Corporate Finance Department
Materials Management Branch

ADDENDUM 2
BID OPPORTUNITY NO. 154-2005

WINNIPEG WATER TREATMENT PROGRAM – SUPPLY OF DISSOLVED AIR FLOTATION AND FLOCCULATION EQUIPMENT

ISSUED: June 13, 2005
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URGENT

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

Template Version: A20050301

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 E – SPECIFICATIONS

Add: **E3 PILOT TRIALS**

E3.1 The following information is available on the City of Winnipeg Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt/projects and is provided to assist the Bidder in preparing his bid to meet the performance requirements of the Bid Opportunity.

E3.1(a) Final Report (Draft) of The City of Winnipeg Water Treatment Plant Phase 2 Pilot Program (1997)

E3.1(b) City of Winnipeg High Rate DAF Pilot Trials Final Report (2004)

E3.1(c) Winnipeg Water Treatment Program – Raw Water Algae Count Summary

E3.2 The inclusion of the information in E3.1 is for information purposes only. The City does not guarantee the accuracy of the information and/or the conclusions. Also, nothing in this information or in the conclusions drawn by the Contractor, based on this information, shall relieve the Contractor of his responsibility to meet the performance requirements of this Bid Opportunity.

E3.3 With respect to E3.1(b), Appendix C, Appendix E, Appendix F, Appendix G and a portion of Section 6 of the City of Winnipeg High Rate DAF Pilot Trials Final Report (2004) contain information that is either immaterial or confidential and has not been made available to the Contractor.

Section 11301

Delete: Entire Section

Section 11301a

Delete: Entire Section

Clarification: Recycle Pumps shall be as specified in Section 11490

Section 11490

Revise 1.1.3 to read: DAF clarifier equipment shall be supplied as follows:

	No. Units per DAF Basin	No. of Units per Train*	Total No. Units
DAF Float Reciprocating Scrapers	1	4	8
Float Beaches	1	4	8
Saturator Vessels	1 per 2 basins	2	4
Recycle Injection Headers	2	8	16
DAF Compressor Packages	--	--	2
Float Trough Spray Wash Headers	1	4	8
DAF Basin Headwall Spray Wash Headers	1	8	8
DAF Basin Sidewall Spray Wash Headers	2	8	16
Recycle Pumps	--	2 duty, 1 standby	6
Saturator Pressure Retention Valves	--	2	4
DAF Control Panels	1 per train	1	2
DAF Header Selector Valves	2	8	16

Note: * One train is equivalent to four DAF basins.

Add: 1.1.6.13 DAF Header Selector Valves

Add: 1.12 **DAF Header Selector Valves**

1.12.1 Two DAF header selector valves shall be supplied, to be mounted on the recycle injection headers in each basin. This valve shall automatically close on power failure.

Add: 5.10 **DAF Header Selector Valves**

5.10.1 Two (2) DAF header selector valves shall be included per basin, one 150 mm and the other 200 mm, for a total of 16 valves. Valves shall be AWWA Butterfly valves in accordance with ANSI/AWWA C-504, and be manufactured by DeZurik, Mueller, Pratt, or approved alternate.

5.10.2 Pneumatic or electric valve actuators shall be provided (one per valve), installed and adjusted by the valve manufacturer. Actuator mounting arrangements and handwheel positions shall facilitate operation and maintenance. Actuators shall confirm to the requirements of ANSI/AWWA C-540.

Revise: 7.7.3 to read: Note: Manufacturer shall confirm all performance requirements to be compatible with the requirements of the DAF system. The performance requirements listed herein are to be considered approximate. It is the responsibility of the Contractor to ensure selection of a pump compatible with the requirements of the DAF system, see **Section 11490** – Dissolved Air Floatation Clarifier Equipment.

Maximum shutoff head (m)	80
Design flow capacity (L/s)	121 or sufficient to ensure a 10 g/m³ air loading at 20ºC and 590 kPag saturator pressure using the type of saturator proposed (see Note 1) – whichever is greater
Design flow pump head [total dynamic head (TDH) m]	65
Design flow minimum pump efficiency (%)	75
Maximum flow capacity at maximum speed (L/s)	150
Maximum flow pump head (TDH m) plus and minus 1 m	55
Maximum flow minimum pump efficiency (%)	70
Maximum flow NPSH required (m)	12
Minimum flow capacity at maximum speed (L/s)	100
Minimum flow pump head (TDH m) at maximum speed plus and minus 1 m	80
Minimum flow pump efficiency (%)	70
Maximum pump speed (rpm)	1800
Maximum motor speed (rpm)	1800
Minimum motor size (kW)	100

Note 1: Packed saturators will be granted an efficiency of 95% for the purposes of this calculation. Any unpacked saturators will be granted an efficiency of 65% for the purposes of this calculation, unless higher efficiency can be demonstrated. Air loading will be calculated as documented in B9 of this Bid Opportunity.

Add: 9.11 **DAF Header Selector Valves**

9.11.1 The DAF header selector valves will be mounted on the recycle headers in each basin, and are intended to allow remote opening and closing of each of the two recycle headers per basin via the DAF Control System.

9.11.2 The valves shall automatically close upon power failure to maintain saturator pressure and prevent depressurization.