

**NEWPCC – CIRCULAR PRIMARY CLARIFIER
REFURBISHMENT**

URGENT

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

ISSUED: March 5, 2008
BY: Rudy Derksen, P.Eng.
TELEPHONE NO. (204) 896-1209

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

Template Version: A20060821

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

PART A – BID SUBMISSION

Replace: **25-2008 Bid Submission with 25-2008 Addendum 1 – Bid Submission. The following is a summary of changes incorporated in the replacement Bid Submission:**

- Form B: Prices has been replaced with Form B (R1): Prices.

PART E – SPECIFICATIONS

Add: **Section 01 52 00, Item 1.2**

1.2 TEMPORARY POWER

.1 The lay down area for the Contractor as shown on Drawing 1-0101P-C0001-001 has an existing overhead service in the area. It is currently being used for another project. This service will remain after the other Contractor is complete. This service point can be used for electrical power in the area. The Contractor shall pay for the energy consumed from this service. The service is a single phase 120/240 V 100 Amp service fed from a 25 kVA transformer. The Contractor shall be responsible for obtaining construction power beyond this capacity.

.2 In the area of the primary clarifiers the Contractor may tap into the existing MCC-1P or MCC-2P for construction power. The contractor shall tap onto the main bus of one of the MCC's and install a 100 Amp 600 V 3 phase fused disconnect on the wall. The Contractor may extend his temporary distribution from this point. The Contractor shall run his distribution in a neat and orderly fashion and refrain from interfering with any City access or process requirements. There will be no meter and the Contractor will not be charged for power in this area.

Add: **Section 02 61 33, Item 1.6 ASBESTOS**

There is asbestos on the worksite. Potential for asbestos has been noted in City of Winnipeg surveys on hot water piping insulation, some ductwork and on the electrical room ceiling materials.

If asbestos is suspected and if it must be engaged in order to complete project work, request the Contract Administrator to have the material tested. If tests indicate asbestos is present, remove asbestos as agreed with the Contract Administrator.

Testing and asbestos removal, or precautions required to address the issue would be performed using funds from the project Asbestos Testing and Remediation – Cash Allowance presented on Form B (R1). Only actual costs incurred would be reimbursed. Asbestos handling procedures must conform to applicable current Workplace Health and Safety standard requirements.

Replace: **Section 03 30 00, Item 2.1.1 with the following.**

Cement: To CAN/CSA-A3001, Type MS or HS_b.

Add: **Section 05 50 00, Item 3.6 GRADE ADJACENT TO CLARIFIERS**

.1 Site grade in the area of the clarifiers is 300mm, plus or minus, below the top rim of the clarifiers. See also Photos 2.3 and 3.11 in Appendix C.

Add: **To Section 11 00 00, item 3.2.9.1, the following.**

In addition to written instructions, Eimco will provide as part of their contract, a minimum one full day of on-site training to the contractor as to how to install their clarifier systems.

Replace: **Section 11 00 00, item 3.2.18, with the following.**

Any damage to painted systems must be repaired to the highest standard. Repainting damaged materials must be done in acceptable space temperatures. Any touch-up painting related to the Eimco supplied clarifier materials shall be performed by WISL as they are already carrying a 5-year warranty on this paint system, through their contract with Eimco, the clarifier mechanism supplier. Touch-up painting shall conform to the paint specifications presented in the City of Winnipeg Bid Opportunity 361-2007 for supply of the clarifier mechanisms.

Add: **To Section 11 00 00, item 3.3**

- .3 The clarifier mechanism shall be field torque tested. The purpose of the torque test is to verify the structural integrity of the mechanism structural steel design and center drive unit. Test the mechanism under Eimco's supervision and as approved by the Contract Administrator before the mechanism is accepted and placed into operation.
- .4 The torque test shall consist of securing the rake arms by cables to anchor bolts installed by the contractor in the tank floor at locations specified by the equipment manufacturer. A load shall be applied to the scraper arm in small increments by means of a ratchet lever connected to the cable assembly. The magnitude of the applied load shall be measured by calculating the torque from the distance of the line of action of each cable to the centerline of the mechanism. A reading shall be taken at the drive design torque.
- .5 Verify that the alarm, motor cut-out, and back up safety motor cut-out switches are properly set and are in proper operation to protect the clarifier mechanism as specified.
- .6 After the installation has been verified, torque test completed, and any identified deficiencies have been remedied, perform a running test.

- .7 Advise the Contract Administrator at least seven (7) days in advance of conducting the tests to permit attendance of Eimco, the equipment supplier. The tests may be concurrent with the inspection of satisfactory installation by Eimco if mutually agreed by the Contract Administrator.
- .8 Test Operation – Each clarifier will be filled with wastewater by the City and placed in operation for up to 3 days. At any time during this period, the Contract Administrator will accept the run test. The next clarifier will then be shutdown to permit installation of the next new clarifier system. Operating problems noted during this run test shall be resolved and the system retested before the run test can be accepted.

Replace: **Section 11 50 00, Item 2.1.9.5**

Electric Motor: The motors shall be 5HP, 600 Volt, 60 Hz, 3 phase, TEFC, inverter duty rated and shall be suitable for Class I, Division II, Group D locations.

Replace: **Section 11 50 00, Item 2.1.11.13**

Provide a heavy-duty use variable frequency drive (VFD) rated for a 5 HP screw conveyor. Acceptable product: ABB ACS800 Series drives (ACS800-01-0011-7), No substitutions.

Add: **Section 11 50 00, Item 2.1.16**

.16 Local Control Panel

.1 Provide a NEMA 4X local control panel with the following features

- .1 On-off selector switch.
- .2 Manual adjustment for the speed of the screw conveyor.
- .3 Speed indication of the screw conveyor.

Replace: **Section 23 34 00 Item 2.1.1 with the following**

Each exhaust fan shall suitable for installation in a sewage treatment plant and shall be rated for 1180 L/s @ 250 Pa (2500 CFM @ 1" ESP), 1986 FRPM, 2.31 BHP, 575V / 3PH / 60Hz, 3 HP, TEFC motor, belt drive, continuously welded housing, inlet collar, flanged outlet, heavy duty self-aligning ball or roller pillow block bearings, polished solid steel shafts, fully welded heavy gauge wheel, statically and dynamically balanced, belt guard, factory mounted base with vibration isolators, industrial epoxy coating – entire unit, Shaft Seal - Felt with Rub Ring. CSA Approved. Fan shall have an AMCA B spark proof rating. (Note: motor shall remain TEFC.)

Add: **Section 26 12 17 – Dry Type Transformer Up To 600 V Primary as per attached.**

Add: **Section 26 24 17 – Panelboards Breaker Type as per attached.**

Add: **Section 26 28 21 – Moulded Case Circuit Breakers as per attached.**

Add: **Section 26 05 01, Item 1.11.2**

The DCS and PTC enclosures are located in the existing Bailey Control Equipment Room which is adjacent to the electrical room. The control panel is to be located within the electrical room. A speed control setting device, shall be housed in a NEMA 4X enclosure adjacent to the sludge bin, to be used to manually adjust the speed of the conveyor. A conveyor speed indication shall also be housed in a NEMA 4X enclosure and mounted adjacent to the speed control device. The Contractor shall allow for wiring back to limit switches etc. from the conveyor drive to the control panel.

Replace: **Section 26 05 01, Item 3.9.6, with the following.**

Relocate all existing MCC loads to new distribution panels. The existing MCC-1P and MCC-2P contain 120/208 V panelboards within the MCC. With the new MCC the panelboards will be separate from the MCC's so all 120/208 V panelboard loads shall be relocated to the new panelboards.

Replace: **Section 26 05 01, Item 3.9.7, with the following.**

All 600 V loads will be switched over to the new MCC's.

The intent is to have new cable runs without splices from the MCC's to the first field device. Beyond the first field device the existing cable/wiring remains untouched. The cabling identified as "Existing Wiring" on the schematics/wiring diagrams is shown for completeness of the wiring schematics.

Where a circuit is run in conduit there is no requirement to run a complete new conduit. The conduit may be reused. The Contractor may have to extend a portion of this conduit to suit the new location of the MCC's and Panelboards. The wiring inside the conduit shall be replaced however.

Reference drawings are attached with this addendum that show the location of all these loads and devices.

NEP-918 – Site Plan
NEP-924 – Architectural – Floor Plan & Sections
NEP-930 – Architectural – Modifications to Exist. Bldgs.
NEP-932 – Structural – Plan Above El.18.50'
NEP-934 – Structural – Plan Above El.33.50'
NEP-966 – Electrical – Power & Motor Feeders Floor Plan El.19.00'
NEP-967 – Electrical – Power & Motor Feeders Floor Plan El.33.50'
NEP-970 – Electrical – Riser Diagrams
NEP-973 – Electrical – Installation Details
NEP-974 – Electrical – Installation Details

Replace: **Section 26 05 01, Item 3.9.12**

Supply and install new lighting in Clarifiers 1, 2 and 3 walkways reusing the lighting circuits presently used for the current lighting. All existing wiring within walkways that was removed to facilitate the walkway replacement must be re-installed. The exceptions to this are lighting which is to be new, the new exhaust fans and the new clarifier sweeps.

Add: **Section 26 24 19, Item 2.3.5**

There is no preferred MCC manufacturer.

DRAWINGS

Replace:

25-2008_Drawing_1-0101P-C0001-001-R00 with 25-2008_Addendum_1-Drawing_1-0101P-C0001-001-R01
25-2008_Drawing_1-0101P-C0005-001-R00 with 25-2008_Addendum_1-Drawing_1-0101P-C0005-001-R01
25-2008_Drawing_1-0101P-M0001-001-R01 with 25-2008_Addendum_1-Drawing_1-0101P-M0001-001-R02
25-2008_Drawing_1-0101P-E0004-001-R01 with 25-2008_Addendum_1-Drawing_1-0101P-E0004-001-R02
25-2008_Drawing_1-0101P-E0005-001-R01 with 25-2008_Addendum_1-Drawing_1-0101P-E0005-001-R02
25-2008_Drawing_1-0101P-E0039-001-R01 with 25-2008_Addendum_1-Drawing_1-0101P-E0039-001-R02