

494-2021 ADDENDUM 1

# SUPPLY, DELIVERY AND ON-SITE INSPECTIONS OF NEWPCC SUBMERSIBLE PUMPING EQUIPMENT

## **URGENT**

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID/PROPOSAL ISSUED: 2021-07-30 BY: Kevin Sapiak TELEPHONE NO. (431) 278-0876

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID/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 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 E - SPECIFICATIONS

Revise:	E6.2 to read:	The Contractor will be required to carry the associated costs for a local (Winnipeg based) ABB approved representative(s) to be on-site during all six (6) pump initial start-up and commissioning activities for the full duration as indicated in E6.1. Integrated Power Services (IPS) are the approved local ABB representative(s) that will be required to reprogram the ABB variable frequency drives (VFDs) to match the motor electrical characteristics, provide new VFD setting letters (5 total), assist with reading variable frequency drive (VFD) signals during commissioning and assist with commissioning pump instrument protection devices. Contact Wade Baxted (Integrated Power Services – Business Development Manager) at Cell: (204) 782-3746 / Office: (204) 237-6066 / Email: wbaxted@ips.ca for pricing. Subcontractor pricing shall include all associated costs for travel, meals, accommodations and wages
Revise:	E6.4 (c) to read:	Ensure the existing variable frequency drives (VFDs) settings are changed to the correct parameters by the ABB representative(s). The ABB representative(s) shall provide type written setting letters to be incorporated into the O&M manual. Setting letters shall include all settings (including settings that were not modified), pump number, date, company name and technician name. The existing VFDs model numbers currently in use are ABB ACS800-02-0320-7+H358.
Add:	E6.5 (a) (v)	Commissioning of pump instrument contacts/signals.
Add:	E6.5 (a) (vi)	Fill in inspection and commissioning checklist forms for commissioning of each pump (including pump instrument signals).
Revise:	E6.7 to read:	The Contractor and any subcontractors shall be on site for the entire durations indicated in E6.1. The price for "On-Site Start-Up Inspections" and 'On-Site Commissioning Activities" shall include all costs associated with these items of work, including all subcontractor costs, equipment costs, travel expenses, accommodations, meals and wages.
Revise:	E7.5 (k) to read:	Tab I – Inspection & Commissioning Results.
Add:	E7.5 (k) (iii)	Include type-written inspection and commissioning checklist forms completed for each pump installation and commissioning activities site visit.

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Add: E7.5 (k) (iv) Include five (5) typewritten VFD setting letters prepared by ABB representative(s) for reprogramming of each VFD.

### APPENDICES

Add: Appendix G Existing Submersible Pumps Specifications

#### **QUESTIONS AND ANSWERS**

- Q1: What is the Total Dynamic Head (TDH) including friction losses of the existing submersible pumps?
  - A1: The draft tube is a steel pipe, 711mm (28") diameter. The upper flow rate (at maximum pump speed) is 83 ML per day (15,227 GPM). The total tube length from the top of the impeller is approximately is 10.3 metres (33.8 feet). The static head is 6.0 6.5 metres (19.7 21.3 feet).

Using a 15 year old steel pipe (24" pipe at 16000 GPM with an approximate frictional coefficient of 2.42 feet per 100 feet), the total frictional head loss rounded up is approximately 1.0 feet (=  $33.8/100 \times 2.42$  feet). Therefore, the Total Dynamic Head (TDH) is approximately 6.3 - 6.8 metres (20.7 - 22.3 feet).

- Q2: Is there any intrinsically safe wiring installed?
  - A2: No, there is currently not any intrinsically safe wiring installed. Intrinsically safe wiring will be provided and installed by the City at a future date.
- Q3: What are the existing submersible pumps?
  - A3: The existing submersible pumps are KSB Amacan PB4 700-470/1406 UAG1. Refer to Tender section E4.1 (b).