

224-2012 ADDENDUM 1

REQUEST FOR PROPOSAL FOR PROFESSIONAL CONSULTING SERVICES FOR THE PLC REPLACEMENT AND POWER RELIABILITY UPGRADES PRELIMINARY DESIGN

ISSUED:

<u>URGENT</u>

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE REQUEST FOR PROPOSAL BY: Linda McCusker, P.Eng. TELEPHONE NO. (204) 986-6669

June 12, 2012

THIS ADDENDUM SHALL BE INCORPORATED INTO THE REQUEST FOR PROPOSAL AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Request for Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 9 of Form A: Proposal may render your Proposal non-responsive.

PART B – BIDDING PROCEDURES

Revise: B4.1 to read: The Submission Deadline is 4:00 p.m. Winnipeg time, June 22, 2012.

Add: B7.12 Persons or organizations engaged to perform professional services related to preliminary or detailed design on this Project, in the capacity of Consultant or Subconsultant, will not be eligible to respond to the subsequent bid opportunity for the construction phase of the Project.

PART D – SUPPLEMENTAL CONDITIONS

Add:	D5.4.1 (g)	A proposed solution for the upgrade and or replacement of all existing Bently Nevada pump temperature and vibration alarm monitoring hardware
Add:	D5.4.1 (h)	Throughout all of the facilities, there are approximately twenty (20) PLC panels (primarily servicing the pumps) with local/hand control capabilities. The new design shall maintain the ability for local control. Perform an investigation as to whether or not the existing local hand/control and status displays could be replaced with local panel mounted HMIs.
Add:	D5.4.1 (i)	All of the proposed designs must at minimum maintain the existing system functionality.
Revise:	D5.4.2 (b) to read:	Proposal of PLC architecture to replace or abandon the existing dedicated PLCs for digital and analog I/O.
Revise:	D5.4.3 (c) to read:	Proposal of PLC architecture to replace or abandon the existing dedicated PLCs for digital and analog I/O.
Revise:	D5.4.3 (g) to read:	Incorporation of the MacLean Pumping Station intelligent MCCs connection into the design. The MCCs at MacLean Pumping Station is being replaced as part of a separate initiative. The MCCs will be replaced with intelligent MCCs, with network communications for motor starter monitoring. As part of the MCC Replacement project, the MCC communications will be set up and tested. However, the PLC integration will be deferred until the PLC Upgrade. The MCC currently proposed is the Schneider Electric Square D Model 6 MCC with Tesys T overloads, utilizing the Modbus TCP protocol for communications.

RFP No. 224-2012 Addendum 1 Page 2 of 3

Revise: D5.4.4 (a) to read: The following Modicon Compact PLCs are to be replaced and/or abandoned by this project:

Revise: D5.4.4 (c) to read: Proposal of PLC architecture to replace or abandon the existing dedicated PLCs for digital and analog I/O.

Revise: D5.4.5 (a) to read: The following Modicon Compact PLCs are to be replaced and/or abandoned by this project:

Revise: D5.4.5 (i) (ii) to read: A complete shutdown of the intake can only be accommodated for one week and cannot be shut down from May to September. In addition, there will have to be at least two weeks between shutdowns.

Revise: D5.5.1 (d) to read: Proposal of a method of migration from the existing PLC control logic to the software logic appropriate to the new PLC hardware platform. Note it is expected that a complete PLC rewrite will be required as part of the Detail Design and Implementation phase of this project.

- Add: D5.6.11 Elimination of unnecessary alarms on pump PLC start-up for the McPhillips, MacLean, and Hurst Pumping Stations, the Deacon and Tache Booster Pumping Stations, and the Shoal Lake Intake Facility. Refer to Recommendation 6 of the "Pumping Stations Power Reliability Study". Note the "Pumping Stations Power Reliability Study" only addresses the Regional Pumping Stations. This item is to include the Deacon and Tache Booster Pumping Stations, and the Shoal Lake Intake Facility as well.
- Add: D5.6.12 Addition of remote alarm reset capability for certain pump alarms at the McPhillips, MacLean, and Hurst Pumping Stations, the Deacon and Tache Booster Pumping Stations, and the Shoal Lake Intake Facility. Refer to Recommendation 11 of the "Pumping Stations Power Reliability Study". Note the "Pumping Stations Power Reliability Study" only addresses the Regional Pumping Stations. This item is to include the Deacon and Tache Booster Pumping Stations, and the Shoal Lake Intake Facility as well.
- Add: D5.6.13 Elimination of nuisance power fail alarm messages at the McPhillips, MacLean, and Hurst Pumping Stations, the Deacon and Tache Booster Pumping Stations, and the Shoal Lake Intake Facility. Refer to Recommendation 45 of the "Pumping Stations Power Reliability Study". Note the "Pumping Stations Power Reliability Study" only addresses the Regional Pumping Stations. This item is to include the Deacon and Tache Booster Pumping Stations, and the Shoal Lake Intake Facility as well.
- Delete: D5.7.3
- Revise: D5.7.4 to read: Installation of two additional station flood sensors for each of the McPhillips, MacLean, and Hurst Pumping Stations, and the Deacon and Tache Booster Pumping Stations.

There is currently only one flood sensor per station. Failure or accidental triggering of this sensor could result in a complete loss of pumping. Refer to Recommendation 7 of the "Pumping Stations Power Reliability Study". Note the "Pumping Stations Power Reliability Study" only addresses the Regional Pumping Stations. Preliminary design of this item is to include the Deacon and Tache Booster Pumping Stations as well.

Add: D5.7.4 (f) Ensure that the proposed system provides for a means of testing the flood sensor inputs while maintaining the operation of the Station.

Delete: D5.7.5

Delete: D5.7.10

Revise: D5.7.11 to read: Addition of PLC network redundancy for each of the McPhillips, MacLean, and Hurst Pumping Stations, the Deacon and Tache Booster Pumping Stations, and the Shoal Lake Intake Facility.

		The PLCs in each pumping station are currently connected via a Modbus Plus network that is configured as a loop but is not fully redundant. Refer to Recommendation 32 of the "Pumping Stations Power Reliability Study". Note the "Pumping Stations Power Reliability Study" only addresses the Regional Pumping Stations. Preliminary design of this item is to include the Deacon and Tache Booster Pumping Stations and the Shoal Lake Intake Facility as well.
Revise:	D5.7.11(c) to read:	Provision of a network block diagram for each facility.
Delete:	D5.7.13	
Revise:	D5.8.1(c) to read:	Cross-reference all P&IDs with the PLC I/O and updated accordingly.
Revise:	D9.3 to read:	The City intends to award this Contract by July 23, 2012.