Corporate Finance Department
*Purchasing Division*

# 947-2024 ADDENDUM 1

## PROFESSIONAL CONSULTING SERVICES FOR TYLEHURST LIFT STATION UPGRADES

ISSUED: 2024-12-20
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**URGENT**

**PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID/PROPOSAL**

**THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID/PROPOSAL AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS**

Template Version: Add 2024-02-01

**Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid/Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid/Proposal may render your Bid/Proposal non-responsive.**

## PART D – SUPPLEMENTAL CONDITIONS

Add: D8.5 (d) (xii) Provide design for redundant level sensing piping systems. Each level sensing piping system shall consist of a Siemens SITRANS P DS III differential pressure transmitter, level site glass (gauge), wall penetrations into the Wet Well, floor mounted piping support, isolation (ball) valves along with a clean out port for a water hose. The complete level gauge (other than flange connection into the Wet Well) to be designed to be taken fully offline without the need to drain the Wet Well. Level gauges are to extend into the Motor Room floor for easy access of cleanout ports.

Revise: D8.5 (f) (xi) 4th bullet to read: All pump/motor instruments including vibration and temperature shall be brought to an HMI relay to be installed on **each** VFD enclosure door. At this time it is planned that the HMI controller will be Schneider Electric **HMISCU8B5 complete with 5.7" touchscreen along with digital and analog signals.**

Revise: D11.6 to read: The Consultant will be required to Design and Implement complete programming for new Schneider Electric **HMISCU8B5** Controllers that will be used with each lift pump VFD. The Consultant will be required to be utilize Schneider Electric Vijeo Designer for programming of the HMI Controller. Programs for each lift pump VFD will be similar but require tag names to match associated VFD & P&ID drawings tag names. The following will be required as part of the HMI Controller programming.

Revise: D11.6 (e) to read: HMI Controller shall be setup to provide I/O monitoring to the M580 PLC for SCADA Operations Centre to view. No control functions will be provided from the M580 PLC to the HMI Controller. The City preference is to have the **HMISCU8B5** Controllers connect to the PLC via CAT6 cabling in order to reduce the number of I/O cards needed for the pump signals. **Should communication to the M580 PLC via CAT6 cabling not be possible, the discrete and analog outputs shall be programmed and hard wired to the PLC for monitoring.**

Revise: D21.3 to read: The City intends to award this Contract by **March 17, 2025.**

## APPENDICES

Add: Appendix L Tylehurst Lift Station SCADA Pumping Trends

## QUESTIONS AND ANSWERS

Q1: Is PLC Programming part of the Consultant work and when should this be done?

A1: Yes, the Consultant will be responsible for all PLC Programming and HMI Controller Programming, refer to RFP clause D11 for further requirements. The PLC Programming and HMI Controller Programming is expected to begin and be completed during Construction Non-Resident Services Phase.

Q2: Where is the valve for isolating the Wet Well?

A2: The valve for isolating the Wet Well is located in the Comminutor Chamber room. Please note that RFP clause D8.5 (d) (v) mentions this valve is to be replaced and should not be used for isolating the Wet Well. This valve can only be replaced while the Lift Station is on bypass pumping.

Q3: Where are the bypass pumps to be located?

A3: The bypass pumps should be planned to be installed within the Gate Chamber (south of the Lift Station), refer to RFP clause D8.5 (b) (i) for bypass pumping details.

Q4: Do all pumps have the same pumping capacity?

A4: Although all three (3) pumps have the same size 30 HP motor. From SCADA pumping trends in Appendix L, Pump 1 has a capacity of around 200 L/s, Pump 1 has a capacity of around 180 L/s while Pump 2 and Pump 3 and have a capacity of around 180 L/s. Pump 1 impeller was replaced in 2021 with a larger sized impeller.

Q5: Please confirm where the water meter is to be relocated to?

A5: The water meter is currently located on the Lower Level floor and is to be relocated to the Main Floor, refer to RFP clause D8.5 (d) (ix) for details. The existing water main will need to be reused and should not include a strainer upstream of the meter.

Q6: What is the new planned lift pump setup?

A6: The existing lift pump setup requires all three (3) lift pumps to run during wet weather events and has a combined pumping capacity of approximately 380 L/s. The new lift pump setup is to include three (3) new lift pumps, with only two (2) pumps required to run at the same time to pump approximately 380 L/s. Refer to RFP clause D8.5 (d) (ii) for further details. Note that one (1) pump should be capable of running in reverse for unclogging while two (2) pumps are running in the forward direction.

Q7: Are redundant level transmitters to be used?

A7: Yes, redundant differential pressure transmitters on separate level gauges are required. Refer to added RFP clause D8.5 (d) (xii) above for further details along with RFP clause D8.5 (g) (vii).

Q8: Is there any shore line stabilization along with Geotechnical work needed?

A8: No, there is not expected to be any shore line stabilization required. There is no work planned for the Gate Chamber (other than bypass pumping work) and the Contractor will not be allowed to store materials near the river bank. Note that a City of Winnipeg Waterway Permit will be required for this project, refer to RFP clause D9.7 (b) for details to be included on the Construction Documents. The Consultant will be required to produce a Geotechnical Engineering Report to protect the river bank, refer to RFP clause D12.20 for further details.

Q9: Is there any history of water hammering with the lift pumps?

A9: No, this City has not had any issues with water hammering Tylehurst lift pumps.

Q10: Please confirm what Wet Well work is required by the Consultant?

A10: The Wet Well access manhole will require a new hatch rim and a new stainless steel ladder, refer to RFP clause D8.5 (c) (iii). At this time the condition of the Wet Well is unknown. The Consultant will be required to inspect and provide a Technical Memorandum for the Wet Well once it has been fully bypassed and cleaned. Any Structural refurbishment work will be applied towards the Additional Work Allowance, refer to RFP clause D13.9 for further details.

Q11: Where are the new monorails to be located?

A11: The new monorails are required for the Main Floor, Motor Room and Pump Room. This is for City staff to be able to remove equipment in the future, refer to RFP clause D8.5 (c) (xii). Please note that the outdoor equipment removal hatch will be located within the new building superstructure.

Q12: Where is the CSO Panel to be relocated to?

A12: The existing location of the CSO Panel is on the Lower Level room. The CSO Panel is to be relocated to the Main Floor, refer to RFP clause D8.5 (g) (viii). The CSO Panel should be installed directly above the existing installed location to make use of existing CSO instrument cabling slack.

Q13: What is the size of the existing electrical service and is there a service upgrade needed?

A13: The existing size of the electrical service is 75 kVA, 600V 3-phase. With the increased pump sizes along with HVAC loads, the electrical service will need to be upgraded. The Consultant will be required to size the new service for theoretical three (3) pumps running along with new HVAC and miscellaneous loads. Refer to RFP clause D8.5 (f) (iii) for further details.

Q14: Is there any flexibility in when the Construction Tender Package can get posted?

A14: No, the Consultant will be required to ensure Detailed Design is fully completed no later than the beginning of November 2025 so the Construction Tender can close in December 2025. Refer to RFP clause D9 for all documents required for construction tender package. Since the lift pumps and associated piping can only be replaced from November 1, 2026 to February 28, 2027, the hired Contractor will need reasonable times to procure long lead equipment (pumps, valves, MCCs, VFDs, PLC, etc.). Should the Consultant miss this critical tender stage window, the project would get delayed 1-year that puts significant risk on the City to maintain the existing lift station.