



ADDENDUM NO. 1 BID OPPORTUNITY NO. 32-2005

WINNIPEG WATER TREATMENT PROGRAM – SUPPLY OF BUTTERFLY VALVES FOR WATER TREATMENT PLANT YARD PIPING

URGENT

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

ISSUED: January 28, 2005
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**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID OPPORTUNITY AND SHALL
FORM A PART OF THE CONTRACT
DOCUMENTS**

Template Version: A20041223

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: Form B: Prices with Form B(R1): Prices.

PART D – SUPPLEMENTAL CONDITIONS

Revise: D2.1 from “.....eight(8) butterfly valves....” to “.....seven (7) butterfly valves....”

Replace: D2.2 (b) with the following:

- (b) Supply and delivery of three (3) 2100 millimetre nominal diameter AWWA C504 Butterfly Valves, complete with manual actuators.

Replace: D10.1 (a) and (b) with the following:

- (a) Supply and delivery of two (2) 2100 millimetre butterfly valves with electric actuators and two (2) 2100 millimetre butterfly valves with manual actuators to the City of Winnipeg warehouse at 1500 Plessis Road by **July 29, 2005**.
- (b) Successful in-warehouse testing of two (2) 2100 millimetre butterfly valves with electric actuators and two (2) 2100 millimetre butterfly valves with manual actuators by **August 15, 2005**.

Replace: D13.1 (a) and (b) with the following:

- (a) Supply and delivery of two (2) 2100 millimetre butterfly valves with electric actuators and two (2) 2100 millimetre butterfly valves with manual actuators to the City of Winnipeg warehouse at 1500 Plessis Road by **July 29, 2005**— one thousand, five hundred dollars (\$1,500);
- (b) Successful in-warehouse testing of two (2) 2100 millimetre diameter butterfly valves with electric actuators and two (2) 2100 millimetre butterfly valves with manual actuators by **August 15, 2005** – one thousand, five hundred dollars (\$1,500);

PART E – SPECIFICATIONS

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

| <u>Drawing No.</u> | <u>Drawing</u> |
|----------------------------|---|
| SK-01 – Revised Addendum 1 | Conceptual Yard Piping Valve Location Plan – Revised Addendum 1 |
| SK-02 | Typical Electrical Actuator Mounting |

Revise: E3.2 as follows;

“All goods must be delivered to the above location by the Critical Stage set out in D10.1.”

Revise: E4.2 (b):

| | | |
|-------|--|-----------------------|
| (vi) | Normal System Operating Head | 18 metres Static Head |
| (vii) | Normal System Operating Pressure | 172 kPa (25 psi) |
| (ix) | Maximum Flow Rate (closing – line break) | 1200 MLd |
| (x) | Valve Test Pressure (2 times Operating) | 345 kPa (50 psi) |
| (xii) | Maximum Non-Shock Shut-Off Pressure (All) | 172 kPa (25 psi) |
| (xiv) | Headloss (fully open) | Maximum K value 0.5 |
| (xv) | Valve torques and safety factors shall be based upon the design pressure of 172 kPa (25 psi) | |

Revise: E4.2 (b) Table – Revise number of 2100 millimetre Manual Actuated Valves from 6 to 3.

Add: E4.2 (b) (xvi) Valve torques shall allow for increase in dynamic torques due to fittings.

Revise: E4.5.1 (b) (iii) from “....(275 kPa for Class 75B valves)...” to “....(345 kPa for Class 75B valves)...”

Revise: E4.5.1 (b) (iv) from “....(275 kPa for Class 75B valves)...” to “....(345 kPa for Class 75B valves)...”

Revise: E4.5.2 (a) (ii) fourth bullet;

from “A pressure of 275 kPa for class 75B valves...” to “A pressure of 345 kPa for class 75B valves...”

Replace: E5.2 (b) (i) with the following;

- (i) The electric actuators for the butterfly valves shall be sized to provide the maximum torque required to close, open or modulate the valve at full design flow, at the design conditions specified in Specification E4.2, plus safety factors. The maximum thrust output of the actuator shall not exceed the valve shaft torque capability as indicated in the latest revision of AWWA Standard C504.

Add: E5.2 (b) (ii) For modulating service, the actuator size shall be checked against valve torques at a minimum of 10 degree increments from fully open to fully closed at the design system flow rate (600 MLd).

Add: E5.2 (b) (iii) For closing service, the actuator size shall be checked against closing at Maximum Flow Rate (1200 MLd), at the minimum specified closing time.

Replace: Table in E5.2 (c) with the following:

| Valve | Valve Size | Valve Invert (m) | Mounting Floor Elevation (m) |
|----------------------|------------|------------------|------------------------------|
| Cell 1 Treated Water | 2100 | 227.49 | 236.20 |
| Cell 3 Treated Water | 2100 | 227.58 | 237.20 |
| Cell 1 Raw Water | 2100 | 230.80 | 236.50 |
| Cell 3 Raw Water | 2100 | 232.45 | 237.20 |

Replace: E.6.2 (a) with the following:

- (a) Quarter turn, manual geared actuators shall be of worm gear drive type designed for one-person operation. Maximum pull on the handwheel rim shall be 356 Newtons (80 ft pounds), at the torque required to close or open the valve for full bi-directional flow, under the design conditions specified in Specification E4.2, plus safety factors.

Add: E6.2 (b) For closing service, the actuator size shall be checked against closing at Maximum Flow Rate (1200 MLd).

Add: E6.2 (c) Acceptable Manufacturers

- (i) Rotork
- (ii) Limitorque

Delete: E6.6 (c) and note that open and close limit switches are not required at this time.

DRAWINGS

Replace: Drawing SK-01 with Drawing SK-01 Revised Addendum 1.