



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	Purchase of Variable Frequency Drives for Western Avenue Lift Station		
Presenter & Title:	Bob Van Gyseghem, Superintendent of Water & Wastewater		
Date:	November 18, 2024		
Please Check Appropriate Box:			
<input checked="" type="checkbox"/>	Committee of the Whole Meeting	<input type="checkbox"/>	Special Committee of the Whole Meeting
<input checked="" type="checkbox"/>	City Council Meeting	<input type="checkbox"/>	Special City Council Meeting
<input type="checkbox"/>	Public Hearing	<input type="checkbox"/>	Other -
Associated Strategic Plan Goal/Objective: EMSII			
Estimated Cost: \$31,500.00	Budgeted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Funding? <input type="checkbox"/> Yes <input type="checkbox"/> No
Executive Summary:			
<p>The FY25 budget has funds allocated towards the replacement of two variable frequency drives (VFD's) at the Western Avenue Lift Station. The lift station has four pumps. The VFD is wired independently to each pump and cannot operate without the VFD. Two VFD's were replaced in 2019. Staff is recommending replacing the remaining two VFD's that have exceeded their useful life of over 20 years and have been discontinued by the manufacturer. The VFD's will need to be purchased, installed, commissioned, programmed, and placed into the SCADA System by modifying the Programmable Logic Controller (PLC). Tri-R Systems has been the City's SCADA integrator for more than twenty-five years and has a history of providing excellent service in the installation of control systems for the Water and Wastewater Utility. Security of the SCADA network and responsiveness to problems is the reason staff has continued the relationship with Tri-R Systems. Staff is requesting that due to the complex and sensitive nature of the project, that competitive bidding be waived.</p>			
Attachments: <i>(please list)</i>			
<ul style="list-style-type: none"> • Resolution • Quote 			
Voting Requirements:			
<p><i>This motion requires 7 affirmative votes for passage. (City Council Only)</i></p> <p><i>The Mayor may vote on three occasions: (a) when the vote of the alderpersons has resulted in a tie; (b) when one half of the alderpersons elected have voted in favor of an ordinance, resolution, or motion even though there is no tie vote; or (c) when a vote greater than a majority of the corporate authorities is required by state statute or local ordinance to adopt an ordinance, resolution, or motion.</i></p>			
Recommendation / Suggested Action: <i>(how the item should be listed on agenda)</i>			
<p>Recommend Approval of Resolution Waiving Competitive Bidding and Authorize the purchase and installation of two Variable Frequency Drives at a cost not-to-exceed \$31,500.00</p>			

RESOLUTION NO. 2024-124

**RESOLUTION AUTHORIZING PURCHASE & INSTALLATION OF
VARIABLE FREQUENCY DRIVES**

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS, as follows:

SECTION 1: That the City Administrator is hereby authorized to approve, on behalf of the City of Geneva, the purchase and installation of two variable frequency drives by Tri-R Systems for the Western Avenue Lift Station as per Exhibit "A".

SECTION 2: This Resolution shall become effective from and after its passage as in accordance with law.

PASSED by the City Council of the City of Geneva, Kane County, Illinois, this ____ day of _____, 2024

AYES: __ NAYS: __ ABSENT: __ ABSTAINING: __ HOLDING OFFICE: __

Approved by me this ____ day of _____, 2024.

Mayor

ATTEST:

City Clerk

October 4, 2024

*Re: City of Geneva, Illinois
LS SCADA Upgrade*

Per your request, TRI-R Systems Incorporated is pleased to provide a proposal for the SCADA work for the Lift Stations.

Existing SCADA PLC System

The lift station PLC's that are installed consists of Allen Bradley SLC 5/03 processors which were installed approximately 23 years ago. The SLC 531 series product lifecycle is listed as discontinued. Parts for this series PLC are still available but, the once the existing stock runs out they will not be producing new parts. The follow proposal will replace the discontinued PLC's with the latest series.

Western Ave LS

- Furnish and install (2) new Power flex 755 VFD's for the older Power flex 700 VFD's install VFD's in existing enclosure.
- Provide 480VAC wiring to VFD's and motors.
- Provide control wiring from PLC to VFD's.
- Provide modifications for VFD pump control logic in existing PLC.
- Provide modifications for VFD pump control logic in existing Operator Interface Terminal.
- Provide modifications for VFD pump control logic in existing SCADA software at WWTP.
- Provide programming, startup and training for PLC, Operator Interface Terminal and SCADA software.

Price: \$31,500.00

Please call if you have any questions.

Sincerely,

TRI-R Systems Incorporated



Timothy C. Smith