



### **AGENDA ITEM EXECUTIVE SUMMARY**

Agenda Item:	Approval SCADA Improvements for Lift Stations Tri-R Systems Inc.		
Presenter & Title:	Richard Babica, Director of Public Works		
Date:	01/23/2019		
<b><i>Please Check Appropriate Box:</i></b>			
<input checked="" type="checkbox"/>	Committee of the Whole Meeting		Special Committee of the Whole Meeting
<input checked="" type="checkbox"/>	City Council Meeting		Special City Council Meeting
<input type="checkbox"/>	Public Hearing		Other -
Estimated Cost: \$57,500.	Budgeted?	___ Yes X No	Other Funding? ___ Yes No
<b>Executive Summary:</b>			
<p>The Fiscal Year 2019 budget allocates \$85,000 to improve communications from the sanitary lift stations to the SCADA system located at the Wastewater Plant. Currently only basic information is displayed for four (4) of the stations. No information is displayed for the other four (4) lift stations. In the event of an alarm staff must go to the station to determine what the problem is no matter if this is during regular work hours or after hours. The goal is to be able to visualize what is occurring at the lift station and communicate remotely with the station. The final product will reduce emergency call outs, automatically record pump information to an Excel report, and reduce the number of man-hours for routine site visits to the stations.</p> <p>The current SCADA interface for the lift stations was done as part of the 2001 expansion of the Wastewater Plant under the overall contract with the General Contractor. The end result was a poor product that is not operator friendly. Because of this experience, Tri-R Systems was selected by the City of Geneva as a sole source to provide the SCADA controls for the Water Treatment Plant and the competitive bid process was waived. The use of Tri-R Systems was also included within the specifications issued for the WWTP Facility Update. The results of these projects have been an excellent product that is operator friendly.</p> <p>Tri-R Systems has, with the exception of the 2001 Project, been the contractor for the Water &amp; Wastewater Division since 1987 for SCADA System maintenance, upgrades and installations. Staff has been exceptionally pleased with their service and products. Additionally, the proposal submitted is under budget. Finally, it is relevant to note that cyber security risks to Water and Wastewater infrastructure are increasing and limiting access to these systems is a recommended best practice by Federal and State agencies. Therefore, staff requests that the City waive competitive bidding for this project</p>			
<b>Attachments: (please list)</b>			
<ul style="list-style-type: none"> <li>• Resolution</li> <li>• Tri-R Systems Proposal dated 01/22/2019</li> </ul>			

**Voting Requirements:**

*This motion requires 7 affirmative votes for passage.*

*The Mayor may vote on three occasions: (a) when the vote of the aldermen or trustees has resulted in a tie; (b) when one half of the aldermen or trustees elected have voted in favor of an ordinance, resolution, or motion even though there is no tie votes; 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.*

**Recommendation / Suggested Action:** *(how item should be listed on agenda)*

Staff respectfully requests that the City Council waive competitive bidding and to authorize the City Administrator to execute a contract with Tri-R Systems Inc., of DeKalb, Illinois in the amount not to exceed \$57,500.

**RESOLUTION NO. 2019-10**  
**RESOLUTION AUTHORIZING THE EXECUTION OF A CONTRACT WITH TRI-R**  
**SYSTEMS INC., TO PERFORM SCADA SYSTEM IMPROVEMENTS FOR LIFT STATIONS**

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**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 execute, on behalf of the City of Geneva, a Contract with Tri-R Systems, Inc., of DeKalb, Illinois, in the form attached hereto as Exhibit "A", relating to SCADA Improvements for various Lift Stations within the City of Geneva.

**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 4<sup>th</sup> day of February, 2019.

**AYES: \_\_ NAYS: \_\_ ABSENT: \_\_ ABSTAINING: \_\_ HOLDING OFFICE: \_\_**

Approved by me this 4<sup>th</sup> day of February, 2019

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

January 22, 2019

Rich Babica  
City of Geneva  
1800 South Street  
Geneva, IL 60134

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

Dear Mr. Babica

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 20 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.

#### **Geneva East LS**

- Furnish and install Allen-Bradley Micrologix PLC in the existing enclosure with operator interface terminal.
- Furnish and install new submersible level transducer
- Furnish and install (2) new float switches for backup control if level transducer fails.
- Provide pump control logic in new PLC.
- Provide programming, startup and training for PLC and operator interface.

**Price: \$15,500**

#### **Fisher Farms LS**

- Furnish and install Allen-Bradley Micrologix PLC in the existing enclosure with operator interface terminal.
- Provide pump control logic in new PLC.
- Provide programming, startup and training for PLC and operator interface.

**Price: \$13,000**

**Kautz Rd LS**

- Furnish and install Allen-Bradley Micrologix PLC in the existing enclosure with operator interface terminal.
- Provide programming, startup and training for PLC and operator interface.

**Price: \$12,000****River LS**

- Furnish and install Allen-Bradley Micrologix PLC in the existing enclosure.
- Provide investigation for current alarms and status from relocated pump control panel.
- Provide programming, startup and training for PLC.

**Price: \$4,000****Westside LS**

- Provide investigation for current alarms and status from existing pump/PLC control panel.
- Provide any necessary alarm reprogramming for discrepancy's found.

**Price: \$1,250****Western Ave LS**

- Remove existing starters and install VFD's (furnished by others) 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: \$11,750.00****General Work**

- Provide programming, startup and training for Wonderware SCADA software, Win911 alarm dialer software and Microsoft Excel reports for stations listed above on existing computer and software.

Please call if you have any questions.

Sincerely,

TRI-R Systems Incorporated

  
Timothy C. Smith



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View the results below for the latest lifecycle detail on the product or family you searched for. You can sort by Catalog Number or by Discontinued Date. You can also filter on a specific Lifecycle Status (e.g., show only End of Life products) or Replacement Category (e.g., show all products within the specified catalog number that are considered Direct Replacement). Click on the Question Mark icon next to each field for an explanation of the respective status or category.

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Lifecycle Status

Replacement Category

2 RESULTS

Sort

**1747-L531-CC - CONFORMAL COATED 1747-L531**  
 LIFECYCLE STATUS DISCONTINUED DATE   
 DISCONTINUED 10/21/2016

REPLACEMENT CATEGORY   
Engineering Replacement

REPLACEMENT PRODUCT  
MIGRATE TO CMX SOLUTION

**1747-L531 - SLC 5/03 8K CONTROLLER**  
 LIFECYCLE STATUS DISCONTINUED DATE   
 DISCONTINUED 08/31/2018

REPLACEMENT CATEGORY   
Engineering Replacement

REPLACEMENT PRODUCT  
MIGRATE TO CMX SOLUTION



City of Geneva  
Check Request

Date 5-24-19 Date Needed 6-17-19

Vendor Tri -R Vendor # \_\_\_\_\_

Address 1804 E Lincoln Hwy  
DeKalb, IL 60115

Check Processing Information

Mail Check  Return to Department  Employee

Paid Advance of Council Approval

Yes\*  No  Date Required \_\_\_\_\_

\*Requires City Administrator's Approval

Justification for Choosing Vendor

Lowest Price  Council Approved  Other

Reason \_\_\_\_\_

Account Number	Amount	Description
630.90.96.95-815.35	\$ 57,500.00	Lift Station SCADA Improvements
Total:	\$ 57,500.00	

Purpose

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Approval BV  
Division \_\_\_\_\_

Finance Manager \_\_\_\_\_

Department \_\_\_\_\_

City Administrator \_\_\_\_\_

Clear



SYSTEMS  
INCORPORATED  
1804 E. LINCOLN HWY. DEKALB, IL 60115  
PHONE (815) 787-0830 FAX (815) 787-0930

# Invoice

Invoice Number:  
004848

Invoice Date:  
Apr 30, 2019

To: City of Geneva  
1800 South Street  
Geneva, IL 60134

Customer PO	Payment Terms	Sales Rep ID	Due Date
	Net 30 Days		5/30/19

Job ID	Description		Amount
	2019 Lift Station Improvements		
	Original Contract Amount	57,500.00	
	Changes To Contract		
	Net Amount Of Contract	57,500.00	
	Total Amount Requested	57,500.00	
	Less Previous Requests		
0733	Total Amount Due This Request	57,500.00	57,500.00

**TOTAL** 57,500.00