



AGENDA ITEM # 13D

AGENDA ITEM EXECUTIVE SUMMARY

Village Board Meeting

February 26, 2018

Item Title: Supervisory Control and Data Acquisition Project

Staff Contact: Victor C. Ramirez, P.E. Public Works Director

VILLAGE BOARD ACTION

Adopt a resolution waiving the competitive bidding process for the design and implementation of a Supervisory Control and Data Acquisition (SCADA) Project and authorizing the execution of a Professional Services Agreement for Supervisory Control and Data Acquisition Design and Implementation Services between the Village of Roselle and Tri-R Systems, Inc.

Executive Summary:

At the Committee of the Whole meeting on February 12, 2018 the Committee of the Whole unanimously recommended approval of the proposal from Tri-R Systems, Inc. for a Supervisory Control and Data Acquisition (SCADA) installation project in the amount of \$677,500.00. The project includes the following:

- Devlin WWTP: SCADA design and installation including Option 1, a fiber optic ring. Total cost = \$321,000
- Botterman WWTP: SCADA design and installation including Option 1, a fiber optic ring, and Option 2, a directional bore fiber optic communication feed from the administration building to the final building. Total cost = \$206,500
- Lift Stations: SCADA design and installation at nine lift stations. Total Cost = \$130,000.

Total Project Cost = \$657,500.00.

The FY 2018 budget includes \$800,000 for the design and installation of a SCADA system at these locations.

Staff completed a request for proposal process for the SCADA design and installation project. In discussions with the Village Attorney, the actual action by the Village Board will require a waiver of bids due to the capital improvement nature of the work. This project did not lend itself to a "Bid process" because the scope is different per provider. Staff believes the RFQ process was in the best interest of the Village in selecting a firm to address the SCADA needs in the Wastewater Treatment Division.

Implications:

Is this item budgeted? Yes, the FY 2018 budget includes \$800,000 for this project in the Water and Sewer Capital Projects Fund 53918292 70100.

Any other implications to be considered? The proposal from Tri-R does not include the purchasing of various information technology network equipment that will allow for the Village to maximize its investment in the new SCADA system and allow for employees to securely access the SCADA system remotely. The equipment will include computers, firewalls, back-up batteries, wireless access points, and wall racked secure cabinets. This equipment will be purchased and installed by the Village's IT staff. It is expected the cost of this equipment will be approximately \$15,000.

Attachments:

Resolution

Professional Services Contract

Tri-R Systems Inc. Proposal

RESOLUTION NO. _____

A RESOLUTION WAIVING THE COMPETITIVE BIDDING PROCESS FOR THE DESIGN AND IMPLEMENTATION OF A SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) PROJECT AND AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT FOR SUPERVISORY CONTROL AND DATA ACQUISITION DESIGN AND IMPLEMENTATION SERVICES BETWEEN THE VILLAGE OF ROSELLE AND TRI-R SYSTEMS INC.

WHEREAS, 65 ILCS 5/8-9-1 authorizes municipalities, by two-thirds (2/3) vote of its corporate authorities, to waive formal competitive bidding; and

WHEREAS, the Village of Roselle determined the need for Supervisory Control and Data Acquisition (SCADA) design and implementation services; and

WHEREAS, the Village solicited a "Request for Qualifications" to seek the services of firms that perform said SCADA services; and

WHEREAS, through a professional review of submittals, subsequent interviews, reference checks, and evaluation of the firms considered for SCADA services; and

WHEREAS, Tri-R Systems, Inc. was selected as the firm that demonstrated the highest quality experience, project team and knowledge, project approach, and references; and

WHEREAS, the costs associated with the project were negotiated and determined to be fair and reasonable and within the industry standards for such work.

WHEREAS, the corporate authorities of the Village of Roselle deem it in the best interests of the Village to waive the competitive bidding and authorize the Mayor to enter into an agreement with Tri-R Systems, Inc. for SCADA design and implementation services.

NOW THEREFORE, be it resolved by the Mayor and Board of Trustees of the Village of Roselle, DuPage and Cook Counties, Illinois that the Mayor shall be and hereby is directed to execute the attached Professional Services Agreement; and

BE IT RESOLVED, that the Village Clerk shall transmit copies of this Resolution and executed Professional Services Agreement to Tri-R Systems, Inc. forthwith; and further

This Resolution shall be in full force and effect from after its passage and approval in a manner provided by law.

ADOPTED this 26th day of February, 2018

AYES:
NAYS:
ABSTAIN:
ABSENT:

Andrew J. Maglio, Mayor

ATTEST:

Patricia Burns, Village Clerk

CONTRACT FOR SCADA INSTALLATION PROFESSIONAL SERVICES

THIS CONTRACT is made and entered into by and between the Village of Roselle, a body politic and corporate (hereinafter the "Village"), and Tri-R Systems, Inc. (hereinafter "Consultant").

WITNESSETH:

WHEREAS, the Village of Roselle (hereinafter "Village") has determined that it is reasonable, necessary and desirable to obtain the services of a firm to provide Professional Services associated with Supervisory Control and Data Acquisition Design and Installation to the Village; and

WHEREAS, Tri-R Systems, Inc. (hereinafter "Consultant") agrees to provide the necessary engineering services upon the terms set forth herein.

NOW, THEREFORE, in consideration of the mutual promises, terms and conditions set forth herein, the parties agree as follows:

1. Scope of Services. Village hereby retains Consultant, and Consultant hereby agrees to act as the independent contractor for the Village performing those engineering services, which are described in the Scope of Services Exhibit (hereinafter the "Work"), attached hereto and incorporated herein as if fully set forth as Exhibit A.

2. Standard of Care. Consultant represents and warrants that it shall perform its services in a manner consistent with the level of care and skill customarily exercised by other professional consultants under similar circumstances at the time the services are performed. Where this Agreement is inconsistent with any provision of Exhibit A this Agreement shall control.

3. Compensation. The Village shall pay the Consultant an amount not-to-exceed \$657,500.00. A breakdown of these fees by task is summarized in the Scope of Services Exhibit. Consultant shall submit itemized invoices containing sufficient detail of the Work performed to enable the Village to properly evaluate the payout request and the Village shall pay Consultant in accordance with the Local Government Prompt Payment Act.

4. Term of Agreement. The term of this Agreement shall be for a period of one year terminating December 31, 2018, unless terminated earlier by either party pursuant to Paragraph 11 and provided the term of the Agreement may be extended upon mutual written agreement.

5. Additional Services. Additional services that are not part of the Work may be assigned subject to prior written approval or direction of the Village. Payment for additional services shall be as mutually agreed upon by the parties before the commencement of any additional services. Any additional services shall be subject to the terms and conditions of this Agreement.

6. Hold Harmless and Indemnification. Consultant shall defend, hold harmless and indemnify the Village, its officers, agents, employees and elected officials, from any loss, damage, demand, liability, cause of action, fine, judgment or settlement, together with all costs and expenses related thereto (including reasonable expert witness and attorney fees), that may be incurred as a result of bodily injury, sickness, death or property damage or as a result of any other claim or suit of any nature whatsoever arising from or in any manner connected with, directly or indirectly, the negligent acts, errors, omissions, or intentional acts or omissions of Consultant in performing the services provided for in this Contract. The obligation on the part of the Consultant to defend, hold harmless and indemnify the Village shall survive the expiration or termination of this contract.

7. Insurance. Unless otherwise authorized in writing by the Village Administrator, Consultant shall purchase and maintain during the term of this Contract insurance coverage which will satisfactorily insure Consultant and, where appropriate, the Village against claims and liabilities which may arise out of the services referred to in this Contract. Such insurance shall be issued by companies authorized to do business in the State of Illinois and approved by the Village. The insurance coverages shall include, but not necessarily be limited to, the following:

(A) Worker's Compensation insurance with limits as required by the applicable statutes of the State of Illinois. The Employer's Liability coverage under the Worker's Compensation policy

shall have limits of not less than \$500,000 each accident/injury; \$500,000 each employee/disease; \$500,000 policy limit.

(B) Commercial general liability insurance protecting Consultant against any and all public liability claims which may arise in the course of performance of this Contract. The limits of liability shall be not less than \$1,000,000 each occurrence bodily injury/property damage combined single limit and \$2,000,000 aggregate bodily injury/property damage combined single limit. The policy of commercial liability insurance shall include contractual liability coverage and an endorsement naming the Village as an additional insured.

(C) Commercial automobile liability insurance covering Consultant's owned, non-owned and leased vehicles which protects Consultant against automobile liability claims whether on or off of the Village's premises with coverage limits of not less than \$1,000,000 per accident bodily injury/property damage combined single limit. The policy of commercial liability insurance shall include contractual liability coverage and an endorsement naming the Village as an additional insured.

(D) Umbrella or Excess liability insurance with limits of not less than \$1,000,000 per occurrence bodily injury/property damage combined single limit. The Umbrella or Excess coverage shall apply in excess of the limits stated in subparagraphs (B) and (C) above, and shall either include an endorsement naming the Village as an additional insured or provide "following form" coverage for the primary insurance.

(E) Professional liability insurance with limits of not less than \$1,000,000 per claim covering Consultant against all sums which Consultant may become obligated to pay on account of any liability arising out of the performance of the professional services for the Village under this Contract when caused by any negligent act, error or omission of Consultant or of any person employed by Consultant or any others for whose actions Consultant is legally liable. The professional liability

insurance shall remain in force for a period of not less than four years after the completion of the services to be performed by Consultant under this Contract.

8. Evidence of Insurance. Consultant shall furnish the Village with a certificate of insurance and, upon the Village's request, copies of all insurance policies and endorsements thereto evidencing the coverages stated above. The insurance certificates and policies shall provide that no cancellation or modification of the policies shall occur without at least 30 days' written notice to the Village. Consultant shall not commence any services under this Contract until evidence of the required insurance is received and approved by the Village. The Village shall be named on the policies required by Section 5 subsections (B) and (D) as additional insured. No policy shall require contribution by the Village's insurance.

9. Compliance with Laws. Consultant shall comply with all applicable federal, state and local laws, rules and regulations, and with all Village ordinances, rules and regulations now in force or hereafter enacted in the performance of the services required under this Contract.

10. Control of Services. The Village shall not be responsible for or have control over the means, methods, techniques or procedures with respect to the performance by Consultant of the services in this Contract.

11. Termination of Contract. If Consultant fails to perform according to the terms set forth herein, the Village may terminate this Contract upon seven days' written notice to Consultant. This Agreement may be terminated by the Village without cause upon fourteen days written notice. In the event of a termination, the Village shall pay Consultant for the services performed and expenses incurred as of the effective date of termination, less any sums attributable, directly or indirectly, to Consultant's breach. The written notice required under this paragraph shall be either (a) served personally during regular business hours; (b) served by facsimile during regular business hours; (c) served by certified or registered mail, return receipt requested, addressed to the address listed at the end of this contract with postage prepaid and deposited in the United States mail or by

e-mail sent to the Consultant's Project Manager. Notice served personally, by facsimile transmission or e-mail shall be effective upon receipt, and notice served by mail shall be effective upon receipt as verified by the United States Postal Service. Consultant shall provide the Village with its Project Manager's e-mail address upon its execution of this Agreement.

12. Ownership of Documents & Release of Information. All records, reports, tests, studies, documents, data or other information, regardless of whether in written, electronic or other format, prepared or generated by Consultant in connection with performing the services provided for herein shall be regarded as the property of the Village and shall not be utilized by Consultant in any manner on other projects or distributed to third parties without the prior consent of the Village. In addition, any information provided by the Village to Consultant in connection with Consultant's performance of the services provided for herein and all information associated with Consultant's work product shall remain confidential and shall not be disclosed to any third party without the prior written consent of the Village.

13. FOIA. Consultant agrees to furnish all records related to this Agreement and any documentation related to the Village required under an Illinois Freedom of Information Act (ILCS 140/1, et/ seq.) (hereinafter "FOIA") request within five business days after Village issues notice of such request to the Consultant. Consultant's fees for FOIA disclosure shall be consistent with the requirements set forth by the FOIA.

14. Integration. The provisions set forth herein represent the entire agreement between the parties and supersede all prior agreements, promises and representations, as it is the intent of the parties to provide for a complete integration within the terms of this Contract. This Contract may be modified only by a further written agreement between the parties, and no modification shall be effective unless properly approved and executed by each party.

15. Exclusive Jurisdiction. Any disputes under this Agreement shall be in the 18th Judicial Circuit Court, Wheaton, DuPage County, Illinois.

IN WITNESS WHEREOF, the parties have entered into this Contract as of the 26th day of
February, 2018.

VILLAGE OF ROSELLE
VILLAGE ADMINISTRATOR
31 S. PROSPECT STREET
ROSELLE, IL 60172

TRI-R SYSTEMS, INC.
1804 E. LINCOLN HWY

DEKALB, ILLINOIS 60115

BY: _____

Mayor

BY: _____

(INSERT)

ATTEST: _____

Clerk

ATTEST: _____

February 21, 2018

Per your request, TRI-R Systems Incorporated is pleased to provide the following proposal.

Devlin WWTP

Administration Building

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish Win 911 auto dialer software upgrade license for mobile 911, dialogic voice board 911, programming, startup and training.
- Furnish and install 2 point backup hardware auto dialer.
- Provide Wonderware Intouch HMI programming on upgraded development license, startup and training.

SCC Main

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install GE MDS iNet-II 900 with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install Allen Bradley Compactlogix 1769-L32E processor with I/O in place of obsolete SLC500 Series PLC.
- Furnish and install Automation Direct 6" color operator interface touchscreen in place of obsolete 2711 series operator interface touchscreen.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

SCC A Press

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install Allen Bradley Compactlogix 1769-L32E processor with I/O in place of obsolete SLC500 Series PLC.
- Furnish and install Automation Direct 6" color operator interface touchscreen in place of obsolete 2711 series operator interface touchscreen.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

SCC B Blower

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install Allen Bradley Compactlogix 1769-L32E processor with I/O in place of obsolete SLC500 Series PLC.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

Bar Screen

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install Allen Bradley Compactlogix 1769-L32E processor with I/O in place of obsolete SLC500 Series PLC.
- Furnish and install Automation Direct 6" color operator interface touchscreen in place of obsolete 2711 series operator interface touchscreen.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

EQ Tank

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install Allen Bradley Compactlogix 1769-L32E processor with I/O in place of obsolete SLC500 Series PLC.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

Aeration Tank

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

Spare Parts

Scope

- Furnish one spare PLC processor, PLC power supply and one unique I/O card of each supplied.
- Furnish one spare wireless access point and power supply.

Price: \$263,000.00

Please note that the price does not include computers.

Option No. 1

Fiber Optic Ring

Scope

- Remove Wireless Access Points from above project scope.
- Provide all necessary electrical conduit installation around plant.
- Furnish and install redundant fiber optic ring system in new conduit installation.
- Furnish and install all fiber optic cable, terminations, switches, patch panels and testing.
- Furnish and install point to point ethernet radio from aeration tank panel to SCC main PLC panel for communication to aeration tank PLC.
- Provide saw cut of asphalt and sidewalks necessary to get around plant. Backfill with gravel.

- Provide grass seed and straw restoration of conduit trenches.

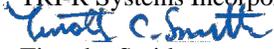
Add Price: \$58,000.00

**Please note price does not include items in black below:
Asphalt and sidewalk replacement or asphalt spoil removal not included.
Approx. 160 feet long x 2 feet wide asphalt patching will be needed.
Approx. 3 to 5 sidewalk squares might need to be replaced.**

If you have any questions, please call.

Sincerely,

TRI-R Systems Incorporated



Timothy Smith

February 21, 2018

Per your request, TRI-R Systems Incorporated is pleased to provide the following proposal.

Botterman WWTP

Administration Building

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish Win 911 auto dialer software upgrade license for mobile 911, dialogic voice board 911, programming, startup and training.
- Furnish and install 2 point backup hardware auto dialer.
- Provide Wonderware Intouch HMI programming on upgraded development license, startup and training.

SCC A Press

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install GE MDS iNet-II 900 with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install Allen Bradley Compactlogix 1769-L32E processor with I/O in place of obsolete SLC500 Series PLC.
- Furnish and install Automation Direct 6" color operator interface touchscreen in place of obsolete 2711 series operator interface touchscreen.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

SCC B Effluent

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install Allen Bradley Compactlogix 1769-L32E processor with I/O in place of obsolete SLC500 Series PLC.
- Furnish and install Automation Direct 6" color operator interface touchscreen in place of obsolete 2711 series operator interface touchscreen.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

Oxidation Ditch

Scope

- Furnish and install Moxa AWK-3121 Series Wireless Access Point with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install APC 1500VA UPS.
- Provide PLC programming, startup and training.

Spare Parts

Scope

- Furnish one spare PLC processor, PLC power supply and one unique I/O card of each supplied.
- Furnish one spare wireless access point and power supply.

Price: \$162,750.00

Please note that the price does not include computers.

Option No. 1

Fiber Optic Ring

Scope

- Remove Wireless Access Points from above project scope.
- Provide all necessary electrical conduit installation around plant.
- Furnish and install redundant fiber optic ring system in new conduit installation.
- Furnish and install all fiber optic cable, terminations, switches, patch panels and testing.
- Furnish and install point to point ethernet radio from aeration tank panel to SCC main PLC panel for communication to aeration tank PLC.
- Provide saw cut of asphalt and sideways necessary to get around plant. Backfill with gravel.
- Provide grass seed and straw restoration of conduit trenches.

Add Price: \$25,000.00

**Please note price does not include items in black below:
Asphalt and sideway replacement or asphalt spoil removal not included.
Approx. 120 feet long x 2 feet wide asphalt patching will be needed.
Approx. 1 to 3 sidewalk squares might need to be replaced.**

Option No. 2

Directional Bore

Scope

- Provide 400 feet conduit directional boring between Admin building and Final building.
- Provide all necessary 1 inch galvanized electrical conduit installation to extend directional boring conduit to buildings.
- Furnish and install 6 strand single mode fiber optic cable system in new conduit installation.
- Furnish and install all fiber optic cable, terminations, switches, patch panels and testing.
- Furnish and install (2) media convertors for fiber to copper conversion.
- Provide saw cut of sidewalks necessary to get conduit to buildings. Backfill with gravel.
- Provide grass seed and straw restoration of conduit trenches.

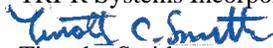
Add Price: \$18,750.00

**Please note price does not include items in black below:
Sidewalk replacement not included.
Approx. 1 or 2 sidewalk squares might need to be replaced.**

If you have any questions, please call.

Sincerely,

TRI-R Systems Incorporated


Timothy Smith

February 21, 2018

Per your request, TRI-R Systems Incorporated is pleased to provide the following proposal.

Lift Stations

Administration Building

Scope

- Provide Win 911 programming on existing software license, startup and training.
- Provide Wonderware Intouch HMI programming on existing license, startup and training.

(9) Lift Stations

Scope

- Furnish and install GE MDS iNet-II 900 with new antennas and cabling as necessary for complete and proper installation.
- Furnish and install Allen Bradley Micrologix 1400 processor with I/O in place of primary controller.
- Furnish and install Allen Bradley Micrologix 1100 processor with I/O in place of backup controller.
- Furnish and install Automation Direct 6" color operator interface touchscreen in place of obsolete 300 series operator interface touchscreen.
- Furnish and install APC 1000VA UPS.
- Provide PLC programming, startup and training.

Spare Parts

Scope

- Furnish one spare PLC processor and one unique I/O card of each supplied.
- Furnish one spare radio and power supply.

Price: \$130,000.00

Please note that the price does not include computers.

If you have any questions, please call.

Sincerely,

TRI-R Systems Incorporated



Timothy Smith