ability to effectively and efficiently ramp up and down pumps based on demand needs within the distribution system.

The existing Rockwell Automation Allen-Bradley VFD on HLSP #5 recently failed after 20 years of use. The repair costs associated with the failed drive would exceed that of a new VFD.

The HLSPs are considered critical assets and the replacement should occur as soon as possible. As an example, this critical asset is needed to maintain water pressure and flow to city residents, industry, and wholesale customers. The risk exposure of not maintaining this HSLP would be an increased potential of loss of water pressure due to a higher community demand (e.g., fire department needs in extinguishing a fire). If the regulatory floor level pressure is not maintained, the water system would be required to issue a public notice of unsafe water which is commonly called a water boil alert.

PROJECT OBJECTIVE:

Werner Electric is the only local distributor supporting Allen Bradley and Rockwell Automation. The quote provided by Werner Electric includes the new Rockwell Automation Allen-Bradley VFD and equipment commissioning for a total cost of \$49,794. The Rockwell Automation replacement VFD would be manufactured to fit into

the existing motor control center to match previous replacement drives (HSLP #3 and #6).

The quote does not include equipment installation. A separate contract will be authorized for the installation of the VFD equipment.

FUNDING:

The funding source for this project will come from the Water Treatment O&M budget.

RECOMMENDATION:

I recommend the sole source purchase of the Water Plant High Service Pump #5 Variable Frequency Drive (VFD) replacement equipment to Werner Electric in the amount of \$49,794. The new installation would be commissioned and then warrantied by Rockwell Automation for a period of one year.