

In-Kind Project Summary

City of Winter Springs
1126 E SR 434
Winter Springs, FL 32708

March 1, 2022

FDEP Facility ID: FLA011067
OGC Case: 21-1055

A. Project Description

The City of Winter Springs owns and operates the West WRF (Water Reclamation Facility) and fifty seven LS (lift stations) within the City's boundaries. The West WRF has a SCADA (Supervisory Control and Data Acquisition) limited to permit required functions. The system provides alarm notifications to on call staff and remote access for off hours viewing. The SCADA system also monitors the LS with wireless telemetry that communicates status and alarm conditions. Some of the LS have old radios, old radio antennas, and old PLCs (Program Logic Controllers) that operate the stations automatically. The benefits to the environment and public health of this project are laid out below.

B. Project Scope

The in-kind project will be a facilities improvement project to complete SCADA improvements at both the West WRF and LSs by replacing old equipment.

The West WRF SCADA improvements will include a new plant PLC, a new plant site radio system, and SCADA software upgrades to accommodate the new and future input/output. A communication point will be installed on top of treatment Unit #2. The communication point will be used to bring operational data, such as dissolved oxygen sensor outputs and digester levels, to the new plant PLC. A new PLC, radio, and antenna will be installed at the RCW high service pump station. The new equipment will allow individual pump monitoring, better station control, and provide alarms through the plant SCADA system. Finally, a new control plan with new PLC, radio, and antenna will be installed at the transfer pump station. The new equipment will allow more control and provide alarms through the plant SCADA system to ensure prompt notification of staff to irregularities in plant function and thereby allowing for swift correction. The equipment will be built and installed by an integrator in the industry.

Multiple field LS control panels will be upgraded. The improvements for each lift station will include a new PLC, new radio, and new antenna. The equipment will be built and installed by an integrator in the industry.

C. Project Benefits

This proposed project will help ensure the water in the reuse system meets and exceeds quality standards, increase the likelihood any potential issues with the system are detected early enough to rectify before entering non-compliance, and in doing so further help protect human health and the environment. The existing West WRF SCADA system is limited to compliance functions, flow monitoring, and blower monitoring. The West WRF SCADA improvements will provide the operators additional operational oversight by delivering process control sensor results in real time for

treatment unit #2, meaning potential issues or irregularities will be detected and prevented before reaching non-compliance levels. The plant PLC will be a new modern unit that can be readily replaced in the future if necessary. The RCW transfer station and high service pump station SCADA improvements will provide operational monitoring and alarm capability not currently available. The new LS SCADA equipment will provide fewer communication errors, more stable communication with the stations, and a modern PLC that can be readily replaced as may be required.

D. Project Cost

The estimated costs, drawn from preliminary quotations, for the in-kind project are itemized in the following table:

| ESTIMATED IN-KIND PROJECT COSTS | | | |
|---------------------------------|---|------------------------|--------------|
| Project | Description | Subtotal | Total |
| West WRF SCADA | | | |
| Plant SCADA | Replace PLC, new 900 MHZ radio, unit #2 communication point, iFix programming | \$68,413 | |
| RCW Transfer Pump Station | New control panel, new PLC, new 900 MHZ radio, iFix programming | \$121,686.67 | |
| RCW High Service Pump Station | New PLC panel, replace PLC, new 900 MHZ radio, iFix programming | | |
| | | West WRF SCADA Total = | \$190,099.67 |
| | | | |
| LS SCADA | | | |
| LS 8W & 12W SCADA | New PLC, new radio, new antenna, programming | \$25,635 | |
| LS 20W & 7E SCADA | New PLC, new radio, new antenna, programming | \$25,635 | |
| | | LS SCADA Total = | \$51,270 |
| | | | |
| | | Project Total = | \$241,369.67 |

The total estimated cost for the in-kind project is \$241,369.67, which exceeds the minimum in-kind project cost of \$224,126.47

E. Implementation Schedule

The proposed schedule for completion of the in-kind project is detailed below.

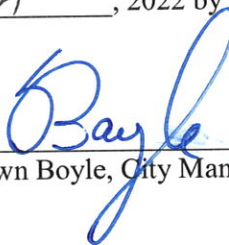
| ESTIMATED IN-KIND PROJECT SCHEDULE | | |
|------------------------------------|----------------|------------------------|
| Task | Estimated Days | Target Completion Date |
| Submit proposal to FDEP | | 2/18/2022 |
| FDEP approval of proposal | 30 | 3/20/2022 |
| Purchasing authorizations | 30 | 4/19/2022 |
| Construction | 180 | 10/16/2022 |
| Project closeout | 15 | 10/31/2022 |

F. Proposal Certification Form

My name is Shawn Boyle and do hereby testify under penalty of law that:

- a. I am a person with management responsibilities for the City of Winter Springs budget and finances. During the eighteen month period prior to the effective date of Consent Order OGC Case No: 21-1055 there has not been any transfer or use of funds obtained by the City of Winter Springs from the collection of sewer rates for any purpose not related to the management, operation, or maintenance of the Sewer System or to any capital improvement needs of the Sewer System.
- b. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowingly submitting false information in this certification.

Sworn to and subscribed before me, by means of physical presence or online notarization, this 3 day of March, 2022 by



Shawn Boyle, City Manager

Personally, known or by Production of the following identification:

Personally Known

Notary Public, State of Florida

Printed/typed or stamped name: Trinh Nguyen

My Commission Expires: 11/22/2025

Commission/Serial No: 200980

