



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 796-2007

SUPPLY AND DELIVERY OF AMR EQUIPPED COLD WATER METERS (VARIOUS SIZES) WITH ENCODER REGISTER AND ITRON 60W ERT

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	3

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Enquiries	1
B4. Addenda	1
B5. Substitutes	2
B6. Bid Submission	2
B7. Bid	3
B8. Prices	4
B9. Qualification	4
B10. Opening of Bids and Release of Information	5
B11. Irrevocable Bid	5
B12. Withdrawal of Bids	5
B13. Evaluation of Bids	6
B14. Award of Contract	6

PART C - GENERAL CONDITIONS

C1. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Definitions	1
D4. Contract Administrator	1
D5. Notices	1

Submissions

D6. Authority to Carry on Business	2
------------------------------------	---

Schedule of Work

D7. Commencement	2
D8. Returned Goods	3

Measurement and Payment

D9. Payment	3
D10. Payment Schedule	3

Indemnity

D11. Indemnity	3
----------------	---

Warranty

D12. Warranty	4
---------------	---

PART E - SPECIFICATIONS

General

E1. Applicable Specifications and Drawings	1
E2. Goods	1
E3. Delivery	3

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

- B1.1 SUPPLY AND DELIVERY OF AMR EQUIPPED COLD WATER METERS (VARIOUS SIZES) WITH ENCODER REGISTER AND ITRON 60W ERT

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, November 14, 2007.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. ENQUIRIES

- B3.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.
- B3.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B3.3 If the Bidder is unsure of the meaning or intent of any provision therein, the Bidder should request clarification as to the meaning or intent prior to the Submission Deadline.
- B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B3.5 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B3.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B4. ADDENDA

- B4.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B4.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B4.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- B4.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B4.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B5. SUBSTITUTES

- B5.1 The Work is based on the materials, equipment, methods and products specified in the Bid Opportunity.
- B5.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B5.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least seven (7) Business Days prior to the Submission Deadline.
- B5.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the material, equipment, method or product as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract.
- B5.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B5.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B5.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B5.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B5.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B13.
- B5.9 No later claim by the Contractor for an addition to the price(s) because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B6. BID SUBMISSION

- B6.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices.

- B6.2 Further to B6.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B5.
- B6.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B6.4 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B6.4.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B6.5 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B6.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B6.8 Bids shall be submitted to:
The City of Winnipeg
Corporate Finance Department
Materials Management Branch
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B7. BID

- B7.1 The Bidder shall complete Form A: Bid, making all required entries.
- B7.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B7.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B7.2.
- B7.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B7.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;

- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B7.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.

B7.4.2 All signatures should be witnessed, except where a corporate seal has been affixed.

B7.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B8. PRICES

B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B8.1.1 Prices on Form B: Prices shall include:

- (a) duty;
- (b) freight and cartage;
- (c) Provincial and Federal taxes [except the Goods and Services Tax (GST) and Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable] and all charges governmental or otherwise paid;
- (d) profit and all compensation which shall be due to the Contractor for the Work and all risks and contingencies connected therewith.

B8.1.2 Prices on Form B: Prices shall not include the Manitoba Association for Resource Recovery Corporation (MARRC) Environmental Handling Charge (EHC) which shall be extra where applicable.

B8.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

B8.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

B9. QUALIFICATION

B9.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B9.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City a list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

- B9.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba).
- B9.4 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B9.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B10. OPENING OF BIDS AND RELEASE OF INFORMATION

- B10.1 Bids will not be opened publicly.
- B10.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements or evaluated prices) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>
- B10.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>
- B10.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B11. IRREVOCABLE BID

- B11.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B11.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B12. WITHDRAWAL OF BIDS

- B12.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B12.1.1 Notwithstanding GC.7.05(2), the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B12.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B12.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;

- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B12.1.3(b), declare the Bid withdrawn.

B12.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B11.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

B13. EVALUATION OF BIDS

B13.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9 (pass/fail);
- (c) Total Bid Price; 100%; and
- (d) economic analysis of any approved alternative pursuant to B5.

B13.2 Further to B13.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.

B13.3 Further to B13.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.

B13.4 Further to B13.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B13.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.

B13.5 This Contract will be awarded as a whole.

B14. AWARD OF CONTRACT

B14.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B14.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B14.2.1 Without limiting the generality of B14.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or

(e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B14.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.

B14.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

C1.1 The *General Conditions for the Supply and Delivery of Goods* (Form 21: 88 03) are applicable to the Work of the Contract.

C1.1.1 The *General Conditions for the Supply and Delivery of Goods* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for the Supply and Delivery of Goods*, these Supplemental Conditions are applicable to the Work of the Contract.
- D1.2 The General Conditions are amended by striking out "The City of Winnipeg Act" wherever it appears in the General Conditions and substituting "The City of Winnipeg Charter".
- D1.3 The General Conditions are amended by striking out "Board of Commissioners" or "Commissioner" wherever it appears in the General Conditions and substituting the "Chief Administrative Officer".
- D1.4 The General Conditions are amended by striking out "Tender Package" wherever it appears in the General Conditions and substituting "Bid Opportunity".
- D1.5 The General Conditions are amended by striking out "Tender Submission" wherever it appears in the General Conditions and substituting "Bid Submission".
- D1.6 The General Conditions are amended by striking out "Bidding Instructions" wherever it appears in the General Conditions and substituting "Bidding Procedures".

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of supply and delivery of AMR equipped cold water meters (various sizes) with encoder register and Itron 60w ERT.

D3. DEFINITIONS

- D3.1 When used in this Bid Opportunity:
- (a) "**Award Authority**" means the authority having the jurisdiction to award the Contract according to the City's by-laws, policies or procedures;
 - (b) "**Business Day**" means any Calendar Day, other than a Saturday, Sunday, or a Statutory or Civic Holiday;
 - (c) "**Submission Deadline**" and "**Time and Date Set for the Final Receipt of Bids**" mean the time and date set out in the Bidding Procedures for final receipt of Bids.

D4. CONTRACT ADMINISTRATOR

- D4.1 The Contract Administrator is:
Jason Enns

Water and Waste Department
Supervisor of Meters
4th Floor, 185 King Street
Winnipeg MB R3B 1J1

Telephone No.: (204) 986-2207
Facsimile No.: (204) 986-6682

D5. NOTICES

- D5.1 GC.7.05 is hereby amended to delete reference to "registered mail" and to replace same with "ordinary mail".

- D5.2 GC.7.05 is further amended hereby to include delivery by facsimile transmission (fax) as an acceptable means of delivering notices, consents, approvals, statements, authorizations, documents or other communications required or permitted to be given under this Contract. Deliveries by fax will be deemed to have been received on the day of delivery, if a business day, or if not a business day, on the business day next following the day of delivery.
- D5.3 Further to GC.7.05, all notices, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.4, D5.5 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.
- D5.4 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:
- The City of Winnipeg
Chief Administrative Officer Secretariat
Attn: Chief Administrative Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174
- D5.5 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:
- The City of Winnipeg
Corporate Services Department
Legal Services Division
Attn: City Solicitor
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

- D6.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.
- D6.2 The City shall have the right to alter the limits and/or coverages as reasonably required from time to time during the continuance of this agreement.

SCHEDULE OF WORK

D7. COMMENCEMENT

- D7.1 The Contractor shall not commence any Work until he is in receipt of a notice of award from the City authorizing the commencement of the Work.
- D7.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
- (i) evidence of authority to carry on business specified in D6.

- (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

D8. RETURNED GOODS

- D8.1 Further to GC.5.04 and GC.10.01, The Contract Administrator or his/her designate shall call the Contractor and inform them of the item(s) being returned and the reason why. The Contractor shall then send a Return Material Authorization (RMA) notice with all the necessary shipping instructions, within five (5) Calendar Days to the Contract Administrator.
- D8.2 The Contractor shall pay all transportation charges on goods in accordance with D8.1. The goods will be held at the Contractor's risk pending instruction.
- D8.3 The Contractor shall provide the Contract Administrator , as a minimum the following information on how the goods are to be returned:
 - (a) RMA notice, for authorized collect shipments;
 - (b) Company name(s) and ship to addresses;
 - (c) Preference of carrier/ shipping method, a contact person with either a local Winnipeg telephone number or a toll-free telephone number; and
 - (d) For questions or concerns provide a contact person with a toll-free telephone number.
- D8.4 The Contract Administrator shall provide the Contractor, as a minimum the following information when the goods are being returned:
 - (a) The RMA will accompany the shipment, with one (1) copy on the outside and one (1) within the package;
 - (b) The Contractors / Customers account number;
 - (c) The City of Winnipeg's Department and address;
 - (d) Total number of packages, weight and dimensions; and
- D8.5 A contact name and phone number at the pick-up point.

MEASUREMENT AND PAYMENT

D9. PAYMENT

- D9.1 Further to GC.9.03, effective January 1, 2007 the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

D10. PAYMENT SCHEDULE

- D10.1 Further to GC.9.01 and GC.9.03, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

INDEMNITY

D11. INDEMNITY

- D11.1 Notwithstanding GC.7.03, the Contractor shall indemnify the City in the amount of two million dollars (\$2,000,000), plus a minimum of twice the Contract value.

WARRANTY

D12. WARRANTY

D12.1 Warranty is as stated in GC.10.01.

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B5.

E2. GOODS

- E2.1 The Contractor shall supply and deliver AMR equipped cold water meters (various sizes) with encoder register and Itron 60w ERT in accordance with the requirements hereinafter specified.
- E2.2 Meters shall conform to The American Water Works Association (AWWA) Standard C700-02 "Standard for Cold Water Meters - Displacement Type, Bronze Main Case including Appendix A and Appendix B - Supplemental Information. If there is any inconsistency between any clause contained in the aforementioned AWWA Standard and any clause contained in this specification, this specification shall prevail.
- E2.3 Registers shall conform to The American Water Works Association (AWWA) Standard C707-05 "Standard for Encoder-Type Remote-Registration Systems for Cold Water Meters. If there is any inconsistency between any clause contained in the aforementioned AWWA Standard and any clause contained in this specification, this specification shall prevail.
- E2.4 The Contractor shall provide an affidavit of compliance (AWWA C700-02, Sec.6.3 and AWWA C707-05 Sec.6.3 within ten (10) Working Days after award of Contract to the Contract Administrator identified in D4.1.
- E2.5 The following requirements are specified (AWWA C700-02, Sec. 4.2):
- (a) the meter will perform to new meter accuracy standards (AWWA C700-02, Sec. 4.2.8.) for a period of one (1) year after being placed in service by the City of Winnipeg; and

Meter Size	Accuracy at Maximum Flow Rate	Accuracy at Intermediate Flow Rate	Accuracy at Minimum Flow Rate
$\frac{5}{8}$ " (15mm)	15 gpm 98.5 – 101.5%	2 gpm 98.5 – 101.5%	0.25 gpm 95 – 101%
$\frac{3}{4}$ " (19mm)	25 gpm 98.5 – 101.5%	3 gpm 98.5 – 101.5%	0.5 gpm 95 - 101%
1" (in) (25mm)	40 gpm (9.10 m ³ /hr) 98.5 – 101.5 %	4 gpm (0.90 m ³ /hr) 98.5 – 101.5 %	$\frac{3}{4}$ gpm (0.17 m ³ /hr) 95 – 101 %
1 ½" (in) (38mm)	50 gpm (11.40 m ³ /hr) 98.5 – 101.5 %	8 gpm (1.80 m ³ /hr) 98.5 – 101.5 %	1 ½ gpm (0.34 m ³ /hr) 95 – 101 %
2" (in) (50mm)	100 gpm (22.80 m ³ /hr) 98.5 – 101.5 %	15 gpm (3.40 m ³ /hr) 98.5 – 101.5 %	2 gpm (0.45 m ³ /hr) 95 – 101 %

- (b) should a meter not perform as specified, the Contractor shall replace it at no cost to the City of Winnipeg. A meter shall be determined not to be performing as specified if it fails to pass an accuracy test, conducted by the City of Winnipeg according to AWWA Standards.

The warranty shall not apply to meters that have been damaged due to abnormal circumstances. It is intended that the warranty is applicable to meters that have been subjected to normal operating practices within the rated capacity of the meter.

- E2.6 Should cast iron frost protection devices be provided, internal corrosion protection shall be provided (AWWA C700-02, Sec.4.2.5).
- E2.7 The meters in size $\frac{5}{8}$ " (in) 15mm, $\frac{3}{4}$ " (in) 19mm, 1" (in) 25mm, 1 $\frac{1}{2}$ " (in) 38mm, and 2" (in) 50mm) shall be frost-protection-type design (AWWA C700-95, Sec.4.3.1.1). If the frost protection plate fails and as a result internal damage occurs, the Contractor shall replace the damaged meter at his cost for a period of ten years from date of supply.
- E2.8 Meters shall be furnished with top or bottom covers constructed from cast iron, stainless steel or copper alloy (AWWA C700-02, Sec.4.2.9.2).
- E2.9 Meters 1 1/2" and 2" shall be flanged on both ends per AWWA C700 section 4.3.2.2.
- E2.10 Coupling nuts, tailpieces, and companion flanges are not required.
- E2.11 The straight reading permanently sealed encoder type registers (AWWA C707-05 Sec. 4.2) to be furnished with each meter shall be as follows:
- (a) Register shall read in cubic meters;
 - (b) Register shall contain six (6) numeral wheels;
 - (c) For meter sizes $\frac{5}{8}$ ", $\frac{3}{4}$ ", 1", and 1 $\frac{1}{2}$ " the indication of the initial dial shall be 0.1 cubic meters. For 2" meter sizes the indication of the initial dial shall be 1 cubic metre;
 - (d) The register shall be attached to the meter body such that it can accept a tamper seal wire or shall be sealed at the factory such that any tampering is easily detected or prevented;
 - (e) The faceplate of the register shall be labelled with the manufacturer's name;
 - (f) Odometers shall be set to zero (000000) at time of shipping to the City of Winnipeg;
 - (g) The register shall be equipped with a low flow indicator;
 - (h) For the purpose of this Bid Opportunity a permanently sealed register shall be a register protected by a formed joint that can only be unsealed by destroying one or more of the components forming the joint;
 - (i) The signal encoder shall encode six (6) digits.
- E2.12 When installed by the City of Winnipeg, the meter will be sealed using a copper seal wire. Meters supplied shall meet one of the following provisions:
- (a) where bayonet mount register is provided, meters shall be supplied to accept a three-point seal to the register, through a bolt with a hole in the head of the bolt, which bolt secures the bottom cover, and to the upstream coupling nut/flange; or
 - (b) where the register is mounted inside the top cover, a two point seal to the top cover and to the upstream coupling nut/flange; or
 - (c) some alternate sealing wire technique as may be proposed by the Contractor that is acceptable to the City of Winnipeg. Such alternate sealing wire technique must be approved by the City of Winnipeg **prior** to the Bid Opportunity closing time, in accordance with B5.
- E2.13 Registration accuracy shall meet or exceed requirements of AWWA C700-02, Sec. 4.2.8. Accuracy testing of each meter and register shall be performed. Each meter shall be factory tested for accuracy of registration at flow rates and test flow quantities in accordance with Section 4.2.8 of AWWA C700-02 and AWWA Manual M6. The manufacturer shall furnish a certificate(s) showing that each meter and register has (have) been tested for accuracy of registration and that the meter assembly complies with the accuracy and capacity requirements of AWWA C700-02 within ten (10) Business Days from a request by the Contract Administrator.

- E2.14 The City may, at its discretion, randomly test all of the water meters in any given shipment in accordance with the foregoing. The City will test each meter at three (3) flow rates, these being "minimum test flow" and the upper limit and lower limit for "normal test flow limits" as listed in Table 1 AWWA C700-02, Section 4.2.8. Should the City test a meter and find that it does not meet the specified accuracy requirements, the following shall apply:
- (a) up to ten (10%) percent of the shipment quantity shall be accuracy tested by the City, at the Contractor's expense. This applies to all costs of testing following discovery of a non-conforming meter; and
 - (b) should **any** other meter be found not to meet the specified accuracy requirements the entire shipment shall be replaced or adjusted by the Contractor at the Contractor's expense.
- E2.15 Meters and registers supplied under this Bid Opportunity become the property of the City of Winnipeg and the Contractor acknowledges that the City may use these meters and registers in any way that the City shall decide. Without limiting the foregoing, the City will be able to read any meters or meter registers purchased under this Bid Opportunity using meter interface units manufactured or otherwise provided by any supplier, vendor or manufacturer of the City's choice at any time in the future. The Contractor acknowledges that such use would not be an infringement on any patent or any other intellectual property rights as may be claimed by the Contractor in any such meters or registers.
- E2.16 The meters to be supplied under this Contract are for use in residential buildings and commercial buildings. Meters are often installed in close proximity to the daily activities of the inhabitants. Accordingly, noise levels emitted from the meter should be such that they do not impact on the inhabitant's lifestyles.
- E2.17 All meter main cases shall be made of a lead-free brass containing a minimum of eighty-five (85%) percent copper that meet National Sanitation Foundation (NSF) 61 standard. The serial number should be stamped between the outlet port of the main case and the register. Main case markings shall be cast raised and shall indicate size, model, direction of flow and NSF 61 certification. Plastic main cases are not acceptable.
- E2.18 All lead-free brass main cases shall be guaranteed free from manufacturing defects in workmanship and material for the life of the meter.
- E2.19 Each register shall be equipped with an Itron 60w ERT with a minimum of five (5') feet of wire.

E3. DELIVERY

- E3.1 Goods shall be delivered within thirty (30) Calendar Day(s) of the placing of an order, f.o.b. destination, freight prepaid to:
- Water and Waste
Door 27 – 552 Plinquet Street
Winnipeg MB
- E3.2 The Contractor shall confirm each delivery with the Contract Administrator or his/her designate, at least two (2) Business Days before delivery.
- E3.3 Goods shall be delivered between 8:30 a.m. and 3:00 p.m. on Business Days.