



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 413-2016

DEACON RESERVOIR DRAINAGE IMPROVEMENTS

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 DEACON RESERVOIR DRAINAGE IMPROVEMENTS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, May 13, 2016.

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. SITE INVESTIGATION

B3.1 Further to C3.1, the Contract Administrator or an authorized representative will be available at the Site from 9:00 a.m. to 10:00 a.m. on May 5, 2016 to provide Bidders access to the Site.

B3.2 Bidders to meet at the access driveway for the Deacon Reservoir (Cell 2) off PR 207.

B3.3 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

B3.4 The Site investigation will not include access to the material stockpile located within the City of Winnipeg's Water Treatment Plant site.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B4.2 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 notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 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.

B4.4 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.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Bidder before receipt hereof; or
- (b) becomes publicly known other than through the Bidder; or

(c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

B6.1 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.

B6.2 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.

B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B6.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.

B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.

B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.

B7.4 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 Plant, Material or method 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 proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
- (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 proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.

- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her 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.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.
- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her 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 B17.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) Bid Security
 - (i) Form G1: Bid Bond and Agreement to Bond, or
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or
a certified cheque or draft;
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 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.
- B8.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B8.4.1 Samples or other components of the Bid 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.
- B8.5 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B17.1(a).
- B8.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.8 Bids shall be submitted to:

The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 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/her own name, his/her 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/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 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.
- B9.4 Paragraph 12 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/her 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/her 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.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.5 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.

B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.2 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.
- B10.3 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.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DISCLOSURE

B11.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.

B11.2 The Persons are:

- (a) N/A

B12. QUALIFICATION

B12.1 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; 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.

B12.2 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 Division website at <http://www.winnipeg.ca/matmgt/debar.stm>

B12.3 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;
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba); and
- (d) upon request of the Contract Administrator, obtain Security Clearances in accordance with PART F -

B12.4 Further to B12.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
- (b) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
- (c) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).

B12.5 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.

B12.6 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.

B13. BID SECURITY

B13.1 The Bidder shall provide bid security in the form of:

- (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
- (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
- (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.

B13.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B13.1.2 All signatures on bid securities shall be original.

B13.1.3 The Bidder shall sign the Bid Bond.

B13.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.

B13.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

B13.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B13.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.

B13.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.

B13.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

B14. OPENING OF BIDS AND RELEASE OF INFORMATION

B14.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.

B14.1.1 Bidders or their representatives may attend.

B14.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B13 will not be read out.

- B14.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B14.3 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 Division website at <http://www.winnipeg.ca/matmgt/>
- B14.4 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.

B15. IRREVOCABLE BID

- B15.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B15.2 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 until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

B16. WITHDRAWAL OF BIDS

- B16.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B16.1.1 Notwithstanding C23.3, 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.
- B16.1.2 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 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B16.1.3 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 12 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B16.1.3(b), declare the Bid withdrawn.
- B16.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B15.2 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.

B17. EVALUATION OF BIDS

- B17.1 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, or acceptable deviation there from (pass/fail);

- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B12 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B7.

B17.2 Further to B17.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid 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.

B17.3 Further to B17.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.

B17.4 Further to B17.1(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.

B17.4.1 Further to B17.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B18. AWARD OF CONTRACT

B18.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B18.2 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.

B18.2.1 Without limiting the generality of B18.2, 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.

B18.3 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, in accordance with B17.

B18.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Construction*, these Supplemental Conditions are applicable to the Work of the Contract.

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of regrading ditches along PR 207 and associated work.

D2.2 The major components of the Work are as follows:

- (a) Removal of organic material from existing highway ditches and hauling offsite.
- (b) Placement of competent clay material and grading ditches to proposed grade.
- (c) Replacement of reservoir cell driveway culverts.
- (d) Installation of turf stone.
- (e) Abandonment of existing catch basin.
- (f) Restoration.

D3. DEFINITIONS

D3.1 When used in this Bid Opportunity:

- (a) "**CSP**" means Corrugated Steel Pipe.

D3.2 Notwithstanding C1.1, when used in this Bid Opportunity:

- (a) "**Business Day**" means any Calendar Day, other than a Saturday, Sunday, or a statutory or civic holiday.

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is AECOM Canada Ltd. represented by:

Adam Braun, P. Eng.
Municipal Engineer

Telephone No. 204 477-5381
Email Address adam.braun@aecom.com

D4.2 At the pre-construction meeting, Mr. Braun will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D5. CONTRACTOR'S SUPERVISOR

D5.1 At the pre-construction meeting, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D6.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

- D6.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D6.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D6.4 A Contractor who violates any provision of D6 may be determined to be in breach of Contract.

D7. NOTICES

- D7.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D7.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D7.3, D7.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D4.1.
- D7.3 Notwithstanding C21, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:
- The City of Winnipeg
Chief Financial Officer
Facsimile No.: 204 949-1174
- D7.4 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 facsimile number:
- The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155
- D7.5 Bids Submissions must not be submitted to this facsimile number. Bids must be submitted in accordance with B8.**

D8. FURNISHING OF DOCUMENTS

- D8.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him/her at cost.

SUBMISSIONS

D9. AUTHORITY TO CARRY ON BUSINESS

- D9.1 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.

D10. SAFE WORK PLAN

- D10.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D10.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

D11. INSURANCE

- D11.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability, broad form property damage cover and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence.
- D11.2 Deductibles shall be borne by the Contractor.
- D11.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D11.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D12. PERFORMANCE SECURITY

- D12.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D12.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D12.2 If the bid security provided in his/her Bid was not a certified cheque or draft pursuant to B13.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D13. SUBCONTRACTOR LIST

D13.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract.

SCHEDULE OF WORK

D14. COMMENCEMENT

D14.1 The Contractor shall not commence any Work until he/she is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.

D14.2 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 D9;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D10;
 - (iv) evidence of the insurance specified in D11;
 - (v) the performance security specified in D12; and
 - (vi) the Subcontractor list specified in D13.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D14.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D15. SUBSTANTIAL PERFORMANCE

D15.1 The Contractor shall achieve Substantial Performance within fifteen (15) consecutive Working Days of the commencement of the Work as specified in D14.

D15.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D15.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D16. TOTAL PERFORMANCE

D16.1 The Contractor shall achieve Total Performance within forty-five (45) consecutive Working Days of the commencement of the Work as specified in D14.

D16.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract

Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D16.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D17. LIQUIDATED DAMAGES

D17.1 If the Contractor fails to achieve Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:

- (a) Substantial Performance – one thousand dollars (\$1,000.00);
- (b) Total Performance – five hundred dollars (\$500.00).

D17.2 The amounts specified for liquidated damages in D17.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial Performance or Total Performance by the days fixed herein for same.

D17.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D18. JOB MEETINGS

D18.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.

D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D19. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D19.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

D20. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D20.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4.

MEASUREMENT AND PAYMENT

D21. PAYMENT

- D21.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D22. WARRANTY

- D22.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

FORM H1: PERFORMANCE BOND
(See D12)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$_____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

BID OPPORTUNITY NO. 413-2016

DEACON RESERVOIR DRAINAGE IMPROVEMENTS

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D12)

(Date)

The City of Winnipeg
Legal Services Department
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 413-2016
DEACON RESERVOIR DRAINAGE IMPROVEMENTS

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

_____ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
LD-7344	Drainage Improvements – Plan / Profile
LD-7373	Drainage Improvements – Cross Sections/Details

GENERAL REQUIREMENTS

E2. SITE SECURITY AND PROTECTION

- E2.1 Description
- (a) This specification covers on site security requirements during construction.
- E2.2 Site Security
- (a) All personnel accessing the City of Winnipeg's Water Treatment Plant site for construction are required to obtain a Criminal Record Search Certificate and Public Safety Verification Check, as outlined in PART F. The Contractor shall submit copies of the Criminal Record Search Certificates to the Contract Administrator identified in D4. The City of Winnipeg Water Services Division will issue time-limited security passes to personnel identified as approved to work on the project. Personnel receiving passes are not permitted to provide or share security passes with other personnel to gain access to the Site. Violation of this policy will result in immediate dismissal of the personnel from the Site.

E3. OPERATING CONSTRAINTS FOR WORK IN CLOSE PROXIMITY TO RESERVOIR INTERCONNECTOR CULVERTS

- E3.1 Description
- (a) This Section details operating constraints for all Work to be carried out in close proximity to the Deacon Reservoir interconnector culverts. Close proximity shall be deemed to be any construction activity within a 5 m offset from the centreline of the culverts.
- E3.2 General Considerations for Work in Close Proximity to the Interconnecting Culverts
- (a) Deacon reservoir is a critical component of the City of Winnipeg Regional Water Supply System and Work in close proximity to the reservoir interconnector culverts shall be undertaken with an abundance of caution. Damage caused to the culverts would likely have catastrophic consequences.

- (b) Two HDPE lined, reinforced concrete box culverts connect reservoir cells No. 1 and 2 as shown on the Construction Drawings. There is minimal soil cover over top of the culverts where they cross the existing roadway and ditches.
- (c) Work around the culverts shall be planned and implemented to minimize the time period that Work is carried out in close proximity to the pipe and to ensure that the culverts are not subjected to excessive construction related loads, including excessive vibrations and/or concentrated loads.

E3.3 Submittals

- (a) Submit proposed construction equipment specifications to the Contract Administrator for review seven (7) days prior to construction. Submittal shall include:
 - (i) Equipment operating weight and dimensions including wheel or track base, track length or axle spacing, track widths or wheel configurations
 - (ii) Payload weights
 - (iii) Load distributions in the intended operating configuration
- (b) Submit a Construction Method Statement with proposed construction plan including haul routes, excavation equipment locations, loading positioning, to the Contract Administrator for review seven (7) days prior to construction. Do not commence construction until the Construction Method Statement has been reviewed and accepted by the Contract Administrator.

E3.4 Pre-Work, Planning and General Execution

- (a) No Work shall commence at the Site until the Equipment Specifications and Construction Method Statement have been submitted and accepted, and the culvert locations have been clearly delineated in the field. Work over the interconnection culverts shall only be carried out with equipment that has been reviewed and quantified in terms of its loading implications on the pipe.
- (b) Where Work is undertaken in close proximity to the interconnecting culverts, utilize construction practices and procedures that do not impart excessive vibration loads on the culverts or that would cause settlement of the subgrade below the culvert.
- (c) No excavated materials, organics, granular materials, or any other construction materials may be stock piled within 5 metres of culverts centerline.
- (d) The Contractor shall make themselves fully aware of all associated restrictions, constraints, and risks associated with working adjacent to and over the interconnecting culverts.
- (e) The Contractor shall ensure that all crew members understand and observe the requirements of this specification. Prior to commencement of on-site work, the Contractor shall jointly conduct an orientation meeting with the Contract Administrator and all superintendents, foreman, and heavy equipment operators to make all workers on Site fully cognizant of the limitations of altered loading on, the ramifications of inadvertent damage to, and the constraints associated with Work in close proximity to the interconnecting culverts. New personnel introduced after commencement of the project need to be formally orientated as to the risks and constraints associated with working over the culverts.

E3.5 Restrictions for working in close proximity to the interconnecting culverts:

- (a) Use of pneumatic concrete breakers within 3 metres of the interconnecting culverts centerline is prohibited. Any concrete or pavement shall be full depth sawcut and carefully removed. Use of hand held jackhammers will be allowed.
- (b) Utilise only smooth edged excavation buckets where there is less than 1.6 metres of earth cover over top of the interconnecting culvert and further excavation is required either adjacent to or over the culvert. Where there is less than 1 metre of cover over the culvert, carefully expose the culvert by hand or soft excavation to delineate the location and depth of the culvert prior to proceeding with excavation. Provide full time supervision of the excavation.

- (c) Where there is less than 2.5 m of earth cover over the interconnecting culvert, offset backhoe or excavation equipment a minimum of 3 m from the culverts centerline, to carry out excavation.
- (d) Compaction within 3 metres of the centreline of the culvert shall be either carried out by static methods (without vibration) or with smaller approved equipment such as hand held plate packers or smaller roller equipment. Bucket compaction will not be permitted.

E3.6 Measurement and Payment

- E3.6.1 All work required by this section of the General Requirements shall be considered incidental to the work and will not be measured for payment. No additional payment will be made.

E4. EXCAVATION, DITCHING, AND BACKFILL

E4.1 Description

- (a) This Specification covers the requirements for excavations, ditching works, and backfilling of trenches and structures.

E4.2 Ditching and Grading

- (a) All ditching and grading work shall be undertaken in accordance with CW 3170.
- (b) All organic material shall be removed from the existing ditches as shown on the Construction Drawings.
- (c) Existing ditches shall be graded and shaped as per the Construction Drawings.
- (d) Competent material excavated in order to achieve the specified ditch grade may be utilized elsewhere as fill material.
- (e) Allowable variance from specified grade for ditches to be ± 50 mm of the grade shown on the Construction Drawing.
- (f) The following excavation quantities have been estimated and may be used for bidding purposes:
 - (i) Total Cut: 585 m³
 - (ii) Total Fill: 468 m³

E4.3 Disposal of Excavated Materials

- (a) All organics and other excavated materials may be disposed of at the surplus material stockpile located west of the City of Winnipeg's Water Treatment Plant. Access to the material stockpile is through the City of Winnipeg's Water Treatment Plant site.

E4.4 Claw Borrow Material

- (a) Clay borrow material may be excavated from the surplus material stockpile located west of the City of Winnipeg's Water Treatment Plant.

E4.5 Backfill

- (a) All backfill material shall be placed and compacted in accordance with CW 3170.

E4.6 Abandonment of Existing Catch Basin

- (a) Abandon the existing catch basin and lead pipe as shown on the drawings and in accordance with CW 2130.

E4.7 Measurement and Payment

E4.7.1 Ditch Regrading

- (a) Removal of organics, grading and shaping of ditches, and placement of borrow material shall be paid on a shall be measured and paid at the Contract Unit Price per linear meter for "Ditch Regrading", which price shall be payment in full for supplying all

required materials, completing all excavation works, hauling, compaction of placed material, and for performing all operations herein described.

E4.7.2 Miscellaneous Grading

- (a) Miscellaneous grading shall be measured and paid at the Contract Unit Price per square meter for "Miscellaneous Grading", which price shall be payment in full for supplying all required materials, completing all excavation works, hauling, compaction of placed material, and for performing all operations herein described.
- (b) Miscellaneous grading shall be considered any regrading required to ensure proper drainage of adjacent lands after completion of drainage improvements along PR 207. Measurement and payment for miscellaneous grading shall only occur where grading work has been identified and accepted by the Contract Administrator.

E4.7.3 Abandonment of Existing Catch Basin

- (a) Abandonment of the existing catch basin and lead shall be paid at the Contract Lump Sum Price for "Abandon Existing Catch Basin", which price shall be payment in full for supplying all required materials and completing all work herein described.

E5. ESTABLISHMENT OF GRASSED AREAS

E5.1 Description

E5.1.1 This Specification covers the requirements for re-establishing areas disturbed by construction.

E5.1.2 Grassed areas may be seeded or sodded.

E5.1.3 Referenced Standard Construction Specifications

- (a) CW 3510-R9 Sodding
- (b) CW 3520-R7 Seeding
- (c) CW 3540-R5 Topsoil and Finish Grading for Establishment of Turf Areas

E5.1.4 Referenced Standard Details

- (a) SD-243- Sodding Details

E5.2 Materials

E5.2.1 Sodding shall be completed in accordance with CW 3510.

- (a) Sod shall be a mixture of 95% Kentucky bluegrass, using equal proportions of any three Class 2 cultivars, and 5% Creeping Red fescue.

E5.2.2 Seeding shall be completed in accordance with CW 3520.

- (a) Provide the Contract Administrator with Certificates of Analysis and mix compositions for all seed mixes. Include supplier's name and telephone contact information, and percentages of each species and cultivar in each mix.
- (b) Obtain Contract Administrator's approval for any proposed adjustments to the seed mix species or cultivars.
- (c) Seed Mix shall be a mixture of the following species:
 - (i) 70% Fulfs Alkaligrass (*Puccinellia distans*);
 - (ii) 20% Audubon or Aberdeen Red fescue (*Festuca rubra*);
 - (iii) 10% Perennial Rye Grass (*Lolium perenne*);
- (d) Cover Crop (Nurse Crop)
 - (i) Use Annual ryegrass as a cover crop in all seeded areas.

E5.2.3 Areas where turfstone is installed shall be seeded in accordance with E6.

E5.2.4 Topsoil and fine grading shall be completed in accordance with CW 3540.

E5.3 Construction Methods

E5.3.1 Sodding:

- (a) Install 75 mm topsoil in accordance with CW 3540.
- (b) Finish grading, sod placement, watering and rolling and 30-day maintenance shall conform to CW 3510.

E5.3.2 Seeding:

- (a) Seed with a Brillion Seeder, or equal on 100 mm compacted depth of imported topsoil. Preparation of seed bed as per CW 3520.
- (b) Seeding shall conform to CW 3520:
 - (i) Sow Seed Mix at 2.2 kg/100 square metres (220 kg/hectare),
 - (ii) Sow cover crop at 0.6 kg/100 square metres.

E5.4 Maintenance

E5.4.1 Maintenance of Sod shall be completed in accordance with CW 3510.

E5.4.2 Maintenance of Seed Mix shall be completed in accordance with CW 3520 and

- (a) The Contractor shall mow seed mix areas to a height of 100 mm

E5.4.3 Termination of Maintenance Period

- (a) The maintenance period shall be terminated after the requirements of CW 3510 and CW 3520 are met and
 - (i) The seeded area has sufficient growth density that bare spots do not exceed 5% of total surface area.

E5.5 Measurement and Payment

E5.5.1 The establishment of grassed areas shall be measured on a unit basis. The number of units measured and paid will be the number of square meters of grassed area acceptably established based on measurements made by the Contract Administrator. Payment for the establishment of grassed areas shall be measured and paid at the Contract Unit Price per square meter for "Establishment of Grassed Area", which price shall be payment in full for supplying all materials and performing all operations herein specified, including rut filling and minor surface grading.

E5.5.2 Cover Crop (Nurse Crop) Seeding

- (a) There will be no separate measurement for cover crop (nurse crop) seeding. Seeding of a nurse crop will be included in payment for seeding operations.

E5.5.3 Herbicides and Insecticides

- (a) There will be no separate measurement for materials, equipment and operations related to the use of herbicides and insecticides.

E5.5.4 Payment for sodding shall be in accordance with the following:

- (a) seventy five (75%) percent of quantity following supply and placement
- (b) Remaining twenty five (25%) percent of quantity following termination of the maintenance period.

E5.5.5 Payment for seeding shall be in accordance with the following:

- (a) Sixty five (65%) percent of quantity following supply and placement
- (b) Remaining thirty five (35%) percent of quantity following termination of the maintenance period.

E6. TURFSTONE

E6.1 Description

E6.1.1 This specification shall supplement and amend City of Winnipeg Standard Construction Specification CW 3330 "Installation of Interlocking Paving Stones".

E6.1.2 Referenced Standard Construction Specifications

- (a) CW 3110- Sub-grade, Sub-base and Base Course Construction
- (b) CW 3310- Portland Cement Concrete Pavement Works
- (c) CW 3330- Installation of Interlocking Paving Stones
- (d) CW 3520- Seeding
- (e) CW 3540- Topsoil and Finish Grading for Establishment of Turf Areas

E6.1.3 Referenced Standard Detail

- (a) SD-240A- Interlocking Paving Stone Detail

E6.2 Materials

E6.2.1 Turfstone Units

- (a) Turfstone units shall be Barkman Concrete Turfstone Eco Units or approved equal in accordance with B7.
- (b) Turfstone units shall conform to the requirements of CAN3-A231.2, Precast Concrete Pavers.
- (c) Further to CAN3-A231.2.6.1.1, where concrete pavers are shipped for installation before the pavers are twenty-eight (28) days old, the average compressive strength of these pavers at the time of delivery to the work site shall be not less than 40 MPa.

E6.2.2 Topsoil

- (a) Topsoil shall be in accordance with CW 3540.

E6.2.3 Grass Seed Mix

- (a) Grass seed mix shall be in accordance with CW 3520.

E6.2.4 Other Materials

- (a) All other materials, including aggregates for the bedding sand and filler sand shall be in accordance with CW 3330.

E6.3 Construction Methods

E6.3.1 Installation of Turfstone Units

- (a) Install turfstone units in accordance with drawings and CW 3330 and SD-240A.
- (b) Fill turfstone units with topsoil to within 13mm of top of turfstone units and install Grass Seed Mix in accordance with CW 3520.

E6.4 Measurement and Payment

E6.4.1 The supply and installation of turfstone units shall be measured on a unit basis. The number of units measured and paid will be the number of square meters of turfstone units supplied and acceptably installed based on measurements made by the Contract Administrator. Payment for the installation of turfstone units shall be at the Contract Unit Price per square meter for "Supply and Install of Turfstone", which price shall be payment in full for supplying all materials and performing all operations herein specified.

E6.4.2 Seeding shall be paid in accordance with E5.

E7. CULVERT INSTALLATION

E7.1 Description

- (a) This Specification covers the removal and installation of CSP culverts.

E7.2 Submittals

E7.2.1 Submit Shop Drawings for the CSP and fittings a minimum of five (5) Business Days prior to commencement of pipe installation. Shop Drawings shall show the pipe segments and all associated materials. Shop Drawings shall include:

- (a) CSP and fitting dimensions, including:
- (i) Nominal Diameter
 - (ii) Corrugation profile
 - (iii) Wall thickness
- (b) CSP coating details, including:
- (i) Coating process
 - (ii) Product specifications
 - (iii) Coating thickness
- (c) CSP coupling detail complete with gasket information

E7.3 Materials

E7.3.1 CSP culverts shall conform to CW 3610 and the following requirements:

- (a) Minimum wall thickness: 2.8 mm
- (b) CSP Culverts shall be supplied with a polymer coating as specified herein

E7.3.2 Polymer Coating

- (a) Shall conform to CAN/CSA-G401-M.
- (b) The CSP shall be galvanized prior to the application of the polymer coating.
- (c) The CSP and coupler bands shall have polymer laminate coated on both sides of the metal sheets, applied after galvanization and prior to the conversion to a CSP.
- (d) The polymer laminate shall have a minimum coating thickness of 250 µm on each surface.
- (e) Prior to installation and backfilling of the CSP and coupler bands, the polymer coating shall be inspected for damage. The manufacturer shall provide suitable materials for repairing the damaged polymer laminate as required.

E7.3.3 Couplers and Gaskets

- (a) Shall conform to CAN/CSA-G401-M
- (b) The couplers shall be corrugated or similarly interlock with the pipe to prevent axial movement.
- (c) Couplers shall have a minimum wall thickness of 1.6 mm and a minimum width of 600 mm.
- (d) Couplings shall be supplied complete with rubber gaskets providing a water tight seal.
- (e) Couplings shall be polymer coated as specified herein.

E7.3.4 Coupler Fasteners

- (a) Coupler flanges shall consist of rolled or formed angles, or lugs, which are to be riveted or welded to the coupler.
- (b) Where flanges are riveted to couplers, minimum rivet diameter shall be 10 mm. The minimum number of rivets per flange shall be 9.

- (c) Flanges on one piece couplers shall be located within 25 mm of one end and at least 100 mm from the other end.
- (d) On two piece couplers, the flanges on the top section shall be located within 25 mm of both ends. The flanges on the bottom section of the coupler shall be located at least 100 mm from both ends.
- (e) Bolts and nuts shall be supplied for connecting coupler flanges. Couplers shall have at least five 12 mm diameter galvanized bolts per connection. The bolts shall be equally spaced along the connection.
- (f) The coupler ends shall have a minimum overlap of 50 mm after the connection is tightened.
- (g) Coupler fastener components shall be galvanized.

E7.4 Construction Methods

- E7.4.1 Culverts shall be installed in accordance with CW 3610.
- E7.4.2 Access to the reservoir cells must be maintained at all times. Provide a staging or temporary access plan for maintaining access to the reservoir cells to the Contract Administrator a minimum of (5) Business Days prior to removing the existing culverts.
- E7.4.3 Inform the Contract Administrator a minimum of two (2) Working Days prior to undertaking the culvert installation.
- E7.4.4 Install culvert end markers in accordance with CW 3610.

E7.5 Restoration

- E7.5.1 Driveways disturbed by construction activities shall be restored to existing condition. Granular road surfacing material shall be placed in accordance with CW 3150 to the thickness of the existing driveway gravel or 150 mm, whichever is greater.
- E7.5.2 Granular surfacing material shall be a crushed limestone conforming to Clause 2.2 of CW 3110, 20 mm max aggregate size.
- E7.5.3 Edges of the driveway(s) shall be shaped to match existing and seeded or sodded in accordance with E5.

E7.6 Measurement and Payment

- (a) Installation of CSP culverts shall be measured and paid in accordance with CW 3610 except as modified herein.
- (b) Removal of the existing culvert(s) shall be considered incidental to the installation of the new CSP culvert and will not be measured for payment. No Additional payment will be made.
- (c) Placement and compaction of granular road surfacing material for restoration purposes shall be considered incidental to the installation of the new CSP culvert and will not be measured for payment. No Additional payment will be made.
- (d) Temporary reservoir cell access (as required) shall be considered incidental to the installation of the new CSP culvert and will not be measured for payment. No Additional payment will be made.
- (e) Installation of culvert end markers shall be considered incidental to the installation of the new CSP culvert and will not be measured for payment. No Additional payment will be made.

E8. SIGNAGE

E8.1 Description

- (a) This Specification covers the installation of aluminum signs supplied by the City of Winnipeg.

E8.2 Materials

- (a) Timber Posts
 - (i) Spruce or Jack Pine
 - (ii) Pressure Treated
 - (iii) Number 2 Grade
 - (iv) Length to suit
- (b) Fasteners: bolts, nuts, washers and other hardware for roadside signs to be cast aluminium alloy, or galvanized steel.

E8.3 Construction Methods

- (a) Install aluminum signs on the existing chain link fencing or wooden posts as shown on the Drawings. The exact location of the signs will be determined in the field.
- (b) Signs installed on chain link fencing shall be installed with a minimum of brackets appropriate for the signage provided by the City. A minimum of two bolts shall be installed per bracket. Brackets shall be manufactured from steel or aluminium. Steel brackets shall be galvanized or otherwise coated to prevent corrosion.
- (c) Signs installed on wooden posts shall be installed as shown on the Drawings. Signs shall be mounted with a minimum of 2 bolts per post.

E8.4 Measurement and Payment

- E8.4.1 The installation of City supplied signs shall be measured on a lump sum basis. Payment for the installation of City supplied signs shall be at the Contract Unit Price for "Install City Supplied Signage", which price shall be payment in full for supplying all materials, installation, and all other operations herein specified.

E9. STRAW ROLL DITCH CHECK

E9.1 Description

- (a) This Specification covers the installation straw roll ditch checks.

E9.2 Materials

E9.2.1 Straw Roll Ditch Check

- (a) The straw roll shall consist of straw or wood fibre that has been compressed and stuffed into a biodegradable polyester or plastic netting.
- (b) Dimensions of each straw or wood fibre roll shall be 300 mm in diameter.
- (c) The straw roll shall be anchored with wooden stakes having a 50 mm x 50 mm cross section and a minimum length of 600 mm. Stakes shall have a spacing along the roll of 1200 mm.

- E9.2.2 Submit product specifications and recommended installation methods for the proposed temporary ditch checks and associated materials.

E9.3 Construction Methods

E9.3.1 Straw Roll Ditch Check

- (a) The straw roll ditch check shall be installed in existing ditches prior to on site excavation or immediately following removal of the existing vegetation and excavation within the existing ditches.
- (b) Straw roll ditch checks to be installed a minimum of 2.2 m up the side slopes of the ditch or to a minimum of 500 mm above the bottom of the ditch whichever is the least.
- (c) The straw roll shall be anchored (through the netting only) with wooden stakes on the downstream side of the roll with a maximum stake spacing of 1200 mm.

E9.3.2 Final Removal

- (a) Straw roll ditch checks are biodegradable and shall remain in place.

E9.4 Maintenance

E9.4.1 Straw Roll Ditch Check

- (a) The Contractor shall maintain the temporary sediment ditch checks until they are no longer necessary. Maintenance consists of keeping the devices functioning effectively. The Contractor shall repair or correct plugged, displaced, damaged, or non-functioning devices to the satisfaction of the Engineer.
- (b) Any damaged or poorly performing areas as the result of storm events shall be replaced/repared immediately. Re-grading of the slope by hand methods may be required in the event of rill or gully erosion.
- (c) Damaged areas may require reseeding.
- (d) No re-measurement or payment will be made for those areas damaged and requiring re-seeding and reinstallation due to faulty installation of the temporary sediment ditch checks.

E9.5 Final Removal

- E9.5.1 Straw roll ditch checks are biodegradable and shall remain in place.

E9.6 Measurement and Payment

- E9.6.1 The supply and installation of straw roll ditch checks shall be measured on a unit basis. The number of units measured and paid will be the number of linear meters of straw roll ditch check supplied and acceptably installed based on measurements made by the Contract Administrator. Payment for the installation of straw roll ditch checks shall be at the Contract Unit Price per linear meter for "Supply and Install Straw Roll Ditch Check", which price shall be payment in full for supplying all materials, installation, maintenance and all other operations herein specified.

PART F - SECURITY CLEARANCE

F1. SECURITY CLEARANCE

- F1.1 Each individual proposed to perform the following portions of the Work:
- (a) any Work on private property;
 - (b) any Work within City facilities, including the Water Treatment Plant site;
 - (c) communicating with residents and homeowners in person or by telephone;
- F1.1.1 Each Individual shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his/her place of residence. Or
- (a) BackCheck, forms to be completed can be found on the website at: <http://www.backcheck.net/> ; or
 - (b) Commissionaires (Manitoba Division), forms to be completed can be found on the website at: <https://www.commissionaires.ca/en/manitoba/home> .
- F1.2 Each individual proposed to undertake work at the Water Treatment Plant shall be required to obtain a Public Safety Verification Check. This can be obtained from one of the following;
- (a) BackCheck, forms to be completed can be found on the website at: <http://www.backcheck.net/> ; or
- F1.2.1 Contact Ron Riskey at 204-986-3758 if you have any questions regarding the Public Safety Verification.
- F1.3 Prior to the award of Contract, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform such Work.
- F1.4 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person will not be permitted to perform any Work specified in F1.1.
- F1.5 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- F1.6 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work specified in F1.1.