

March 22, 2016

RESUME

RESOLUTION; AWARD OF CONTRACT TO DORSETT TECHNOLOGIES, INC. TO DEVELOP, DESIGN, AND INSTALL A COMPLETE SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM FOR THE PRINCE GEORGE COUNTY WATER AND WASTEWATER SYSTEMS (RFP #16-1113-1). AUTHORIZATION TO EXECUTE PURCHASE ORDERS FOR PHASED IMPLEMENTATION UNDER THIS SCADA CONTRACT AS APPROVED AND APPROPRIATED THROUGH FY2018.

Request Board approval for award of contract (RFP #16-1113-1) to Dorsett Technologies, Inc. to develop, design, and install a complete Supervisory Control and Data Acquisition (SCADA) system for the Prince George County water and wastewater systems.

The Utilities Department recently completed the request for proposals public procurement process with the assistance of County Purchasing and Information Technology. Eleven proposals were received and the top three offerors selected for interviews. Of these top three, Dorsett Technologies was selected for recommendation of award.

Request Board authorization allowing the County Administrator to execute purchase orders under this SCADA contract for phased implementation of the water and wastewater SCADA system from the date of this authorization through fiscal year 2018 as funds are approved and appropriated for each fiscal year by the Board.

- FY2016 approved and appropriated amount = \$200,000.
 - Phase I SCADA Implementation Cost = \$59,430 (see Dorsett scope and fee proposal attached)
 - Phase I provides SCADA for the Central Water System (1 booster station, 3 elevated storage tanks)
- FY2017 requested amount = \$300,000
 - Phase II SCADA Implementation – Provides SCADA for remaining water systems and select priority sewer lift stations and meter sites
- FY2018 estimated requirement = \$200,000
 - Phase III SCADA Implementation – Provides SCADA for remaining sewer lift stations and meter sites

Board of Supervisors
County of Prince George, Virginia

Resolution

At the regular meeting of the Board of Supervisors of the County of Prince George held in the Boardroom, Third Floor, County Administration Building, 6602 Courts Drive, Prince George, Virginia, this 22nd day of March, 2016:

Present:

Vote:

William A. Robertson, Jr., Chairman
Jerry J. Skalsky, Vice-Chair
Alan R. Carmichael
Donald Hunter
T. J. Webb

On motion of _____, seconded by _____, which carried a vote the following Resolution was adopted:

RESOLUTION; AWARD OF CONTRACT TO DORSETT TECHNOLOGIES, INC. TO DEVELOP, DESIGN, AND INSTALL A COMPLETE SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM FOR THE PRINCE GEORGE COUNTY WATER AND WASTEWATER SYSTEMS (RFP #16-1113-1). AUTHORIZATION TO EXECUTE PURCHASE ORDERS FOR PHASED IMPLEMENTATION UNDER THIS SCADA CONTRACT AS APPROVED AND APPROPRIATED THROUGH FY2018.

NOW, THEREFORE, BE IT RESOLVED That the Board of Supervisors of the County of Prince George this 22nd day of March, 2016, does hereby approve award of a SCADA contract to Dorsett Technologies, Inc. and authorize the County Administrator to execute purchase orders for phase implementation under this SCADA contract up to the available appropriated amount.

A Copy Teste:

Percy C. Ashcraft
County Administrator



February 24, 2016

County of Prince George, VA

6602 Courts Drive
Prince George, VA 23875

Reference: Phase 1 Central Water System SCADA-Virtual Server and Cellular RTU's for Remote Sites

Dear Dickie:

We are pleased to provide a proposal to supply a fully functional SCADA System for Prince George County. The focus for phase 1 will be the Central Water System included; the booster pump station, three tanks, and a virtual server. The server will be virtualized within the Prince George County's IT department and VPN access will be established for Dorsett Technologies. Dorsett Technologies will supply and install the Oracle data base manager, InfoScan software, and Visio graphical software. This proposal includes all phases of work to design, install, program, and start up phase 1. Remote sites will be communicating via cellular modems. This proposal will also include an option for an OIT at the booster pump station including programming for the entire Central Water System.

The following equipment will be provided by Dorsett Technologies:

Central Booster Pump Station RTU (1)

- ONE MS5 UNV Controller
- ONE MS5 UNV 2 Card Control Panel
- ONE Cellular Modem with antenna
- ONE UPS and surge protection
- ONE Digital Display
- ONE Lot of engineering, programming, and startup.

Elevated Tank RTU (3)

- ONE MS5-UNV Controller
- ONE MS5-UNV 1 Card Panel
- ONE Cellular Modem with antenna
- ONE UPS and surge protection
- ONE Digital Display
- ONE Lot of engineering, programming, and startup

OIT

- ONE 9" Red Lion Touch Screen Panel
- ONE Lot of engineering and programming

*One Additional MS5 UNV for stock at your location

Server with Dorsett Technologies InfoScan

Dorsett Technologies will supply and install Oracle database manager software, InfoScan software, and Visio graphical software. Installation will be done from our office in Yadkinville. Dorsett Technologies will need access to the VPN to install remotely. Any additional hardware and software needed will be the responsibility of Prince George County's IT Department.

Dorsett Technologies MicroScan Hardware Installation

This proposal is a turnkey price to install, test, and start all RTU's. This price does not include a price to remove any existing panels that the county wishes to remove.

Communication

This phase of work will be performed with cellular modems. Dorsett Technologies will provide details of the data plan needed for each remote site. Prince George County has indicated that it will tag these data plans on its existing contract with Verizon. This proposal includes 4G cell modem pricing.

Instrumentation

This proposal includes price to supply and install KPSI pressure transducers at each of the tanks.

Points List

| Location | Point | Use | Description | DI | DO | AI | AO |
|------------------------------------|----------------------------|--------------------|----------------|----|----|----|----|
| Central Water Booster Pump Station | Pump 1,2 and 3 | Status | 120 volt relay | 3 | | | |
| | Pump 1,2 and 3 | Start/Stop | 120 volt relay | | 3 | | |
| | | Power Failure | 120 volt relay | 1 | | | |
| | | HOA | 120 volt relay | 3 | | | |
| | Flow Meter | Monitor Flow | 4-20 ma | | | 1 | |
| | Check Valve Limit Switches | Pump Failure | 120 volt relay | 3 | | | |
| | Common Feed | Suction Pressure | 4-20 ma | | | 1 | |
| | Common Discharge | Discharge Pressure | 4-20 ma | | | 1 | |
| | Transfer Switch | Generator Status | 120 volt relay | 1 | | | |

| Location | Point | Use | Description | DI | DO | AI | AO |
|--------------------------|---------------------|---------------|----------------|----|----|----|----|
| Middle Road Tower | Pressure Transducer | Monitor Level | 4-20 ma | | | 1 | |
| | | Power Failure | 120 volt relay | 1 | | | |

| Location | Point | Use | Description | DI | DO | AI | AO |
|-------------------------|---------------------|----------------|----------------|----|----|----|----|
| Courthouse Tower | Pressure Transducer | Monitor Levels | 4-20 ma | | | 1 | |
| | | Power Failure | 120 volt relay | 1 | | | |

| Location | Point | Use | Description | DI | DO | AI | AO |
|--------------------------|---------------------|----------------|----------------|----|----|----|----|
| South Point Tower | Pressure Transducer | Monitor Levels | 4-20 ma | | | 1 | |
| | | Power Failure | 120 volt relay | 1 | | | |

InfoScan Owner Benefits:

- * No license fees for hardware or software
- * Full development version of software
- * 24/7 free Internet and Phone support
- * Unlimited expansion
- * Free lifetime InfoScan software updates
- * Free training at our facility
- * Historical database, web access, alarm call out programming,
Alarm management, reports, and real time and historical trending

Material: \$30,913.28

Labor: \$11,908.04

Expenses: \$1,924.26

Installation (material and labor): \$5,084.80

Instrumentation (material and labor): \$5,600.00

Total Price Phase 1: \$55,430.00

9" Red Lion OIT Option: \$4,000.00

Accepted by:

County of Prince George, VA

Kindest Regards,

Mark Gordon
SCADA SALES
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www.dorsett-tech.com