

**REQUEST FOR PROPOSALS
DESIGN AND INSTALLATION OF A SUPERVISORY
CONTROL AND DATA ACQUISITION (SCADA) SYSTEM
FOR MANELE WASTE WATER TREATMENT PLANT
AND PUMP STATIONS
November 10, 2017**

MAILING ADDRESS:

Lanai Water Company, Inc.
P.O. Box 630310
Lanai City, HI 96763
Attention: Joy Gannon, Director of Utilities

1 INTRODUCTION

Lanai Water Company, Inc. (“LWC”) is soliciting written proposals from suitably qualified organizations (“Proposers”) to provide the required services to implement a Supervisory Control and Data Acquisition (“SCADA”) system at Manele Waste Water Treatment Plant and Manele Pump Stations.

1.1 Included Items

LWC is soliciting a fully integrated response, providing all necessary hardware, software and services to complete the project. The response should include the following key elements in accordance with the instructions and requirements set out in this Request for Proposals (“RFP”):

Central Monitoring and Control Facility;

- Application Server Platform;
- Human Machine Interface (HMI);
- Data Archiving Capability;
- Analytical Reporting Capability; and
- Alarm Management.

Monitored Sites - Design, procurement/fabrication and installation of:

- Control Panels;
- Programmable Logic Controllers (includes programming);
- Sensors and Instrumentation;
- Controllers and Actuators; and
- Communications Equipment.

System Validation and Acceptance Testing.

User Training and Documentation.

System Maintenance and Support.

1.2 DELIVERABLES

The following list summarizes deliverables identified in this RFP. It is intended to serve as a structure for Proposer responses, including costs. Proposers are free to make additions that they believe will further assist LWC in reaching its objectives. The Proposer will be expected to deliver:

A management plan for the project, with a progress meeting every week.

A design for the SCADA system, including hardware, software and communications, as described, documenting the proposed configuration of all central monitoring components and of each site, to be submitted and approved prior to the commencement of work.

HMI, including application platform, user interface, data archiving, reporting and alarm management capabilities, conforming to approved design submittals and tested, with system and user documentation.

The SCADA system and HMI design shall include the following:

- SBR PLC to be Allen Bradley CompactLogix 1768-L33ER;
- All PLC inputs must have terminal strip surge protection;
- PLC to be 24VDC powered;
- Dual DC power supplies to be independently battery backed;
- Replacement batteries must be sealed lead-acid locally available;
- Existing Hand-Off-Auto switches will remain in use;
- Existing Annunciator board will be replaced by an Advantech FPM-8151H-R3AE touchscreen;
- Touchscreen will display a local Ignition HMI running on a fanless embedded PC w/ no less than 8GB Ram, 500GB SSD or 128GB SSD HDD for OS and second 250GB SSD for local database, Win 10;

- Local ethernet network will be connected by a Level 2 unmanaged industrial switch;
- Communication between PLC and HMI to be ethernet;
- Redundant server and single client Main SCADA HMI powered by ignition (ignition provided and installed by contractor, servers and client PC purchased and install by Pulama Lanai IT, configured by contractor);
- MySQL database will be provided by Pulama Lanai IT, installed and configured by contractor; and
- Project includes ethernet communication link between Main HMI, SBR, SPS1, SPS2, SPS3, SPSE, SPST and R1 Booster.
- Training, instructions and documentation to enable plant operators and LWC staff to effectively operate and maintain the system. Contractor to write system operator's manual including procedure to operate SBR manually in case of PLC failure.
- System maintenance and support for a period of **one (1) year** following acceptance of the system.

1.3 SCHEDULE OF EVENTS

The following tentative schedule has been established for the selection and contracting process. It is subject to change by LWC:

MILESTONES DATES:

Release of RFP: September 28, 2017

Pre-proposal conference (OPTIONAL for Proposers): October 13, 2017

Deadline for questions: October 24, 2017

Final questions and responses published: October 30, 2017 10/20/17

Proposal due date: November 10, 2017

1.4 GENERAL INFORMATION

Inquiries or questions regarding this RFP should be directed to Joy Gannon:

By E-mail: jgannon@pulamalanai.com

By Mail: Lanai Water Company, Inc.

P.O. Box 630310

Lanai City HI 96763

SCADA System

Attention: Joy Gannon, Director of Utilities
By Telephone: 808-563-0259

2.0 BACKGROUND

This section provides Proposers with a brief background on Manele Waste Water Treatment Plant and the SCADA Project.

2.1 Manele Waste Water Treatment Plant

Manele Waste Water Treatment Plant is surrounded by numerous assets, including roads, water, gas and electrical utilities, and sewage systems. At present there is the main Central facility and five (5) sewage lift stations in operation. The proper and timely operation of these stations is critical. These stations require frequent monitoring in order to ensure proper operation.

3. PROJECT SCOPE

The scope of services set forth in this RFP represents an outline of the services which LWC anticipates the successful Proposer to perform and is presented for the primary purpose of allowing LWC to compare proposals. The precise scope of services to be incorporated into the Design/Installation Agreement shall be negotiated between LWC and the successful Proposer.

4. PROJECT OBJECTIVES

The objectives of the SCADA project is to implement a central infrastructure for data, communications, system monitoring, control, historical data recording, analysis and reporting. This infrastructure will be capable of handling the current SCADA requirements of LWC and will have sufficient capacity, or be expandable, to accommodate all pumping stations and be able to handle future requirements as they arise.

Even though the scope of the initial SCADA implementation will be limited to a small number of pumps and lift stations, the overall SCADA system is envisioned as an Enterprise-wide system, encompassing all aspects of SCADA required within LWC, regardless of a particular type or purpose. All infrastructure elements should be designed with this requirement in mind.

The Manele Wastewater Treatment Plant uses an old obsolete SCADA software system to manage the operation and components of the Manele Waste Water Treatment Plant. The current software is customized and runs on Windows 98. The treatment plant system does not have the ability to “emergency call out” operators during or outside of operating hours. The LWC staff does not monitor any information and nothing is recorded. There are five (5) stand-alone phone dialers controls on the lift stations in Manele with the ability to call out an operator under certain emergency conditions.

4.1 Manele Waste Water Treatment Plant Central Facility

The SCADA Monitoring/Control System, with HMI, database, alarm management, etc. will be installed in the office at the Manele Waste Water Treatment Plant.

4.2 Material and Services to be provided

All proposals should address the design, software licensing, programming, installation, testing, startup and commissioning of a complete telemetry and SCADA system. This includes (except as noted) all materials, equipment, installation, programming, coordination, and other necessary work required for a complete system as described herein.

4.3 Project Management

Proposals should include a detailed schedule for all proposed tasks, specifying the party or parties responsible for completion of each task. A description of the implementation methodology and experience in using the methodology in implementing similar systems must also be provided. It is required that all pumping facilities included within the scope of the project remain fully operational during the work, with minimal transition time between the existing and new control systems. The project plan should reflect this requirement and clearly describe the transition plan. All proposals should state how project activities will be coordinated with LWC’s project team.

4.4 System Design

Proposers should expect to develop a fully documented design for all SCADA components, including both the central facility and remote sites, prior to the actual performance of any work.

4.5 Software Implementation

The central SCADA system will be based on a packaged software product. The successful bidder will provide all required software licensing and programming required to implement the central facility according to the approved design. Program development will be also be required for remote site.

4.6 Remote Site Installation

At each remote location proposed services should include installation of all components required to achieve a fully functioning SCADA system.

4.7 System Start-up and Acceptance Testing

Proposals should include the start-up, integration and testing of all elements of the SCADA system, including acceptance testing as described in the specifications.

4.8 Training and Documentation

Effective training will be critical in attaining its objectives. Training should be proposed for:

Maintenance operators; and

System administrators, responsible for the ongoing operation of computer hardware and software components.

4.9 Maintenance and Support

Proposals should include maintenance services for all components of the SCADA system including hardware, software and communications for a period of one (1) year following system acceptance.

4.10 Other Services

Proposals may include any other services that are considered necessary to complete this project in a turnkey fashion, or which would, in the judgment of the Proposer, improve the capability or increase the value of the delivered system.

4.11 Evaluation Criteria

The technical evaluation will be based upon a determination by the LWC as to how well each proposal meets the requirements as presented in this RFP.

The technical evaluation will consider the following factors:

Solution proposed, including:

- Software components;
- Hardware components;
- Ease of maintenance; and
- Completeness of solution.

Vendor's and Vendor's team experience and overall qualifications, including:

- Financial stability;
- Implementation methodology and experience of implementing;
- Similar systems;
- Training and support capabilities; and
- References.

Proposed services.

Quality of the overall work plan.

Completeness of response.

Time to implement the system.

Reasonableness of price.

LWC, at its absolute discretion and judgment, has the authority to make final decisions regarding this RFP.

5.0 INFORMATION REQUIRED FROM PROPOSERS

This section of the RFP identifies the expected structure and content of the proposal.

Failure to follow these guidelines may result in rejection of the proposal on the basis of non-compliance.

LWC is interested in proposals that illustrate an ability to design, install, configure, provide training, and support a system that meets the needs of Manele Waste Water Treatment Plant. LWC will be impressed by concise, well-written explanations of proposed products, services and benefits. Lengthy narrative is discouraged. Proposals should clearly express the turnkey nature of the implementation.

Proposers should be aware that the specifications and requirements stated in this RFP are minimum requirements.

5.1 Qualifications, Related Experience and References

This section of the proposal should establish the ability of the Proposer to provide the range of required goods and services satisfactorily. The section should include:

- A summary of your business activities;
- Products and services offered by your organization;
- Number of years providing those products and services;
- Number of employees;
- Size and composition of customer base;
- List of existing customers with needs similar to LWC; and
- Operational experience in Hawaii and/or on Lanai.

5.2 Methodology, Staffing, Project Organization and Schedule of Work

Identify the key personnel proposed to perform the work on the project, and indicate major areas of subcontracted work, if any. This should include the identity of the project manager or single point of contact along with the hierarchy for escalation of issues.

5.3 Insurance

Proposers should note that the selected Proposer shall comply with the various insurance requirements.

5.4 Other Supporting Material

Information considered by the Proposer to be pertinent to this project, and which has not been specifically solicited in any of the aforementioned sections, may be provided to support the proposal. Proposers are cautioned, however, that this does not constitute an invitation to submit large amounts of extraneous material; supporting material should be relevant and brief.

5.5 Cost Proposal

Proposers are expected to provide a price for all materials and services required to accomplish all project objectives, broken down based on project deliverables.

6.0 APPENDIX I - INSTRUCTIONS TO PROPOSERS

This appendix provides detailed instructions for the submission of responses to this RFP.

1. REQUIRED REVIEW

The Proposer shall carefully review this RFP without delay for defects and questionable or objectionable matter.

2. PRE-PROPOSAL CONFERENCE

An optional pre-proposal conference will be held on October 6, 2017 at 10:00 a.m. at the Manele Wastewater Treatment Plant.

The purpose of this conference is to ensure that Proposers have adequate information to respond fully and comprehensively to LWC requirements. During the conference, LWC staff will discuss with prospective Proposers the work to be performed and answer questions arising from the initial review of this RFP.

Proposers should have reviewed the RFP thoroughly prior to the pre-proposal conference and be familiar with its content, as well as LWC functional and technical requirements. Proposers are encouraged to e-mail any questions to jgannon@pulamalanai.com prior to the pre-proposal conference. This process will facilitate a more productive pre-proposal conference and result in Proposers obtaining answers to their questions more quickly.

The pre-proposal conference is not expected to take more than an hour. It is recommended that Proposers plan sufficient time to attend the pre-proposal conference; it will not be repeated. However, Proposers who attend the pre-proposal conference and subsequently require further information in order to respond adequately to the RFP should e-mail additional questions.

3. REVIEW OF PROJECT WORK

Before submitting a proposal, the Proposer shall consider the magnitude and character of the work to be done and the difficulties involved in its proper execution. Proposer shall include in any proposal all costs necessary to cover all contingencies essential to the proper installation of all hardware and software and the services proposed. No claims for compensation will be considered or allowed for extra work resulting from ignorance of any existing requirement or condition on the part of the Proposer.

4. PROPOSAL VALIDATION PERIOD

The proposal must remain valid for at least one hundred and twenty (120) days from the proposal due date. No Proposer may withdraw its proposal within this period. Proposals must be signed by an individual authorized to bind the Proposer to its provisions.

5. MAILING ADDRESS AND DEADLINE FOR RECEIPT OF PROPOSALS

Proposals will be received until November 10, 2017.

MAILING ADDRESS:

Lanai Water Company, Inc.
Attention: Joy Gannon, Director of Utilities
P.O. Box 630310
Lanai City, HI 96763

6. PROPOSER AMENDMENTS TO PROPOSALS

Amendments or withdrawals of proposals shall only be allowed if received prior to November 10, 2017.

7. LANAI WATER COMPANY IS NOT RESPONSIBLE FOR PREPARATION COSTS

All costs incurred in the preparation, submission and/or presentation of a proposal responding to the RFP, including but not limited to, the Proposer's travel expenses to attend any pre-proposal conferences, oral presentations, long distance charges, and interview sessions, shall be the sole responsibility of the Proposer and will not be reimbursed by LWC.

LWC will not pay any costs incurred for proposal or agreement preparation as a result of termination of this RFP or termination of the agreement resulting from this RFP.

8. PROPOSAL PROCESSING

All proposals shall be opened in private.

9. RIGHT TO USE IDEAS

All proposals and other material submitted become the property of LWC and may be returned only at LWC's option. LWC reserves the right to use any ideas presented in any response to the RFP. Selection or rejection of the proposal shall not affect this right.