

ADDENDUM 1 BID OPPORTUNITY NO. 153-2005

WINNIPEG WATER TREATMENT PROGRAM – CONSTRUCTION OF YARD PIPING AND VALVE CHAMBERS - CONTRACT 1

ISSUED: May 4, 2005

BY: Larry Smith, C.E.T., UMA Engineering Ltd.

TELEPHONE NO. (204) 204-0580

<u>URGENT</u>

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

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID OPPORTUNITY 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 Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 11 of Form A: Bid may render your Bid non-responsive.

PART A - BID SUBMISSION

Replace: Part A – Bid Submission with Addendum_1-Bid_Submission.

PART B – BIDDING PROCEDURES

Replace: B2.1 with "The submission deadline is 12:00 noon Winnipeg time, May 11, 2005."

Revise: B9.4 to read:

Notwithstanding GC.12.2.3(c), prices for Items No. 1, 2 and 7 b) on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra.

PART D - SUPPLEMENTAL CONDITIONS

Delete: D2.2 e)

Revise: D15.1 (d) (ii) to read:

The Booster Pumping station and UV facility will be permitted to be taken off line for a period of twenty-one (21) calendar days. All works required to place the pumping station back into service must be completed within this time period.

Add: D15.1 (g) "Cell 1 Raw and Treated Water connections and Cell 3 Treated Water connection shall be

scheduled such that they are completed, and the existing Cell 1 outlet line, Cell 3 outlet line, and the Deacon Booster Pumping Station available to return to service prior to December 1, 2005."

PART E – SPECIFICATIONS

Revise: E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u> <u>Drawing Name/Title</u>

Cover Sheet

- Construction Site Layout (For General Information Only)

1-0601Y-C-C0001-001-01D 1-0601Y-C-C0002-001-00D	Civil -Yard Piping – Site Plan – Plan & Coordinate Geometry Civil - Cell 1 Raw Water – Plan & Profile – Valve Chamber to the Raw Water Pumping Station
1-0601Y-C-C0003-001-00D	Civil - Cell 3 Raw Water – Plan & Profile – Existing 2100 Pipe to the Raw Water Pumping Station
1-0601Y-C-C0004-001-00D	Civil - Cell 1 & Cell 3 Treated Water – Plan & Profile – Clearwell Discharge Chamber to Existing Treated Water Connections
1-0601Y-C-C0005-001-00D 1-0601Y-C-C0006-001-00D	Yard Piping - Cell 1 Raw Water Valve Chamber – Sections & Details Civil - Yard Piping - Cell 1 Treated Water Valve Chamber – Sections & Details
1-0601Y-C-C0007-001-00D	Civil - Yard Piping - Cell 3 Treated Water Valve Chamber – Sections & Details
1-0601Y-C-C0008-001-00D 1-0601Y-C-C0009-001-00D	Civil - Miscellaneous Yard Piping Details Civil - Miscellaneous Valve Chamber Structural Details

Add: E1.3 The following Historical Drawings are provided for informational purposes to aide in the Contractors assessment of existing conditions:

Drawing No.	Drawing Name/Title
D-2074	Deacon Reservoir Expansion - Construction of Cell 3 and Cell 4 Cell 3 Outlet Piping From 172 Metres North of Cell 3 to Deacon Booster Pumping Station and Branch I/II Interconnection Plan and Profile
D-2075	Deacon Reservoir Expansion - Construction of Cell 3 and Cell 4 Cell 3 Outlet Pipe Thrust Block and Connection to Deacon Booster Pumping Station Details
DBP-19	Deacon Booster Pumping Station – Structural Part Plan Above Elev. 227.000 m
DBP-22	Deacon Booster Pumping Station – Structural – Sections I
DBP-68	Deacon Booster Pumping Station – Project – Piping Profiles
DBP-72	Deacon Booster Pumping Station – Project - Valve Chambers No's VC 301 & VC 308
F-1575 1 of 62	Canron Inc - 2743 Suction from Reservoir - Deacon Booster Pumping Station
F-1575 2 of 62	Canron Inc - 2743 Suction from Reservoir - Deacon Booster Pumping Station
F-1575 15 of 62	Canron Inc - Detail of MK No 8
F-1575 44 of 62	Canron Inc - Detail of MK No 66
F-1575 45 of 62	Canron Inc - Detail of MK No 10
F-4131 - 4	Hyprescon Inc – Deacon Reservoir Expansion – Cell 3 & Cell 4 2100 Outlet Piping
F-4131 - 5	Hyprescon Inc – Deacon Reservoir Expansion – Cell 3 & Cell 4 2100 Outlet Piping
F-4135 - C4	Hyprescon Inc – Detail of MK 4
F-4135 - C25	Hyprescon Inc – Detail of MK 25
F-4135 - C26	Hyprescon Inc – Detail of MK 26
F-4135 - C27	Hyprescon Inc – Detail of MK 27
F-4135 - C28	Hyprescon Inc – Detail of MK 28
F-4135 - C29	Hyprescon Inc – Detail of MK 29
F-4135 - C30	Hyprescon Inc – Detail of MK 30
F-4135 - C33	Hyprescon Inc – Detail of MK 33

Add: E1.4 Historical Drawings

- a) Additional historic drawings are available for viewing at the offices of UMA Engineering Ltd., 1479 Buffalo Place, Winnipeg, Manitoba;
 - (i) Deacon Booster Pumping Station DBP-1 to DBP-73
 - (ii) Deacon Reservoir Expansion Construction of Cell 3 and Cell 4 D-2000 to D-2127
 - (iii) Deacon Booster Pumping Station Canron Shop Drawings F-1575 1 to 62
 - (iv) Deacon Reservoir Expansion Hyprescon Shop Drawings F-4131 1 to 16 and F-4135 1 to 53

Bid Opportunity No. 153-2005 Addendum 1

Page 3 of 5

Revise: E2.4 (a) (i) to read:

The City of Winnipeg Water Treatment Plant Preliminary Design Report – Section 15 Geotechnical Investigations (2005).

Revise: E8.2 (a) (i) Delete phrase

"and as indicated on Supplier Shop Drawings (Appendix C)"

Revise: E9.3 (a) (ii) to read:

All pipe and fittings shall be designed and constructed to withstand the maximum design head imposed by the Deacon Reservoir (geodetic elevation 241.5 metres), plus transient allowance, at a safety factor of 1.5 working pressure and all external pressures caused by overburden, traffic or other loads to which the pipe might be subjected, all in accordance with the applicable requirements of AWWA Standards C301 and C304.

Add: E11.2.2 Bidders are advised that the consistency of the clay profile generally ranges from firm to soft with increasing depth. Shoring designs shall account for the variability in soil strengths in the assessment of earth pressures, and the potential for basal instabilities.

Add E.11.2.3 Shoring shall be designed to not permit more than 25 millimetres of horizontal or vertical movements adjacent to existing water transmission lines, active chlorine lines and railways.

Add: E11.5.4 The Contractor shall utilize excavation shoring in all areas required to protect existing and proposed infrastructure from movement or other potential damage. Limits of excavations and shoring shown on the drawings are approximate only, and may vary dependant on shoring and construction methods. Excavations shall not undermine proposed or existing pipelines and structures.

Revise: E11.6 Renumber all clauses and sub clauses of Section E11.6 to E 11.7

Add: E 11.6 Backfill

E11.6.1 Backfill under the railway spur line immediately west of Cell 1 Raw and Treated Water valve chambers shall be constructed with suitable insitu materials, placed in maximum 200 millimetre lifts, compacted to 100 percent standard proctor maximum dry density, within 3 metres of the centreline of the existing track, to an elevation of 236.20 metres.

- E11.6.2 Backfill within 1 metre of existing and new concrete structures shall be completed with free draining pit run granular material to City of Winnipeg Class 3 standards. The top 600 millimetres of the backfill adjacent to concrete structures shall be insitu clay material completed to City of Winnipeg Class 4 standards.
- E11.6.3 Backfill within 3 metres of new valve chambers and around existing valve chambers and structures excavated to facilitate construction shall be backfilled to finish grades shown on the drawings, or existing site grades in the case of existing structures. Construct 3 horizontal:1 vertical backslopes to existing and temporary site grades, where required.

Add: E13. Craning and Lifting

E13.1 General

The Contractor shall conduct all crane and lift operations in accordance to industry standard practices, legislation and safety plans.

E13.2 Submittals

- E13.2.1 The Contractor shall submit crane and lift plans in accordance to Project Heath and Safety Plans. At a minimum, lift plans shall be provided for;
 - a) Standard pipe lift plan adjacent to trenching
 - b) Pipe lift plan adjacent to existing buildings, pipes and structures

- c) Lift staging plan at each valve chamber
- E13.3 Construction Methods
- E13.3.1 Cranes and heavy equipment will not be permitted to lift within 2 metres of existing buildings and buried structures, as measured from the outside edge of the building or structure, to the nearest edge of track, wheel or outrigger
- E13.3.2 Cranes shall not impart damaging lateral loads on existing buried structures or walls. Loads shall be distributed by means of lifting pads, track pads, outriggers or other means to minimize forces. Reduction of soil dead loads adjacent to structures can be considered in total lateral load calculations.
- E13.3.3 Loads shall not be hoisted over hazardous locations, including chlorine tanks and aerial electrical lines.

<u>APPENDICIES</u>

Replace: Appendix A - Test Hole Logs with the attached Appendix A - Test Hole Logs - Addendum 1.

DRAWINGS

Replace: Drawing 1-0601Y-C-C0001-001-00D Civil -Yard Piping – Site Plan – Plan & Coordinate

Geometry

with Drawing 1-0601Y-C-C0001-001-01D Civil -Yard Piping – Site Plan – Plan & Coordinate

Geometry

Add: Historical Drawings

Drawing No.	Drawing Name/Title
D-2074	Deacon Reservoir Expansion - Construction of Cell 3 and Cell 4 Cell 3 Outlet Piping From 172 Metres North of Cell 3 to Deacon Booster Pumping Station and Branch I/II Interconnection Plan and Profile
D-2075	Deacon Reservoir Expansion - Construction of Cell 3 and Cell 4 Cell 3 Outlet Pipe Thrust Block and Connection to Deacon Booster Pumping Station Details
DBP-19	Deacon Booster Pumping Station – Structural Part Plan Above Elev. 227.000 m
DBP-22	Deacon Booster Pumping Station – Structural – Sections I
DBP-68	Deacon Booster Pumping Station – Project – Piping Profiles
DBP-72	Deacon Booster Pumping Station – Project - Valve Chambers No's VC 301 & VC 308
F-1575 1 of 62	Canron Inc - 2743 Suction from Reservoir - Deacon Booster Pumping Station
F-1575 2 of 62	Canron Inc - 2743 Suction from Reservoir - Deacon Booster Pumping Station
F-1575 15 of 62	Canron Inc - Detail of MK No 8
F-1575 44 of 62	Canron Inc - Detail of MK No 66
F-1575 45 of 62	Canron Inc - Detail of MK No 10
F-4131 - 4	Hyprescon Inc – Deacon Reservoir Expansion – Cell 3 & Cell 4 2100 Outlet Piping
F-4131 - 5	Hyprescon Inc – Deacon Reservoir Expansion – Cell 3 & Cell 4 2100 Outlet Piping
F-4135 - C4	Hyprescon Inc – Detail of MK 4
F-4135 - C25	Hyprescon Inc – Detail of MK 25
F-4135 - C26	Hyprescon Inc – Detail of MK 26
F-4135 - C27	Hyprescon Inc – Detail of MK 27
F-4135 - C28	Hyprescon Inc – Detail of MK 28

Revise: Drawing 1-0601Y-C-C0005-001-00D

F-4135 - C29

F-4135 - C30

F-4135 - C33

Reference ROOF PLAN - Revise detail references WY-S001 to WY-C005.

Hyprescon Inc – Detail of MK 29 Hyprescon Inc – Detail of MK 30

Hyprescon Inc - Detail of MK 33

Bid Opportunity No. 153-2005 Addendum 1

Page 5 of 5

Revise: Drawing 1-601-C-C009-001-00D

Reference CELL 1 RAW WATER VALVE CHAMBER - LIFTING LUG DETAILS FOR REMOVABLE PANELS

- Revise slab thickness dimension from 300 (TYP) to 400 (TYP). Revise dimension 150 (710 WIDE PANEL) to 150 (600 WIDE PANEL). Revise dimension 1050 (TYP) to TO SUIT (MIN. 300).