

# **REQUEST FOR QUALIFICATIONS (RFQ)**

**VILLAGE OF ROSELLE**

**ILLINOIS**



**SUPERVISORY CONTROL AND DATA ACQUISITION  
(SCADA) SERVICES**

**DEPARTMENT OF PUBLIC WORKS**

**VILLAGE OF ROSELLE, ILLINOIS**  
**REQUEST FOR QUALIFICATIONS**  
**SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)**  
**SERVICES**  
**DEPARTMENT OF PUBLIC WORKS**

Sealed Statements of Qualifications, plainly marked "SCADA Engineering Services", on the outside of the mailing envelope, addressed to the Village Clerk, Village of Roselle, 31 S. Prospect Street, Roselle, IL 60172 will be accepted until 11:00 a.m. on Wednesday, October 4, 2017.

**SCOPE OF WORK:** The Village of Roselle is requesting Qualifications from qualified firms to submit qualifications to provide SCADA services to replace the existing SCADA system at two wastewater treatment (WWT) plants and eleven lift stations. Work includes, but is not limited to designing and implementing changes to the SCADA system involving software and hardware installation, programming, integration, and documentation.

Request for Qualifications (RFQ) documents may be obtained at the Public Works Facility, 474 Congress Circle North, Roselle, IL, 60172, by visiting the Village's website at [www.roselle.il.us/bids](http://www.roselle.il.us/bids) or by contacting Victor Ramirez, Public Works Director, [Vramirez@roselle.il.us](mailto:Vramirez@roselle.il.us) or 630-671-2365. Addenda to this RFQ, if any, including written answers to questions, will be posted on the Village of Roselle website under the project heading.

The Village of Roselle reserves the right to reject any or all statements of qualifications, to waive technical or legal deficiencies, to proceed or not to proceed with any subsequent proposal process, or to negotiate without further process any contract as may be in the best interest of the Village.

**VILLAGE OF ROSELLE, ILLINOIS**  
**REQUEST FOR QUALIFICATIONS**  
**SUPERVISORY CONTROL AND DATA ACQUISITION SERVICES**  
**DEPARTMENT OF PUBLIC WORKS**

Sealed Statements of Qualifications (SOQ), plainly marked "SCADA Engineering Services", on the outside of the mailing envelope, addressed to the Village Clerk, Village of Roselle, 31. S. Prospect Street, Roselle, IL 60172 will be accepted until 11:00 a.m. on October 4, 2017. A Pre-submittal meeting is scheduled for September 20, 2017 at 9:00 a.m. at the Public Works Facility located at 474 Congress Circle North, Roselle, IL 60172. This will be the only meeting to visit the WWT Facilities and lift stations.

**PROJECT BACKGROUND AND PURPOSE**

The Village of Roselle is located primarily in north-central DuPage County with a small portion of north Roselle located in Cook County. The 2012 United States Census Bureau population estimate is 22,984 within a 5.4 square mile area of which 0.8 square miles are located in Cook County (north of Devon Avenue). Major corridor roadways intersecting the Village are Lake Street, Irving Park Road, Roselle Road, and I-390. The Village's Public Works Department consists of Administration, Water, Wastewater, Fleet, Facilities, and Streets Divisions.

The Village operates SCADA in two Divisions: Wastewater and Water. They are similar platforms but operate independently. The Water Division SCADA is not part of the scope of this project. The Wastewater Division operates two Wastewater Treatment Facilities and eleven lift stations. The existing system utilizes Altronex software and is about 15+ years old. It has been experiencing increasing communication and reliability issues and is at the end of its useful life. The control systems serving the WWT facilities are based on a complex arrangement of Allen Bradley Programmable Logic Controllers (PLCs). At each of the WWT facilities, a SCADA consisting of a workstation running software by Wonderware collect data gathered by the PLCs. With these systems, plant staff control treatment operation, generate production reports, and receive alarms to warn of abnormal conditions from their respective control rooms. In addition to plant controls, a complex telemetry system monitors the operation of the collection system pumping stations via a radio telemetry network. The configuration can generally be described as follows:

**Devlin WWT Plant:**

- SCC-Main Influent Pump Station
- SCC-A Press Building
- SCC-B Blower room
- Equalization tank
- Aeration Tank
- Barscreen (Preliminary Building)
- SCADA PC (Admin building)

Panelview 550 and 1000 are utilized with PLC's, switch, antenna, and access points and have UPS.

Radio: SCC-Main iNet

Botterman WWT Plant:

- SCC-A Press Building
- SCC-B Effluent Building
- Oxidation Ditch
- SCADA PC (Effluent Building office)

Similar to Devlin there are Panelview 550's, PLC's, access points, antenna, switches, and UPS

Radio: SCC-Main iNet and Point-to-point antenna tower, elevated tower 1 repeater iNet (Irving Park elevated water storage tower)

Lift stations:

- All have Panelview 550's and use radio for communication to Devlin and Botterman

In summary, there are 9 PLC's, 10 Access Point's, 11 switches, 11+ antennas, 18 displays, 3 iNet repeaters, and 11 lift station radios. Remote communication of alarms is done by dialer software and cell phone.

This firm must be able to demonstrate its competence, knowledge, and qualifications in all aspects of SCADA. The Village anticipates a single point of contact to serve as the project manager, although the firm may use additional resources and personnel for specific tasks. .

The Village anticipates it will enter into a contract with the selected firm for design, installation, and integration and have a separate contract for ongoing maintenance services.

## **PROJECT SCOPE**

The firm must demonstrate they have technical and project management qualifications in all aspects of SCADA systems. The actual scope of services will be negotiated with the selected firm.

### **General Services Description**

- 1.) Demonstrate the ability to provide SCADA engineering design services, installation, programming, and integration to replace the existing SCADA system.
- 2.) Demonstrate the ability to evaluate the existing SCADA system and offer alternatives during the control system network design to implement a new system with the ability for future expansion.

- 3.) Demonstrate expertise in the design/implementation of cyber security that follow Department of Homeland Security guidelines for Critical Infrastructure. This includes wired and wireless connectivity and remote access consistent with industry best practices including incorporating mobile devices such as tablets and smartphones into operations.
- 4.) Demonstrate the ability to provide proper guidance to develop PLC standards that include but are not limited to PLC tag naming conventions, memory allocation, and documentation.
- 5.) Demonstrate expertise in integrating telemetry systems into WWT plant Control System.
- 6.) Demonstrate the ability to provide technical support on software or hardware issues at the WWT facilities including PLC and SCADA programming, control panel maintenance and operator workstation diagnostics and repair. Telephone support is required in all areas of control, telemetry, networking, and instrumentation and will be made available 24/7, 365 days/year. This support is provided to assist maintenance or operations personnel in the diagnostic or troubleshooting of the system when Integrator staff is not at the site or when a visit is not required.

## **REQUIRED CONTENTS OF THE STATEMENT OF QUALIFICATIONS (SOQ)**

### **1. Firm Experience**

In order to be considered for this project, the firm must demonstrate that its staff has the proven knowledge and experience in conducting Instrumentation and/or SCADA development in wastewater application. The System Supplier shall be an Allen Bradley recognized system integrator. Indicate the current workload of the firm and ability to commit required resources to meet the needs of the Village.

In addition, provide three municipal or Wastewater District client references with current contact information (name, title, organization, phone, cell and e-mail) that the firm has successfully complete scope of work similar to that outlined herein.

### **2. Project Team**

Provide the names, qualifications, and resumes of specific project staff who are qualified to act in the primary and supporting roles. Also, provide a brief description of relevant projects in which staff has played a central role and an organizational chart clearly delineating individual responsibilities. Information such as areas of specialty, office location, total years of experience, and years with firm. Any certifications should also be noted.

***All resumes included should be limited to a maximum of two pages per team member.***

### **3. Approach to Project**

Include a comprehensive discussion on the firm's approach to providing these Services. List the use of any subconsultants/subcontractors and define their scope of work to be performed on this project.

### **4. Licenses**

Provide proof of current certification to perform work in the State of Illinois as well as each firm submitting a SOQ acknowledges their employees possess all necessary federal, state, and local licenses as required by law, and shall furnish satisfactory proof to the Village upon request that the licenses are in effect during the entire period of the contract.

## **RANKING OF QUALIFICATIONS**

Each SOQ will be reviewed and ranked according to the following criteria:

- |   |                      |
|---|----------------------|
| a. Relevant firm experience             | Maximum of 30 points |
| b. Overall project team experience      | Maximum of 30 points |
| c. Ability to provide required services | Maximum of 30 points |
| d. Reference checks                     | Maximum of 10 points |

## **SELECTION AND CONTRACT**

Upon review of all responsive SOQs using the criteria outlined above, the Village of Roselle will select approximately three (3) firms to interview. Upon completion of the interviews, the Village of Roselle anticipates negotiating a final Scope of Services and fee with the highest ranking firm initially, and if unsuccessful, will negotiate a professional services agreement with the second or third ranked firms as necessary.

## **RESERVATION OF RIGHTS**

The Village of Roselle reserves the right to reject any or all Statement of Qualifications, to waive technical or legal deficiencies, to proceed or not to proceed with any subsequent proposal process, or to negotiate without further process any contract as may be in the best interest of the Village of Roselle.

The Village of Roselle reserves the right to make such inquiries regarding the firm's qualifications and reputation as it deems necessary to evaluate the firm.

## **CONTRACT DOCUMENT**

All information, data, documents, photos, computer records, and other materials of any kind acquired or developed by the consultant pursuant to this project shall be the property of the Village of Roselle.

## **INQUIRIES**

All inquiries regarding this RFQ shall be submitted via e-mail to Victor Ramirez, Public Works Director, at [vramirez@roselle.il.us](mailto:vramirez@roselle.il.us) no later than 3:00 p.m. Wednesday, September 27, 2017. The Village of Roselle reserves the right to not respond to any or all inquiries. Responses will be provided in a written addendum with both inquiries and responses, without stating the source of the inquiry, on the Village of Roselle website at [www.roselle.il.us/bids](http://www.roselle.il.us/bids) no later than Thursday, September 28, 2017.