



RFQ: 706-2017A

PROPONENTS' CONFERENCE AND SITE TOUR DESIGN BUILD OF THE CITY OF WINNIPEG REGIONAL WATER DISTRIBUTION SYSTEM SCADA SYSTEM UPGRADE, PLC REPLACEMENT AND POWER RELIABILITY UPGRADES

URGENT

ISSUED: June 1, 2018

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE
REQUEST FOR QUALIFICATION**

THE FOLLOWING PROVIDES INFORMATION FROM THE PROPONENT'S CONFERENCE AND SITE TOUR, MAY 24, 2018

Proponents are reminded that they are not entitled to rely on this information or interpretation unless and to the extent that it is provided by the City by subsequent addendum. (see B6.2.2 and B12.4)

1. A pdf copy of the Proponents' Conference PowerPoint Presentation is attached.
2. Companies who were represented at the Proponent's Conference:
 - Black and McDonald
 - SNC Lavalin
 - ABCO Supply & Service Ltd
 - AMPS Services
 - Manco Control Systems
 - Celco Controls
 - Schneider Electric
 - Eramosa Engineering
 - AECOM
 - Stantec
 - Lakeside Process Controls Ltd
 - Aecon Infrastructure
 - Industrial Software Solutions
 - True North Automation

3. Proponents' Conference Questions and Answers

Question 1: Will there be a fairness advisor retained for this Project?

Answer 1: No, City of Winnipeg Materials Management personnel and procedures will provide oversight for this Project.



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**Proponents' Conference
and Site Tour – May 24, 2018**

**DESIGN BUILD OF THE
CITY OF WINNIPEG
REGIONAL WATER DISTRIBUTION SYSTEM
SCADA SYSTEM UPGRADE, PLC REPLACEMENT AND
POWER RELIABILITY UPGRADES**

*** Corrections to information from presentation**

INTRODUCTIONS

- City of Winnipeg
- Dillon Consulting Limited
- Schedule for the day
 - Winnipeg Drinking Water Treatment Plant
 - Deacon Booster Pumping Station
 - Deacon Chemical Feed Facility
 - Taché Booster Pumping Station
 - McPhillips Regional Pumping Station

- No photos

SAFETY ORIENTATION

- Required PPE for the tour of the sites
 - Hard hat, CSA approved hard-toe shoes and safety glasses

- Washrooms

- Muster Point
 - Grassed area, south of the parking lot, outside the main WTP Building entrance

- Stay with the tour group

REGIONAL WATER DISTRIBUTION SYSTEM - FACILITIES

- Shoal Lake Aqueduct Intake Facility
- Shoal Lake Aqueduct Monitoring
- Deacon Booster Pumping Station
- Deacon Chemical Feed Facility
- Hurst Reservoir and Regional Pumping Station
- MacLean Reservoir and Regional Pumping Station
- McPhillips Reservoir and Regional Pumping Station
- Taché Booster Pumping Station

SHOAL LAKE AQUEDUCT INTAKE FACILITY

- Raw water supply
- Remote location
- Accessible only by rail
- Intake structure
- Low lift pumps
- Chlorine addition

SHOAL LAKE AQUEDUCT MONITORING

- Supply line from Shoal Lake to Deacon storage cells
- Pressure point monitoring

DEACON STORAGE CELLS

- Four cells for raw water storage equalization
- Valve outlet chambers

DEACON WATER TREATMENT FACILITY

- Raw water pumping
- Dissolved air floatation
- Ozonation
- Granulated active carbon filtration
- Chlorination
- Chemical dosing systems
- Treated water storage reservoir

DEACON BOOSTER PUMPING STATION

- Three dual speed pumps
- Two variable speed pumps
- UV treatment
- Two surge towers
- Two in-town aqueducts

DEACON BOOSTER PUMPING STATION CHEMICAL FEED

- Addition of fluoride
- Addition of corrosion inhibitor

HURST STORAGE RESERVOIR AND REGIONAL PUMPING STATION

- Located on Hurst Way in South Winnipeg
- Storage reservoir for flow equalization
- Six electric pumps
- Chlorine dosing

MACLEAN STORAGE RESERVOIR AND REGIONAL PUMPING STATION

- Located on Lagimodiere Blvd and Marion St in East Winnipeg
- Storage reservoir for flow equalization
- ~~4 electric pumps~~
 - * should be 3 electric pumps
- Two gas engine drive pumps

MCPHILLIPS STORAGE RESERVOIR AND REGIONAL PUMPING STATION

- Located on McPhillips St and Logan Avenue in North Winnipeg
- Storage reservoir for flow equalization
- ~~4 electric pumps~~
 - * should be 3 electric pumps
- ~~Two gas engine drive pumps~~
 - * should be 3 gas engine drive pumps

TACHÉ BOOSTER PUMPING STATION

- Located on Taché Avenue and ?? **Messenger** in Winnipeg
- Three booster pumps

PROJECT SCOPE OF WORK

- SCADA System Replacement
- PLC Upgrades
- RDS Reliability Upgrades
 - PLC Control Logic
 - Instrumentation
- Pump and Motor Vibration and Temperature Monitoring Replacement
- Pump and Motor Control
- Training
- Warranty Support (24/7)

SCADA SYSTEM REPLACEMENT

- Existing RDS SCADA system installed in 1993
- Upgrades performed in 2017
- Current version does not support Windows Server ??
- Existing WTP SCADA system installed in 2008
- Upgrades are continually performed as they are made available
- RDS SCADA replacement to provide a single fully integrated RDS/WTP SCADA system

SCADA SYSTEM REQUIREMENTS

- Operate in a Sever/Client environment
- Operate in a virtualized environment
- Utilize object orientated programing
- Fully supported by City staff
- Redundancy
 - Server Redundancy
 - Communication Redundancy
- Disaster recovery

SCADA SYSTEM REPLACEMENT SCHEDULE

Sequencing of SCADA Replacement

- FAT
- Installation of new RDS SCADA server hardware
- Installation of new RDS SCADA System software
- Enable new PLC systems as they are installed
- Taché Booster Pumping Station
- Hurst Regional Pumping Station
- MacLean Regional Pumping Station
- McPhillips Regional Pumping Station
- Deacon Booster Pumping Station and Deacon Chemical Feed Facility

SCADA SYSTEM REPLACEMENT SCHEDULE

Sequencing of SCADA Replacement - Continued

- Merge the existing WTP SCADA system with the new RDS SCADA system
- Migrate historical data from the Telvent system into the new SCADA system

PLC UPGRADES SCHEDULE

Sequencing of PLC Upgrades

- FAT
- Shoal Lake
- Taché Booster Pumping Station
- Hurst Regional Pumping Station
- MacLean Regional Pumping Station
- McPhillips Regional Pumping Station
- Deacon Booster Pumping Station and Deacon Chemical Feed Facility

SHOAL LAKE AQUEDUCT INTAKE UPGRADES SCHEDULE

Sequencing of Upgrades

- FAT
- Installation of Ethernet cabling systems
- Installation of City supplied Wonderware InTouch application
- Upgrade PLC hardware
- Installation of new PLC programs
- Start-up and commissioning
- Station on-line

TACHÉ BOOSTER PUMPING STATION UPGRADES SCHEDULE

Sequencing of Upgrades

- FAT
- Installation of Ethernet cabling systems
- Enable new SCADA System application objects and graphic screens
- Upgrade PLC hardware
- Installation of new PLC programs
- Start-up and commissioning
- Station on-line

REGIONAL PUMPING STATION UPGRADES SCHEDULE

Sequencing of Upgrades

- FAT
- Installation of Ethernet cabling systems
- Installation of new SCADA system work station
- Enable new SCADA System application objects and graphic screens
- Upgrade PLC hardware and software
- Upgrade vibration monitoring systems

REGIONAL PUMPING STATION UPGRADES SCHEDULE - Continued

Sequencing of Upgrades - Continued

- Instrumentation upgrades
- Motor control (motor protection relays, power fail and fast restart)
- Start-up and commissioning
- Station on-line

DBPS & DCFF UPGRADES SCHEDULE

Sequencing of Upgrades

- FAT
- Installation of Ethernet cabling systems
- Installation of new SCADA system work station
- Enable new SCADA System application objects and graphic screens
- Upgrade PLC hardware and software
- Upgrade vibration monitoring systems
- Start-up and commissioning
- Station on-line

PROJECT COMPLETION

- Upgrade all PLC firmware and software versions to the latest available
- Upgrade all SCADA system software versions to the latest available
- Remove all old RDS SCADA system hardware
- Transition all RDS systems into new RDS SCADA system
- Merge the existing WTP SCADA system with the new RDS SCADA system
- Migrate historical data from the Telvent system into the new SCADA system

PROCUREMENT PROCESS

- Schedule
 - RFQ Issue – May 1, 2018
 - Proponents' Conference and Site Tour – May 24, 2018
 - Last Day for RFIs – July 10, 2018
 - Last Day for Addenda – July 17, 2018
 - Qualification Submission Deadline – July 31, 2018, 4:00 pm!
(Winnipeg time)
 - Shortlist of Prequalified Proponents – November 26, 2018
 - Anticipated RFP Issue – January 2, 2019
 - Anticipated Project Award – January 2, 2020

PROCUREMENT PROCESS

- RFIs
- Addenda
- RFQ evaluation
- Substitutions

RFQ REQUIREMENTS

- Section A – Qualification Submission
- Section B – Executive Summary
- Section C – Project Organizational Approach
- Section D – Past Project Experience
- Section E – Qualification and Experience of Key Individuals
- Section F – Project Management Methodology
- Section G – Financial Information
- Section H – Business Information

RFP PROCESS

- RFP
 - Anticipated date of posting – January 2, 2019 (7-8 months open period)
 - Honorarium and Break Payments
 - Design Build Agreement
 - Technical Requirements
 - RFI's
 - Commercially Confidential meetings

QUESTIONS?