# **Request for Proposals**

For SCADA Integration for Commerce, GA Wastewater Treatment System

Prepared for:

**City of Commerce** 27 Sycamore Street Commerce, GA 30529

Prepared By:



**GOODWYN MILLS CAWOOD, LLC** 6120 Powers Ferry Road NW, Suite 200 Atlanta, GA 30339

## **1 INTRODUCTION**

The purpose of this request for proposals (RFP) is to solicit proposals from Vendors for SCADA Integration for the city of Commerce's Wastewater Treatment System. It is the intent of Commerce to select a vendor that will be used in the design and implementation of SCADA within its system.

It is Commerce's intent to have proposals representative of similar scope, supply, and configuration between suppliers based on performance requirements so that the proposals can be evaluated on an equal and fair basis with like-for-like comparison where possible. The proposals will be evaluated using criteria listed in Section 3. Commerce may request site visits and/or presentations from a short-list of Vendors prior to making a selection.

## **Background**

Commerce's wastewater treatment system is primarily comprised of an existing Water Pollution Control Plant (WPCP), the Northside WPCP, water towers and pump stations to efficiently serve the surrounding area. An additional WPCP has been designed to better support the Northside WPCP, and is to begin construction soon.

## Northside WPCP:

The Northside WPCP is an existing 2.1 million gallon per day (MGD) maximum monthly average daily flow (MMADF) facility in Commerce, GA. The Plant serves approximately 7,800 acres of property in Jackson County, Georgia and treats domestic, commercial and industrial wastewater. The facility consists of coarse screening, influent flow measurement and recording, grit removal, aeration basins, filtration, chlorination and dechlorination. The original plant was constructed in 1974, and was upgraded in 1986 to treat 1.05 MGD of flow and was again upgraded in 2003 to treat its present 2.1 MGD permitted flow. A PFD of Northside WPCP site plant, adjacent lift station and P&I Diagram following their 2003 upgrade is attached in **Appendix A**.

The current SCADA system installed at the Northside WPCP is the General Electric Intellution iFIX 3.5 SCADA system. Computer displays present graphic illustrations of each system with equipment run status, process flow readings, chemical flow readings, chemical tank levels, alarms, alarm report history, reports and trending information.

**Grove Creek WPCP:** 

Commerce recently has requested the design of a new wastewater treatment facility to provide support to the Northside WPCP. This plant, the Grove Creek WPCP, is designed as a 2.0 MGD greenfield facility. The plant will feature an Orbal oxidation ditch, tertiary cloth disc filters, and a UV system. A PFD of the site plan for the proposed facility is attached in **Appendix B**. The location of the Beck Road lift station is also shown.

## Submittal Registration

Proposers must register via email with the Engineer, Goodwyn Mills Cawood, to ensure that all addenda are received. Proposals by unregistered suppliers will not be considered. Send contact information to Charles Welch at <u>Charles.Welch@gmcnetwork.com</u> with the subject line, "Commerce SCADA Integrator Proposal". The email shall in its body provide the following information:

- 1. Contact Name
- 2. Phone (Office/Cell)
- 3. E-mail Address
- 4. Physical Address
- 5. SCADA Integrator Manufacturer

### **Questions**

All questions should be addressed in writing to Charles Welch at <u>Charles.Welch@gmcnetwork.com</u>. PLEASE DO NOT CALL such that questions may be properly managed and all suppliers provided the same information. The engineer will issue addenda as deemed necessary and appropriate. Questions shall be submitted no later than the following: November 15, 2024 at 5:00 P.M. E.S.T.

Companies that wish to schedule an on-site review of the existing Northside WPCP may do so by contacting Charles Welch at <u>Charles.Welch@gmcnetwork.com</u> or by calling 404-626-3893.

## Preparation of Proposal

Each Proposal shall be assembled in one PDF document with a Title Page, Table of Contents, and Section Dividers. The submittal information shall be presented in the order requested under Section 5, Proposal Information.

In the case of Vendors who choose to furnish "confidential information", this information shall be clearly identified as the confidential portion of the Vendor's Proposal and shall be assembled in the same manner as described above.

## **Delivery of Proposal**

The Proposal shall be emailed to Charles Welch at <u>Charles.Welch@gmcnetwork.com</u>. If the PDF is too large, GMC can provide an FTP site or OneDrive folder where the Vendor can upload the document.

The Proposal must be received by: 12:01 P.M. E.S.T. on December 16, 2024.

## 2 **Project Description**

General description of the work at each facility is detailed below. It is the request of Commerce that the new SCADA system at both plants allows operators control of either facility and also the control of the Beck Road Pump Station.

### Northside WPCP:

- 1. Provision and installation of all Local Control Panels (LCPs). Replace all existing LCPs with the latest technology.
- 2. Replacement of Remote Input Output (RIO) cabinets and equipment as required to operate the new system.
- 3. Rehabilitation and/or upgrading of existing SCADA server/panel.
- 4. New SCADA program.
- 5. New Operator Interface Terminal (OIT) computers and equipment.
- 6. Replacement, calibration, and commissioning of necessary instruments.
- 7. Complete programming for SCADA and LCPS.

## Grove Creek WPCP:

The project description for Grove Creek WPCP includes the Beck Road Pump Station adjacent to the plant.

- **1.** Provision and installation of all LCPS and integration with Factory Control Panels (FCPs).
- 2. Provision and installation of primary and backup SCADA program and server/panel, OITs, communication equipment including ModBUS CAT6 managed network switches, radios, and milt-mode Fiber Optic (FO) converters.
- 3. Provision, calibration, and commissioning of all integrator supplied instrumentation.
- 4. Complete programming for SCADA, LCPS, ad VFDS not factory programmed.

**Note:** Any supplier who submits in its Proposal to Commerce any information that is determined by Commerce or its engineer, Goodwyn Mills Cawood, to be substantially inaccurate, misleading, exaggerated, or incorrect may be disqualified from consideration.

## **3** SELECTION PROCESS

## **CATEGORIES**

Commerce and its consultants reserve the right to change, suspend, or rescind the Proposal rating and/or sole source selection based on subsequently ascertained information.

The offers will be evaluated according to the five categories below:

- Lead Time 20%
- Established Presence 20%
- Experience/Installations 20%
- Design, Operation, and Maintenance 20%
- Cost 20%

## 4 REQUIRED SUBMITTAL INFORMATION FOR SUPPLIERS

GENERAL

- Provide an acknowledgment of all addenda.
- Provide the following information:
  - Sales Representative company name (if applicable), project contact, address, phone number, web address and email
  - Manufacturer company name, project contact, address, phone number, web address and email

## LEAD TIME

• Length of time between approval of shop drawings/submittal and delivery to the job site. It is anticipated that shop drawings/submittal will be approved prior to project bid.

## ESTABLISHED PRESENCE

Please state the following:

- A brief company (manufacturer) history
- Duration that the Vendor has been in business
- Provide an organizational chart with the team that will be assigned to this project
- Location and qualifications of nearest qualified service representative
- Overview of maintenance and troubleshooting program

## **EXPERIENCE/INSTALLATIONS**

• State the number of total installations the manufacturer has in operation in North America.

- State the number of installations the manufacturer has in Georgia.
- List installations completed within the past ten (10) years.
  - All projects submitted shall be separated projects
  - All the projects must have been completed by the Vendor submitting a Proposal for this project.
- For two (2) projects, include the following additional information.
  - Owner's representative who has personal knowledge of the manufacturer's performance during the referenced project. More than one person may be listed, but all must have knowledge of the project. DO NOT list principals or individuals who cannot answer specific questions about the equipment.
  - Cost of manufacturer's portion of the project

### PERFORMANCE AND SITE REQUIREMENTS

- State what power requirements are needed to run the SCADA system and all associated equipment provided by the Vendor (i.e., phase, kW, etc.)
- State any additional set up and/or site requirements

### <u>COST</u>

- Provide the hourly rates for the installation and setup the vendor will perform.
- Provide an estimated schedule of O&M costs for the next 20 years that would include the following at a minimum:
  - Annual maintenance and repairs
  - Any replacement costs for equipment
  - Annual power usage (assume \$0.12/kwh)
  - Call out costs
- Provide the capital cost for all equipment necessary for the SCADA system.

#### DESIGN

- Please provide a technical specification specific for your equipment.
- Please provide cut sheets or any other brochures and technical information that would be helpful in evaluating your equipment.
- Provide equipment layout drawings with dimensions and component sizing drawn to scale for the proposed project. Provide a process and instrumentation diagram as well as electrical drawings (panels, one line, etc.).
- Provide written description of routine maintenance requirements and expected frequency. This shall match the cost estimate.
- Provide standard manufacturer equipment used by Vendor for major components, and clearly state the proposed manufacturer for all major equipment.

- Provide Vendor scope of supply.
- Clearly list all required materials not provided by the Vendor that are needed for successful installation, such as anchor bolts, supports, etc. This should not include items specifically listed as not required to be provided by the Vendor in Section 2.
- Vendors should contact the engineer in writing as described in Section 1 should they find that requirements of the RFP contribute considerable cost, yet questionable benefit. Further, cost saving or value engineering suggestions are recommended in the proposals.

# APPENDIX A – See attached

- Page 1 Northside Site Plan
- Page 2 Process & Instrumentation Diagram
- Page 3 Process & Instrumentation Diagram
- Page 4 Process & Instrumentation Diagram
- Page 5 Process & Instrumentation Diagram











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1. THE SYSTEM INTEGRATOR SHALL SUPPLY AREA PLC CONTROL PANELS PLC 100, PLC 200, AND PLC 300, AND THE ADMIN. BUILDING ROUTER PANEL. THE EXACT PANEL COMPONENTS SHALL BE DETERMINED BASED ON THE I/O LIST, SCHEMATIC WIRING DIAGRAMS, SPECIFICATION SECTIONS 13420, 13430, 13450. AND 13615.

2. THE FABRICATOR SHALL SUPPLY ALL MOUNTING AND SUPPORTING HARDWARE AS

3. ENCLOSURE SHALL BE FREESTANDING NEMA 12 PAINTED STEEL CONSTRUCTION. ENCLOSURE SIZE SHALL BE 72" H X 36" W X 24" D AND TYPICAL FOR FOUR (4)

4. THE FABRICATOR SHALL VERIFY ALL EQUIPMENT, DEVICE SPACINGS, AND PANEL CUTOUT DIMENTIONS BEFORE FABRICATION. IF THE PANEL INTERIOR SPACE IS NOT SUFFICIENT FOR INSTALLING ALL NECESSARY COMPONENTS, THE PANEL SIZE SHALL

5. INSTALL STAINLESS STEEL SHELVES AS NEEDED TO MOUNT MODEMS, INTERFACES, FIBER-OPTIC SWITCHES, ETC. INSTALL SIDE PANEL TO ACCOMODATE FIBER PATCH

Ray Group Consulting Engineers, Inc. 1827 Powers Ferry Road Building 21, Suite 200 Atlanta, Georgia 30339 Tel. (770) 953-1443 Fax (770) 953-9533

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# APPENDIX B – See attached

# Page 1 Grove Creek WPCP Site Plan



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