



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 776-2017

**2018 REGIONAL STREET RENEWAL PROGRAM: PEMBINA HIGHWAY
NORTHBOUND – DUCHARME AVENUE TO CLOUTIER DRIVE**

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	4
Form G1: Bid Bond and Agreement to Bond	11
Form G2: Irrevocable Standby Letter of Credit and Undertaking	13

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Enquiries	1
B4. Confidentiality	1
B5. Addenda	1
B6. Substitutes	2
B7. Bid Components	3
B8. Bid	3
B9. Prices	4
B10. Disclosure	4
B11. Qualification	5
B12. Bid Security	6
B13. Opening of Bids and Release of Information	6
B14. Irrevocable Bid	7
B15. Withdrawal of Bids	7
B16. Evaluation of Bids	8
B17. Award of Contract	8

PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	1
D4. Contractor's Supervisor	2
D5. Ownership of Information, Confidentiality and Non Disclosure	2
D6. Notices	2
D7. Furnishing of Documents	3

Submissions

D8. Authority to Carry on Business	3
D9. Safe Work Plan	3
D10. Insurance	3
D11. Performance Security	4
D12. Subcontractor List	4
D13. Equipment List	4
D14. Detailed Work Schedule	4

Schedule of Work

D15. Commencement	5
D16. Working Days	5
D17. Restricted Work Hours	5
D18. Work by Others	6
D19. Sequence of Work	6
D20. Critical Stages	7
D21. Substantial Performance	7
D22. Total Performance	8

D23. Liquidated Damages	8
D24. Scheduled Maintenance	8
Control of Work	
D25. Job Meetings	9
D26. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	9
D27. The Workplace Safety and Health Act (Manitoba) – Qualifications	9
Measurement and Payment	
D28. Payment	9
Warranty	
D29. Warranty	9
Form H1: Performance Bond	10
Form H2: Irrevocable Standby Letter of Credit	12
Form J: Subcontractor List	14
Form K: Equipment	15
Form L: Detailed Work Schedule	17

PART E - SPECIFICATIONS

General

E1. Applicable Specifications and Drawings	1
E2. Geotechnical Report	1
E3. Pavement Core Report	1
E4. Office Facilities	1
E5. Protection of Existing Trees	2
E6. Traffic Control	3
E7. Traffic Management	3
E8. Refuse and Recycling Collection	4
E9. Pedestrian Safety	5
E10. Water Obtained From the City	5
E11. Surface Restorations	5
E12. Infrastructure Signs	5
E13. Salt Tolerant Grass Seeding	5
E14. Interlocking Paving Stones	6
E15. Working near Waterways	8
E16. Mountable Monolithic Concrete Curb and Splash Strip	8
E17. Working on/around retaining Wall	9
E18. Pine Bark Mulch	9
E19. Asphalt Patching of Miscellaneous Concrete	10
E20. Supply and Install Directional Tactile Strip	11
E21. Sign Support Clamps	12
E22. Transit Shelter Foundation	12
E23. Asphalt Rumble Strip	13
E24. Tree Removals	14
E25. Relocate Charette Park Sign	14
E26. Relocate Decorative Plant Stand	15

Appendix 'A' – Geotechnical Report

Appendix 'B' – Pavement Core Report

Appendix 'C' – Product Specifications

Appendix 'D' – Supplementary Drawings

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

- B1.1 2018 REGIONAL STREET RENEWAL PROGRAM: PEMBINA HIGHWAY NORTHBOUND –
DUCHARME AVENUE TO CLOUTIER DRIVE

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, February 6, 2018.
- 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 D3.1.
- 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 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.
- B3.3 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.
- B3.4 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.
- B3.5 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. CONFIDENTIALITY

- B4.1 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.
- B4.2 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.

B5. ADDENDA

- B5.1 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.

- B5.2 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.
- B5.2.1 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>
- B5.2.2 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.
- B5.3 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.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 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.
- B6.4 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.
- B6.5 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.
- B6.6 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.
- B6.6.1 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.
- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.

- B6.8 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 B16.
- B6.9 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.

B7. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices, hard copy;
 - (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;
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 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.
- B7.4 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.
- B7.4.1 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.
- B7.4.2 A hard copy of Form B: Prices must be submitted with the Bid. If there is any discrepancy between the Adobe PDF version of Form B: Prices and the Microsoft Excel version of Form B: Prices, the PDF version shall take precedence.
- B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.6 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 B16.1(a).
- B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.8 Bids shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.

B8.2 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.

B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.

B8.3 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.

B8.4 Paragraph 13 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, shall 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.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B8.5 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.

B9. PRICES

B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.1.1 For the convenience of Bidders, and pursuant to B7.4.2 and B16.4.2, an electronic spreadsheet Form B: Prices in Microsoft Excel (.xls) format is available along with the Adobe PDF documents for this Bid Opportunity on the Bid Opportunities page at the Materials Management Division website at <http://www.winnipeg.ca/matmgt/>

B9.2 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.

B9.3 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.

B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. DISCLOSURE

B10.1 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.

B10.2 The Persons are:

- (a) N/A

B11. QUALIFICATION

B11.1 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.

B11.2 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>

B11.3 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);

B11.4 Further to B11.3(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) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) or
 - (i) 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
 - (ii) 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
- (b) 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/>).

B11.5 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.

B11.6 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.

B12. BID SECURITY

B12.1 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.

B12.1.1 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.

B12.1.2 All signatures on bid securities shall be original.

B12.1.3 The Bidder shall sign the Bid Bond.

B12.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.

B12.2 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.

B12.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B12.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.

B12.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.

B12.3 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.

B13. OPENING OF BIDS AND RELEASE OF INFORMATION

B13.1 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.

B13.1.1 Bidders or their representatives may attend.

B13.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B12 will not be read out.

- B13.2 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/>
- B13.3 After award of Contract, the name(s) of the successful Bidder(s), their address(es) 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/>
- B13.4 The Bidder is advised that any information contained in any Bid may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B13.4.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Bid Submission identified by the Bidder as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B14. IRREVOCABLE BID

- B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B14.2 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.

B15. WITHDRAWAL OF BIDS

- B15.1 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.
- B15.1.1 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.
- B15.1.2 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 13 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B15.1.3 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 13 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.
- B15.2 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 B14.2 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.

B16. EVALUATION OF BIDS

- B16.1 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 therefrom (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B6.
- B16.2 Further to B16.1(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.
- B16.3 Further to B16.1(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.
- B16.4 Further to B16.1(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.
- B16.4.1 Further to B16.1(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.
- B16.4.2 The electronic Form B: Prices and the formulas imbedded in that spreadsheet are only provided for the convenience of Bidders. The City makes no representations or warranties as to the correctness of the imbedded formulas. It is the Bidder's responsibility to ensure the extensions of the unit prices and the sum of Total Bid Price performed as a function of the formulas within the electronic Form B: Prices are correct.

B17. AWARD OF CONTRACT

- B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B17.2 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.
- B17.2.1 Without limiting the generality of B17.2, 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.
- B17.3 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 B16.
- B17.3.1 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:

- (a) Major Rehabilitation
 - (i) Pembina Highway (Northbound Lanes) – Ducharme Avenue to Cloutier Drive

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

- (a) Roadway Rehabilitation
 - (i) Planing of existing asphalt overlay as required;
 - (ii) Removal of existing curb, sidewalk, and medians as required;
 - (iii) Adjustment of catchbasins, catchpits, manholes, drainage inlets, and other pavement appurtenances;
 - (iv) Installation of catchbasins and connecting pipe;
 - (v) Full depth (200 mm) concrete repairs of existing slabs and joints;
 - (vi) Construction of new 3 meter bi-directional asphalt bicycle facility with an adjacent 1.5 meter concrete sidewalk on east boulevard;
 - (vii) Construction of new curb lane splash strip utilizing slip-form paving equipment;
 - (viii) Renewal of median lane curb and splash strip as required;
 - (ix) Renewal of miscellaneous concrete slabs, including medians and bullnoses as required;
 - (x) Boulevard grading and seeding/sodding
 - (xi) Cleaning of all catchbasins and catchpits in the project area
 - (xii) Asphalt patching over full depth concrete repairs;
 - (xiii) Placement of mainline asphalt overlay (average thickness – 75 mm) utilizing automatic grade control for final lift;
 - (xiv) Placement of tie-in asphalt overlay for median openings, and private approaches;

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Dillon Consulting Limited , represented by:

Taran J. Peters, P.Eng.
Project Manager

Telephone No. 204 453-2301 ext. 4031

Email Address tpeters@dillon.ca

D3.2 At the pre-construction meeting, Taran J. Peters will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D3.3 Bids Submissions must be submitted to the address in B7

D4. CONTRACTOR'S SUPERVISOR

- D4.1 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.
- D4.2 At least two (2) business days prior to the commencement of any Work on the site, the Contractor shall provide the Contract Administrator with a phone number where the supervisor identified in D4.1 or an alternate can be contacted twenty-four (24) hours a day to respond to an emergency.

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D5.1 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.
- D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D5.3 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.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

- D6.1 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.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3 D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 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:
- The City of Winnipeg
Attn: Chief Financial Officer
Office of the Chief Administrative Officer
Susan A. Thompson Building
2nd Floor, 510 Main Street
Winnipeg MB R3B 1B9
- D6.4 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

D6.5 Bids Submissions must not be submitted to this facsimile number. Bids must be submitted in accordance with B7.

D7. FURNISHING OF DOCUMENTS

D7.1 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

D8. AUTHORITY TO CARRY ON BUSINESS

D8.1 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.

D9. SAFE WORK PLAN

D9.1 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.

D9.2 The Safe Work Plan shall 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>

D10. INSURANCE

D10.1 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;
- (c) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- (d) Contractor's pollution liability (CPL) in the amount of at least one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) annual aggregate insuring against claims covering third-party injury and property damage claims and including clean-up costs and transported cargo as a result of pollution conditions arising suddenly or gradually from the Contractor operations and completed operations. Such policy to name the City as an additional insured and remain in place throughout the warranty period.

D10.2 Deductibles shall be borne by the Contractor.

D10.3 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 the C4.1 for the return of the executed Contract.

D10.4 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.

D11. PERFORMANCE SECURITY

D11.1 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.

D11.1.1 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.

D11.2 If the bid security provided in his/her Bid was not a certified cheque or draft pursuant to B12.1(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 and in no event later than the date specified in the C4.1 for the return of the executed Contract.

D12. SUBCONTRACTOR LIST

D12.1 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 or prior to a pre-construction meeting, or 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 C4.1 for the return of the executed Contract.

D13. EQUIPMENT LIST

D13.1 The Contractor shall provide the Contract Administrator with a complete list of the equipment which the Contractor proposes to utilize (Form K: Equipment List) at or prior to a pre-construction meeting, or 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 C4.1 for the return of the executed Contract.

D14. DETAILED WORK SCHEDULE

D14.1 The Contractor shall provide the Contract Administrator with a detailed work schedule (Form L: Detailed Work Schedule) 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

D15. COMMENCEMENT

D15.1 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.

D15.2 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 D8;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the twenty-four (24) hour emergency response phone number specified in D4.2.
 - (iv) the Safe Work Plan specified in D9;
 - (v) evidence of the insurance specified in D10;
 - (vi) the performance security specified in D11;
 - (vii) the subcontractor list specified in D12;
 - (viii) the equipment list specified in D13; and
 - (ix) the detailed work schedule specified in D14.
- (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.

D15.3 The Contractor shall not commence the Work on the Site before May 22, 2018, and shall commence the Work on Site no later than May 31, 2018, as directed by the Contract Administrator and weather permitting.

D16. WORKING DAYS

D16.1 Further to C1.1(jj);

D16.1.1 The Contract Administrator will determine daily if a Working Day has elapsed and will record his/her assessment. On a weekly basis the Contract Administrator will provide the Contractor with a record of the Working Days assessed for the preceding week. The Contractor shall sign each report signifying that he/she agrees with the Contract Administrator's determination of the Working Days assessed for the report period.

D16.1.2 Work done to restore the Site to a condition suitable for Work, shall not be considered "work" as defined in the definition of a Working Day.

D16.1.3 When the Work includes two or more major types of Work that can be performed under different atmospheric conditions, the Contract Administrator shall consider all major types of Work in determining whether the Contractor was able to work in assessing Working Days.

D17. RESTRICTED WORK HOURS

D17.1 Further to clause 3.10 of CW 1130, the Contractor shall require written permission forty-eight (48) hours in advance from the Contract Administrator for any work to be performed between 2000 hours and 0700 hours, or on Saturdays, Sundays, Statutory Holidays and or Civic Holidays.

D17.2 The following work hour restrictions shall also apply:

- (a) No work shall be done on Pembina Highway south of Ducharme Avenue for the period of one hour before until one hour after the operating hours of the St. Norbert Farmer's Market which operates on the following days between the following hours:
 - (i) Wednesday: 11:00 am – 3:00 pm

- (ii) Saturday: 8:00 am – 3:00 pm

D18. WORK BY OTHERS

D18.1 Work by others on or near the Site will include but not necessarily be limited to:

- (a) MTS
 - (i) Miscellaneous adjustments of manholes, relocation of MTS boxes and other appurtenances that may be required within this contract.
- (b) Manitoba Hydro
 - (i) Relocation of street light poles as required within this contract.
- (c) City of Winnipeg Traffic Signals
 - (i) Adjustment of traffic signal poles.
- (d) City of Winnipeg Traffic Services
 - (i) Removal and installation of new traffic signage and line painting.
- (e) City of Winnipeg Transit Department
 - (i) Removal and installation of City of Winnipeg Transit infrastructure.

D19. SEQUENCE OF WORK

D19.1 Further to C6.1, the sequence of work shall be as follows:

D19.1.1 The Work shall be divided into four (4) Stages.

- (a) **Stage I – Construction Works South of Ducharme Avenue**
 - (i) Removal of existing barrier curb and sidewalk;
 - (ii) Adjustment of catchbasins, catchpits, manholes, drainage inlets and other pavement appurtenances;
 - (iii) Installation of new catchbasins and connecting pipe;
 - (iv) Construction of monolithic splash strip, 3 m bi-directional asphalt bicycle facility and adjacent 1.5 m concrete sidewalk;
 - (v) Boulevard grading and seeding;
 - (vi) Placement of mainline asphalt overlay;
 - (vii) Placement of tie in asphalt overlay for private approaches;
 - (viii) Temporary asphalt ramping as necessary; and
 - (ix) Renewal of median slab.
- (b) **Stage II – Curb Lane Rehabilitation and Multi-Use Pathway Construction**
 - (i) Planing of asphalt overlay to varying depths;
 - (ii) Removal of existing barrier curb and sidewalk;
 - (iii) Adjustment of catchbasins, catchpits, manholes, drainage inlets and other pavement appurtenances;
 - (iv) Installation of new catchbasins and connecting pipe;
 - (v) Full depth concrete repairs of existing slabs and joints;
 - (vi) Construction of monolithic splash strip, 3 m bi-directional asphalt bicycle facility and adjacent 1.5 m concrete sidewalk;
 - (vii) Asphalt patching over full depth repairs as required;
 - (viii) Boulevard grading and seeding;
 - (ix) Placement of first lift (scratch) of mainline asphalt overlay; and
 - (x) Temporary asphalt ramping as necessary;
- (c) **Stage III – Median and Left Turning Lane Rehabilitation**
 - (i) Planing of existing asphalt overlay to varying depths;

- (ii) Adjustment of manholes and other pavement appurtenances;
- (iii) Full depth concrete repairs of existing slabs and joints;
- (iv) Renewal of splash strip, barrier curb, bullnoses and median slabs as required;
- (v) Boulevard grading and seeding;
- (vi) Asphalt patching over full depth repairs as required; and
- (vii) Placement of first lift (scratch) of mainline asphalt overlay including mainline left turn lanes if possible, depending on depth.

(d) **Stage IV – Final Asphalt Overlay**

- (i) Placement of mainline asphalt overlay utilizing automatic grade control;
- (ii) Sequence from curb to median lane;
- (iii) Placement of tie in asphalt overlay for median openings and private approaches; and
- (iv) Cleaning of all catchbasins and catchpits in the project area.

D19.1.2 Immediately following the completion of the asphaltic concrete works of Stage I, the Contractor shall clean up the Site and remove all plant, surplus material, waste and debris, other than that left by the City or other Contractors.

D19.1.3 It should be noted that more than one concrete crew may be required at any one time to complete the work within the allocated number of Working Days.

D19.1.4 Placing the topsoil and finished grading of all boulevard and median areas shall be completed prior to commencing construction of asphaltic concrete overlays, including scratch courses.

D19.1.5 At the end of the day of asphalt placement, there shall be no drop-off accessible to traffic along any longitudinal joint, excepting the longitudinal joint between the gutter and approaches, and any median openings available to traffic.

D20. CRITICAL STAGES

D20.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

- (a) All construction works as outlined in Stage I found in D19.1.1(a) must be completed within fifteen (15) working days of construction start date.

D20.2 When the Contractor considers the Work associated with Stage I to be completed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Completion. 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 re-inspected.

D20.3 The date on which the Stage I Work has been accepted by the Contract Administrator as being completed to the requirements of the Contract is the date on which completion of Stage I has been achieved.

D21. SUBSTANTIAL PERFORMANCE

D21.1 The Contractor shall achieve Substantial Performance within forty (40) consecutive Working Days of the commencement of the Work as specified in D15.

D21.2 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 re-inspected.

D21.3 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.

D22. TOTAL PERFORMANCE

D22.1 The Contractor shall achieve Total Performance within forty-two (42) consecutive Working Days of the commencement of the Work as specified in D15.

D22.2 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 re-inspected.

D22.3 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.

D23. LIQUIDATED DAMAGES

D23.1 If the Contractor fails to achieve Critical Stages, 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) Stage I – Five hundred dollars (\$500);
- (b) Substantial Performance – Two-thousand two hundred and fifty dollars (\$2250);
- (c) Total Performance – Seven hundred dollars (\$700).

D23.2 The amounts specified for liquidated damages in D23.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages, Substantial Performance or Total Performance by the days fixed herein for same.

D23.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D24. SCHEDULED MAINTENANCE

D24.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:

- (a) Reflective Crack Maintenance (during one year warranty period) as specified in CW 3250 R7;
- (b) Sodding (maintenance period) as specified in as specified in CW 3510 – R9;
- (c) Seeding (maintenance period) as specified in as specified in CW 3520 – R7.

D24.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D25. JOB MEETINGS

- D25.1 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.
- D25.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D26. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D26.1 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).

D27. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

- D27.1 Further to B11.4, 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 B11.4.

MEASUREMENT AND PAYMENT

D28. PAYMENT

- D28.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D29. WARRANTY

- D29.1 Notwithstanding C13.2, the warranty period shall begin on the date of Substantial Performance and shall expire one (1) year thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D29.2 Notwithstanding C13.2 or D29.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Substantial Performance if:
- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D29.2.1 In such case the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

FORM H1: PERFORMANCE BOND
(See D11)

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. 776-2017

2018 REGIONAL STREET RENEWAL PROGRAM: PEMBINA HIGHWAY NORTHBOUND – DUCHARME AVENUE TO CLOUTIER DRIVE

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 D11)

(Date)

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

RE: PERFORMANCE SECURITY – BID OPPORTUNITY NO. 776-2017

2018 REGIONAL STREET RENEWAL PROGRAM: PEMBINA HIGHWAY NORTHBOUND –
DUCHARME AVENUE TO CLOUTIER DRIVE

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)

FORM J: SUBCONTRACTOR LIST
 (See D12)

2018 REGIONAL STREET RENEWAL PROGRAM: PEMBINA HIGHWAY NORTHBOUND – DUCHARME AVENUE TO CLOUTIER DRIVE

<u>Portion of the Work</u>	<u>Name</u>	<u>Address</u>
SURFACE WORKS:		
Supply of Materials:		
Concrete		
Asphalt		
Base Course & Sub-Base		
Sod, Topsoil and Seeding		
Installation/Placement:		
Asphalt Planing		
Concrete		
Asphalt		
Base Course & Sub-Base		
Sod, Topsoil and Seeding		
UNDERGROUND WORKS:		
Supply of Materials:		
Catchbasins/Manholes		
Connecting Pipe		
Installation/Placement:		
Catchbasins/Manholes		
Connecting Pipe		
Sewer Televising		
OTHERS:		

FORM K: EQUIPMENT
(See D13)

2018 REGIONAL STREET RENEWAL PROGRAM: PEMBINA HIGHWAY NORTHBOUND – DUCHARME AVENUE TO CLOUTIER DRIVE

<p>1. Category/type: Asphalt Planing</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>
<p>2. Category/type: Concrete Restoration and Slip-form Concrete Curbing</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>
<p>3. Category/type: Asphalt Paving</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>

FORM K: EQUIPMENT
(See D13)

2018 REGIONAL STREET RENEWAL PROGRAM: PEMBINA HIGHWAY NORTHBOUND – DUCHARME AVENUE TO CLOUTIER DRIVE

4. Category/type:

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

5. Category/type:

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

6. Category/type:

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

Make/Model/Year: _____ Serial No.: _____

Registered owner: _____

FORM L: DETAILED WORK SCHEDULE
 (See D14)

2018 REGIONAL STREET RENEWAL PROGRAM: PEMBINA HIGHWAY NORTHBOUND – DUCHARME AVENUE TO CLOUTIER DRIVE

For each item of Work, indicate the cumulative percentage proposed to be completed by the end of each time period until 100% completion is achieved.					
Items of Work	Time Period in Working Days				
	15	20	30	40	42
Stage I – Construction Work South of Ducharme Ave.					
Underground Works					
Construction of Curb, Splash Strip and Multi-Use Path					
Boulevard Landscaping					
Tie-In Asphalt Overlay					
Stage II – Curb Lane Rehabilitation					
Planing					
Underground Works					
Construction of Curb, Splash Strip and Multi-Use Path					
Roadway Concrete Works					
Boulevard Landscaping					
First Lift Asphalt Overlay					
Stage III – Median/Turning Lane Rehabilitation					
Planing					
Underground Works					
Roadway Concrete Works					
Splash Strip, Bullnose and Median Slab Renewal					
Boulevard Landscaping					
First Lift Asphalt Overlay					
Stage IV – Final Asphalt Overlay					
Final Lift Asphalt Overlay					
Tie in Asphalt Overlay					

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>City Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
01		Cover Sheet	A1
02	P-3493-2018-02	Northbound Pembina – Start to STA. 0+465 (Plan-Profile)	A1
03	P-3493-2018-03	Northbound Pembina – STA: 0+465 to 0+625 (Plan-Profile)	A1
04	P-3493-2018-04	Northbound Pembina – STA: 0+625 to 0+785 (Plan-Profile)	A1
05	P-3493-2018-05	Northbound Pembina – STA: 0+785 to 0+945 (Plan-Profile)	A1
06	P-3493-2018-06	Northbound Pembina – STA: 0+945 to 1+105 (Plan-Profile)	A1
07	P-3493-2018-07	Northbound Pembina – STA: 1+105 to 1+625 (Plan-Profile)	A1
08	P-3493-2018-08	Northbound Pembina – STA. 1+625 to End (Plan-Profile)	A1
09	P-3493-2018-09	Details	A1
10	P-3493-2018-10	Sections	A1

E2. GEOTECHNICAL REPORT

- E2.1 Further to C3.1, the geotechnical investigation report is provided to aid the Contractor's evaluation of the existing soil conditions in proximity to the soldier pile retaining wall behind the east Pembina Highway sidewalk, north of Grandmont Boulevard. The geotechnical report is contained in Appendix 'A'.

E3. PAVEMENT CORE REPORT

- E3.1 Further to C3.1, the pavement core report is provided to aid the Contractor's evaluation of the pavement structure. The pavement core report is contained in Appendix 'B'.

E4. OFFICE FACILITIES

- E4.1 The Contractor shall supply office facilities meeting the following requirements:
- (a) The field office shall be for the exclusive use of the Contract Administrator.
 - (b) The building shall be conveniently located near the site of the Work.

- (c) The building shall have a minimum floor area of 20 square metres, a height of 2.4 m with two windows for cross ventilation and a door entrance with a suitable lock.
 - (d) The building shall be suitable for all weather use. It shall be equipped with an electric heater and air conditioner so that the room temperature can be maintained between either 16-18°C or 24-25°C.
 - (e) The building shall be adequately lighted with fluorescent fixtures and a minimum of three (3) wall outlets.
 - (f) The building shall be furnished with one (1) desk, one (1) drafting table, one (1) meeting table, one (1) stool, one (1) legal size filing cabinet and a minimum of eight (8) chairs. .
 - (g) A portable toilet shall be located near the field office building. The toilet shall have a locking door and be for the exclusive use of the Contract Administrator and other personnel from the City.
 - (h) The field office building and the portable toilet shall be cleaned on a weekly basis immediately prior to each site meeting. The Contract Administrator may request additional cleaning when he/she deems it necessary.
- E4.2 The Contractor shall be responsible for all installation and removal costs, all operating costs, and the general maintenance of the office facilities.
- E4.3 The office facilities will be provided from the date of the commencement of the Work to the date of Total Performance.
- E4.4 On a one time basis, where directed by the Contract Administrator, the Contractor shall relocate the office facilities to a location more convenient for the remaining Work.
- E5. PROTECTION OF EXISTING TREES**
- E5.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:
- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
 - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
 - (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- E5.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.
- E5.3 No separate measurement or payment will be made for the protection of trees.
- E5.4 Except as required in clause E5.1(c) and E5.1(e), Elm trees shall not be pruned at any time between April 1 and July 31.

E6. TRAFFIC CONTROL

E6.1 Further to clauses 3.6, 3.7 and 3.8 of CW 1130:

- (a) Where directed by the Contract Administrator, the Contractor shall construct and maintain temporary asphalt ramps to alleviate vertical pavement obstructions such as manholes and planing drop-offs to the satisfaction of the Contract Administrator. Payment shall be in accordance with CW 3410.
- (b) In accordance with the Manual of Temporary Traffic Control on City Streets (MTTC), the Contractor ("Construction Agency" in the manual) shall be responsible for placing, maintaining and removing the appropriate temporary traffic control devices as specified by the MTTC or by the Traffic Management Branch of the City of Winnipeg Public Works Department. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by their own forces or subcontractor.

E6.2 Notwithstanding E6.1, in accordance with the MTTC, the Contract Administrator shall make arrangements with the **Traffic Services Branch of the City of Winnipeg** to place, maintain, and remove all **regulatory signs** and traffic control devices authorized and/or required by the Traffic Management Branch in the following situations:

- (a) Parking restrictions,
- (b) Stopping restrictions,
- (c) Turn restrictions,
- (d) Diamond lane removal,
- (e) Full or directional closures on a Regional Street,
- (f) Traffic routed across a median,
- (g) Full or directional closure of a non-regional street where there is a requirement for regulatory signs (turn restrictions, bus stop relocations, etc.) to implement the closure.
- (h) Approved Designated Construction Zones with a temporary posted speed limit reduction. Traffic Services will be responsible for placing all of the advance signs and 'Construction Ends' (TC-4) signs. The Contractor is still responsible for all other temporary traffic control including but not limited to barricades, barrels and tall cones.

E6.2.1 An exception to E6.2 is the 'KEEP RIGHT/KEEP LEFT' sign (RB-25 / RB-25L) which shall be supplied, installed, and maintained by the Contractor at their own expense.

E6.2.2 Further to E6.2, where the Contract Administrator has determined that the services of the Traffic Services Branch are required, the City shall bear the costs associated with the placement of temporary traffic control devices by the Traffic Services Branch of the City of Winnipeg in connection with the works undertaken by the Contractor.

E7. TRAFFIC MANAGEMENT

E7.1 Further to clause 3.7 of CW 1130:

- (a) Single lane closures on intersecting and/or adjoining Regional Streets shall only be permitted during non-peak periods when required for construction activities when approved by the Traffic Management Branch. Storage/parking of materials, equipment or vehicles is not permitted on Regional Streets at any time unless approved by the Contract Administrator, in consultation with the Traffic Management Branch.

E7.1.1 Maintain a minimum of one lane of traffic northbound during construction, including during paving and milling operations. When no work is being performed on site, non-essential lane closures will not be permitted.

E7.1.2 Further to E7.1.1, depending on what tasks are being performed, the Contractor shall manage traffic around their crews with a moving or growing protected Work zone to minimize the length of the closure to the best of their ability if only isolated areas are being

worked on. The Contractor will be permitted to close one lane of traffic for the entire length of the project if work is taking place throughout the length of the project site.

- E7.1.3 Where left turn lanes exist, an additional lane to accommodate the left turn storage lane shall be maintained at all times. Minimum length of storage lane will be determined by the Contract Administrator on site.
- E7.1.4 Traffic at Ducharme Avenue, Grandmont Boulevard and Cloutier Drive intersections must be maintained during construction to allow for:
- (a) one lane of eastbound traffic on Ducharme Avenue and Grandmont Boulevard to turn left and travel northbound
 - (b) one lane of northbound Pembina Highway traffic to turn right and travel eastbound on to Cloutier Drive.
- E7.1.5 When no work is being performed in intersections and providing it is safe for vehicles, closures in the intersection will not be permitted.
- E7.1.6 Median opening and private approach access shall be maintained at all times unless joint/slab repairs or planing/paving operations require temporary closure. Temporary closures are to be staggered such that consecutive intersections are not closed at the same time. Traffic on intersecting streets shall be maintained at all times as stated in E7.1.4 unless planing/paving operations require temporary complete closures. Temporary complete closures shall be no longer than ten (10) minutes during asphalt planing/paving operations and shall be completed during off peak hours.
- E7.1.7 Flag persons may be necessary to maintain the flow of traffic during certain work operations.
- E7.1.8 Should the Contractor be unable to maintain pedestrian or vehicular access to a residence or business, he/she shall review the planned disruption with the business or residence and the Contract Administrator, and take reasonable measures to minimize the impact. The Contractor shall provide a minimum of twenty-four (24) hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.
- E7.1.9 Pedestrian access must be maintained on the west side at all times. One pedestrian crossing in the north-south direction must be maintained at each of the Grandmont Boulevard and Ducharme Avenue intersections at all times.
- E7.1.10 Mainline paving shall not occur during or prior to the hours of 0700 to 0900, unless authorized by the Contract Administrator.
- E7.1.11 Winnipeg Transit access to be maintained, including bus stops. Should the Contractor be unable to maintain bus stops or side street bus routes, it shall be reviewed with the Contract Administrator at least forty-eight (48) hours to see if modifications can be made.
- E7.1.12 Ambulance/emergency vehicle access must be maintained at all times.

E8. REFUSE AND RECYCLING COLLECTION

- E8.1 While access to refuse and/or recycling collection vehicles is restricted, on collection day(s) the Contractor shall move all of the affected property owners refuse and/or recycling materials to a nearby common area, prior to an established time, in accordance with E8.2 to permit the normal collection vehicles to collect the materials. Immediately following recycling collection the Contractor shall return recycling receptacles to the addresses marked on the receptacles.
- E8.2 Collection Schedule:

Collection Day(s): **Wednesday**
Collection Time: **7:00 AM to 6:00 pm**

E8.3 No measurement or payment will be made for the work associated with this specification.

E9. PEDESTRIAN SAFETY

E9.1 During the project a temporary snow fence shall be installed if necessary in locations such as open excavations that are adjacent to pedestrian facilities . The Contractor shall be responsible for maintaining the snow fence in a proper working condition. No measurement for payment shall be made for this work

E10. WATER OBTAINED FROM THE CITY

E10.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

E11. SURFACE RESTORATIONS

E11.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E12. INFRASTRUCTURE SIGNS

E12.1 The Contractor shall obtain infrastructure signs from the Traffic Services Sign Shop at 421 Osborne Street. The Contractor shall mount each sign securely to a rigid backing material approved by the Contract Administrator. The Contractor shall fasten each sign to a suitable support and erect and maintain one sign at each street as directed by the Contract Administrator. When the Contract Administrator considers the Work on the street complete, the Contractor shall remove and dispose of the signs and supports. No measurement for payment will be made for performing all operations herein described and all other items incidental to the work described

E13. SALT TOLERANT GRASS SEEDING

DESCRIPTION

E13.1 Further to CW 3520 and CW 3540, this specification shall cover sub-grade preparation and the supply and placement of Salt Tolerant Grass Seed.

MATERIALS

E13.2 Salt Tolerant Grass Seed

E13.2.1 Salt Tolerant Grass Seed for regional and collector boulevards, medians and interchange areas shall be a mixture composed of:

- (a) Seventy percent (70%) Fults or Nuttals Alkaligrass (*Puccinellia* spp.), twenty percent (20%) Audubon or Aberdeen Creeping Red Fescue and ten percent (10%) Perennial Ryegrass.

EQUIPMENT

E13.3 Scarification equipment shall be suitable for the area being scarified, shall be capable of scarifying the sub-grade to the specified depth and shall be accepted by the Contract

Administrator. For confined areas a toothed bucket may be acceptable. For larger areas tilling equipment may be required.

CONSTRUCTION METHODS

E13.4 Preparation of Existing Grade

E13.4.1 Prior to placing topsoil, in areas to be seeded greater in width than 600 mm, prepare the existing sub-grade by scarifying to a minimum depth of 75mm and to a maximum depth of 100 mm to the satisfaction of the Contract Administrator.

E13.4.2 Scarification shall consist of breaking up and loosening the sub-grade. No scarification shall occur within the edge of a tree canopy (or drip line).

E13.5 Salt Tolerant Grass Seeding

E13.5.1 Salt Tolerant Grass Seed shall be sown at a rate of 2.2 kilograms per 100 square meters.

MEASUREMENT AND PAYMENT

E13.6 Supply, placement and maintenance of Salt Tolerant Grass Seed will be paid for at the Contract Unit Price per square metre for "Salt Tolerant Grass Seeding", measured as specified herein, which price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification. Payment for Salt Tolerant Grass 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.

E14. INTERLOCKING PAVING STONES

DESCRIPTION

E14.1 Further to the latest version of the City of Winnipeg Standard Construction Specification CW 3335, this Specification shall cover the:

- (a) Supplying and installing of interlocking paving stones (unit pavers) used in Transit stop paving band square;
- (b) Supplying and installing of sand setting bed.

E14.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary or and incidental to the satisfactory performance and completion of all Work as hereinafter specified.

E14.3 Referenced Specifications and "Drawings"

- (a) The latest version of the City of Winnipeg Standard Construction Specifications
 - (i) CW 3330 – Installation of Interlocking Paving Stones

MATERIALS

E14.4 General

- (a) All materials supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.
- (b) The Contractor shall be responsible for the supply, safe storage and handling of all materials as set forth in this Specification. All materials shall be handled in a careful and workmanlike manner, to the satisfaction of the Contract Administrator.

E14.4.1 Interlocking Paving Stones

- (a) Concrete interlocking paving stones (unit pavers) for indicator strips or equivalent in accordance with B6, supplied by:
 - Barkman Concrete
 - Phone: 204-667-3310
 - www.barkmanconcrete.com
 - http://www.barkmanconcrete.com/images/uploads/resources/specs_catalogue_2017OCT.pdf
- (b) As shown on the Drawings and as follows:
 - (i) Blue Holland Stone 105 x 210 x 60 mm
- (c) Concrete interlocking paving stones (unit pavers) for indicator strips shall be clay brick pavers conforming to CAN3-A231.2, Precast Concrete Pavers. Further to CAN3-A231.2.6.1.1, where concrete pavers are shipped for installation before the pavers 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.

E14.4.2 Sand

- (a) Clean brick sand as joint filler.
- (b) Clean brick sand as minimum 13 mm depth setting bed.
- (c) Bedding sand shall be fine aggregate as specified in Specification CW 3330.

EQUIPMENT

- E14.5 All equipment shall be of a type acceptable to the Contract Administrator and shall be kept in good working order.

CONSTRUCTION METHODS

E14.6 Installation of Indicator Strip Paving Stones in paving band square.

- (a) Paving stones shall be installed in formed concrete blockouts in accordance with CW 3330, set in locations and patterns as shown on the Drawings. Spaces between joints shall not exceed 3 mm, and shall be uniform and consistent while maintaining true patterns as indicated on the Drawings.
- (b) Contractor to verify the exact dimensions of pavers prior to construction of blockouts in concrete sidewalk.
- (c) Remove and dispose of existing paving stones in existing sidewalks. Any removal and/or disposal shall be incidental to the Work within this Specification.
- (d) Install concrete sidewalk complete with blockouts for paving stones as specified on the Drawings.
- (e) Install sand bed to minimum 13 mm depth as shown on the Drawings.
- (f) Do not compact setting bed prior to installation of pavers.
- (g) Spread only sufficient area which can be covered with pavers same day.
- (h) Remove adjacent pavers in patterns as required to ensure that bricks do not require cutting to fit existing paving pattern.
- (i) Where paving pattern is interrupted by vertical structural elements, pavers must be saw cut and fit true and hand tight.
- (j) Commence installation of pavers against edge to obtain straightest possible course for installation.
- (k) Pavers shall be cut with a saw only, to obtain true even undamaged edges. Chipped pavers are unacceptable.
- (l) Crews shall work on installed pavers, not on sand layer.

- (m) Spread and fine grade brick sand over paving surface and sweep into joints, in several directions. Sand is incidental to the price for supply and installation of pavers.
- (n) Compact pavers with vibratory plate compactor having mass of at least 113kg. Compaction is incidental to the price for supply and installation of paving stone.
- (o) Sweep remaining sand over all paving areas until joints are full and remove excess from Site.
- (p) Remove cracked, chipped, broken or otherwise damaged paving materials from Site immediately.
- (q) Upon completion, clean in accordance with manufacture's recommendations.

MEASUREMENT AND PAYMENT

E14.7 Interlocking Paving Stones

- (a) Interlocking paving stone work will be measured on an area basis and will be paid for at the Contract Unit Price per square metre for "Interlocking Paving Stones", measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification. The area to be paid for shall be the installed area of paving stones.

E15. WORKING NEAR WATERWAYS

- E15.1 The contractor shall comply with all rules and regulations stated in the City of Winnipeg Planning, Property and Development Waterway Permit.

E16. MOUNTABLE MONOLITHIC CONCRETE CURB AND SPLASH STRIP

DESCRIPTION

E16.1 General

- (a) This specification covers the construction of the monolithic mountable curb and splash strip at locations specified in the drawings.
- (b) Referenced Standard Construction Specifications
 - (i) CW 3310 – Portland Cement Concrete Pavement Works

MATERIAL AND EQUIPMENT

E16.2 Concrete Materials

- (a) Concrete material supplied shall be as per CW 3310-R17.

E16.3 Equipment

- (a) Equipment as per CW 3310-R17 Clause 8.

CONSTRUCTION METHODS

E16.4 Monolithic Mountable Concrete Curb and Splash Strip

- (a) Construction Methods as per CW 3310-R17 Clause 9.

MEASUREMENT AND PAYMENT

- E16.4.1 Mountable Monolithic Concrete Curb and Splash Strip will be measured on a linear measure basis and paid for at the Contract Unit Price per metre for "Mountable Monolithic Concrete Curb and Splash Strip, which price shall be payment in full for supplying all materials and performing all operations herein described and all other items incidental to the work included in this Specification.

- E16.4.2 No measurement or payment shall be made for supply or placement of bonding grout for concrete curbs.
- E16.4.3 Drilled curb ramp tie bars are to be paid in accordance with CW 3230.

E17. WORKING ON/AROUND RETAINING WALL

DESCRIPTION

- E17.1 A soldier pile retaining wall is located north of Grandmont Boulevard along the east side of the existing northbound Pembina Highway sidewalk, as identified in the Drawings. This retaining wall is a component of the riverbank stability system as described in the Report attached in Appendix 'A'.

CONSTRUCTION METHODS

- E17.2 Due to the susceptibility to movement, the following conditions must be met for the project duration within the identified retaining wall area:
- (a) No material shall be stockpiled between the curb and the soldier pile wall.
 - (b) No equipment shall be parked between the curb and the soldier pile wall.
 - (c) Equipment used for excavation shall work from the roadway only.
 - (d) No heavy equipment permitted for subgrade compaction, spreading and placement of granular and compaction of granular. A skid-steer would be acceptable to use.
 - (e) Paving equipment may be used for the asphalt path but cannot be parked in the area when not in use. During paving operations, the asphalt supply truck shall not drive between the curb and the soldier pile wall from STA 0+875 to STA 1+000.

MEASUREMENT AND PAYMENT

- E17.3 No measurement or payments shall be made for working on/around the retaining wall.

E18. PINE BARK MULCH

DESCRIPTION

- E18.1 General
- E18.1.1 Pine bark mulch shall be placed at the retaining wall located north of Grandmont Boulevard along the east side of the existing northbound Pembina Highway sidewalk, as identified in the drawings.
- E18.1.2 Pine bark mulch shall be placed off the back of sidewalk at the proposed pedestrian crossing between Grandmont Boulevard and Cloutier Drive.

MATERIALS

- E18.2 General
- E18.2.1 Mulch shall be a clean bark mulch with chips not less than 25 mm nor larger than 100 mm in size and not less than 75 mm thick. Mulch shall be free of leaves, branches, and other extraneous matter.

CONSTRUCTION METHODS

- E18.3 General
- E18.3.1 Hand place pine bark mulch.
- E18.3.2 See equipment restrictions identified in E17 for working near the soldier pile retaining wall.

MEASUREMENT AND PAYMENT

E18.4 General

- E18.4.1 Supply and placement of Pine Bark Mulch will be measured on a volume basis and paid for at the Contract Unit Price per cubic metre for "Pine Bark Mulch". The volume to be paid for will be total volume of new Pine Bark Mulch supplied and placed around the retaining wall in accordance with this specification and accepted by the Contract Administrator.

E19. ASPHALT PATCHING OF MISCELLANEOUS CONCRETE

DESCRIPTION

E19.1 General

- E19.1.1 This specification covers the placement of asphalt patches in various situations to prepare a concrete pavement for subsequent placement of mainline asphalt pavement overlay. This includes patching full depth concrete repairs, cracks and joints, and vertical faults.
- E19.1.2 Referenced Standard Construction Specifications
- (a) CW 1130-R2 - Site Requirements;
 - (b) CW 3250-R7 – Joint and Crack Maintenance;
 - (c) CW 3410-R10 – Asphaltic Concrete Pavement Works.

MATERIAL AND EQUIPMENT

E19.2 Asphalt Materials

- E19.2.1 Asphalt material supplied shall be as per CW 3250 (Type 1A Asphalt Material).

E19.3 Equipment

- E19.3.1 Equipment as per CW 3410-R10 Clause 8.

CONSTRUCTION METHODS

E19.4 Full Depth Concrete Repairs

- E19.4.1 Place asphaltic concrete over the newly constructed joint repair where there is a minimum of 20 mm elevation difference between repair surface and adjacent pavement surface. Remove any loose or debonded asphalt at the joint perimeter and place new asphaltic concrete in these areas as well.
- E19.4.2 Dispose of all material in accordance with Section 3.4 of CW 1130-R2.
- E19.4.3 Prior to placement of asphaltic concrete patching material, ensure surface is clean and dry.
- E19.4.4 Prepare the joint surface with a uniform application of Tack Coat applied in small quantities sufficient to wet the concrete surface.
- E19.4.5 Place and compact asphaltic concrete over the joint repair in accordance with CW 3410-R8 Clause 9.3 and to the satisfaction of the Contract Administrator so that the finished elevation of the patch is flush with surrounding asphalt surface.
- E19.4.6 Compact the asphalt material to an average ninety five percent (95%) of the 75 blow Marshall Density of the paving mixture with no individual test being less than ninety percent (90%).
- E19.4.7 Ensure that no traffic is allowed to cross the patched area until the asphalt has cooled to atmospheric temperature.

E19.5 Crack/Joint Patching

- E19.5.1 Construction Methods as per CW 3250-R7 Clause 3.4.

MEASUREMENT AND PAYMENT

- E19.6 Asphalt Patching of Miscellaneous Concrete will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Asphalt Patching of Miscellaneous Concrete". The area to be paid for will be the total number of square metres of full depth joints, cracks and joints, and vertical faults patched in accordance with this specification, accepted, and measured by the Contract Administrator.

E20. SUPPLY AND INSTALL DIRECTIONAL TACTILE STRIP

DESCRIPTION

- E20.1 This Specification covers the supply and installation of directional bar tiles in 100 mm concrete sidewalks. These are used at bus stops where the sidewalk must cross a multi-use path or bicycle path.

REFERENCES

- E20.2 Referenced Specifications and Drawings

- E20.2.1 The latest version of the City of Winnipeg Standard Construction Specifications
- (a) CW 3235 – Renewal of Existing Miscellaneous Concrete Slabs
 - (b) CW 3310 – Portland Cement Concrete Pavement Works
 - (c) CW 3325 – Portland Cement Concrete Sidewalk

MATERIALS AND EQUIPMENT

- E20.3 Acceptable Directional Tactile Strip product is (or equivalent in accordance with B6):
- (a) 305 mm x 610 mm Cast in Place (Wet Set) with Anchors – Manufactured by ADA Solutions;
 - (b) Part # 1224BAR1875Y;
 - (c) Flush Mount, Federal Yellow;
 - (d) Fasteners: 6 mm Dia. x 38 mm Long SS FH Bolts (Hex Drive) and 6 mm Dia. x 38 mm Long Zinc Inserts; and,
 - (e) Sealant: Manufacturer recommended.
- E20.3.1 Product specifications found in Appendix 'C' of this document.

EQUIPMENT

- E20.4 All equipment shall be of a type acceptable to the Contract Administrator and shall be kept in good working order.

CONSTRUCTION METHODS

- E20.5 Install Wet Set Replaceable units as per manufacturer's recommendations, and as shown on Contract Drawings.
- E20.6 Where necessary, cut Wet Set Replaceable units accurately using a sixty (60) tooth carbide or diamond blade with a suitable cutting device. No cut unit shall measure less than 250 mm in length. In accordance with manufacture's recommendations, supplemental fasteners and Inserts shall be added as needed when the distance between the cut face of the unit and the original hardware exceeds 100 mm.
- E20.7 Install Wet Set Replaceable units true to grade, in location, layout pattern as indicated on the Contract Drawings.

- E20.8 Wet Set Replaceable units shall be set flush into a minimum 65 mm depth of concrete. Vibrate or tamp (with rubber mallet) the Wet Set Replaceable units into the fresh concrete to insure that there are no voids underlying the units and that the units are flush with the adjacent substrate. Temporary weights can be added as necessary in the event of float during initial set of the units.
- E20.9 Joint Lines between successive Wet Set Replaceable Units: Maintain a 3 mm – 5 mm consistent joint line between successive units.
- E20.10 Tooled Edge Detail: Maintain a 3 mm – 6 mm tooled edge detail along the perimeter of the Wet Set Replaceable unit installation. Installation of the tooled edge detail facilitates future removal and replacement of the units.
- E20.11 Protective Plastic Sheet: Particularly in direct sunlight and when temperatures exceed 25 degrees C, remove the protective plastic sheeting from the Wet Set Replaceable units within forty-eight (48) hours of installation of the unit. Failure to do so will be solely at the Contractors risk and may result in the protective plastic bonding to the unit thus requiring a considerable effort to remove the protective plastic sheeting. If plastic sheeting cannot be removed, it will be at the Contractors expense to replace that unit.

MEASUREMENT AND PAYMENT

- E20.12 Directional Tactile Strip
- E20.12.1 Directional Tactile Strip shall be measured on a unit basis and paid for at the Contract Unit Price per unit for the item listed here below. The number of units to be paid for shall be the total number of Directional Tactile Strip supplied and installed in accordance with this specification, accepted and measured by the Contract Administrator.
- (a) Directional Tactile Strip: 305 mm x 610 mm tiles.

E21. SIGN SUPPORT CLAMPS

- E21.1 The Contractor shall install all new sign support clamps at the locations shown on the Drawings or as directed by the Contract Administrator. The City shall supply all sign support clamps.
- E21.2 All costs in connection with the installation of sign support clamps are incidental to the Contract.

E22. TRANSIT SHELTER FOUNDATION

DESCRIPTION

- E22.1 This Specification shall cover the installation of concrete bus shelter pad foundations as identified on the Drawings.
- E22.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies, and all things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified.

REFERENCES

- E22.3 Referenced Specifications and Drawings
- (a) The latest version of the City of Winnipeg Standard Construction Specifications
- (i) CW 3310 – Portland Cement Concrete Pavement Works
- (ii) CW 3325 – Portland Cement Concrete Sidewalk

MATERIALS AND EQUIPMENT

- E22.4 General

- (a) All materials supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.
- (b) The Contractor shall be responsible for the supply, safe storage and handling of all materials as set forth in this Specification. All materials shall be handled in a careful and workmanlike manner, to the satisfaction of the Contract Administrator.

E22.5 Concrete and Reinforcing Steel

- (a) Concrete mix design shall comply with Clause 6.2a) of the latest version of the CW 3310.
- (b) All other materials as per Clause 5 of the latest version of the CW 3310.

CONSTRUCTION METHODS

- E22.6 Construction shall take place in accordance with the Drawings and CW 3310 and CW 3325.
- E22.7 All forming is incidental to the unit price Bid for the specification.
- E22.8 Verify dimensions of bus shelter pads prior to construction.
- E22.9 Meet existing grades and slopes unless otherwise indicated on the Drawings. Notify the Contract Administrator where this requirement will not result in positive drainage.
- E22.10 Removal of any existing concrete bus shelter pad shall be incidental to the Work.

MEASUREMENT AND PAYMENT

E22.11 Transit Shelter Foundations

- E22.11.1 Constructing the Transit Shelter Foundations shall be paid for at the Contract Unit Price per square metre for "Transit Shelter Foundations", measured as specified herein, performed in accordance with this specification and accepted by the Contract Administrator, which price shall be paid in full for supplying all materials and for performing all operations herein describe and all other items incidental to the work. The area to be paid for shall be the total number of square metres of Transit Shelter Foundations constructed in accordance with this specification and as measured and accepted by the Contract Administrator.

E23. ASPHALT RUMBLE STRIP

DESCRIPTION

- E23.1 The Contractor shall construct a milled in rumble strip along the sidewalk/bike paths as shown on the Drawings.

EQUIPMENT

- E23.2 The Contractor shall provide all equipment and labour necessary for the construction of the rumble strips.
- E23.3 Rumble strip constructed outside of the tolerances shown on the Plans, or exhibiting any defects will be rejected and the Contractor shall be responsible for repairing such work.
- E23.4 The milling machine used shall either be equipped with an integral sweeping device mounted directly behind the cutter, or a separate sweeping operation shall be conducted as construction of the rumble strips progresses. The Contractor shall pick up and dispose of all debris created from the milling operation.

MEASUREMENT AND PAYMENT

E23.5 Installation of rumble strips shall be measured on a length basis and paid for at the Contract Unit Price for "Asphalt Rumble Strip". The length to be paid for will be the total number of metres of rumble strips constructed in accordance with this specification, accepted and measured by the Contract Administrator

E24. TREE REMOVALS

DESCRIPTION

E24.1 This specification shall amend the City of Winnipeg Standard Construction specification CW 3010 "Clearing and Grubbing", and shall cover the removal of trees as specified on the Contract Drawings. The City of Winnipeg, Forestry Branch must be contacted prior to removing any trees.

CONSTRUCTION METHODS

E24.2 Tree Removals

E24.2.1 Remove only trees marked and confirmed for removal in the field by the Contract Administrator.

E24.2.2 Remove trees in accordance with CW 3010.

E24.2.3 The Contractor shall arrange for any Elmwood to be disposed of by the City of Winnipeg.

MEASUREMENT AND PAYMENT

E24.3 Removal of trees will be measured on a unit basis and paid for at the Contract Unit Price per unit item of "Tree Removal". The number to be paid for will be the total number of trees removed in accordance with this specification and accepted by the Contract Administrator.

E25. RELOCATE CHARETTE PARK SIGN

DESCRIPTION

E25.1 This Specification shall cover the relocation of the Charette Park sign as identified on the Drawings.

REFERENCES

E25.2 Referenced Specifications and Drawings

- (a) The latest version of the City of Winnipeg Standard Construction Specifications
 - (i) CW 3110 – Sub-Grade, Sub-Base and Base Course Construction
- (b) City of Winnipeg Specification for Bilingual Park Sign with Address as shown in Appendix 'D'.

CONSTRUCTION METHODS

E25.3 Sign Removal

- (a) The Contractor shall remove the Charette Park sign carefully and ensure safe storage until reinstallation can occur.

E25.4 Site Inspection

- (a) Prior to commencing installation of the sign posts at a location, the Contractor shall verify that it can be installed in strict accordance with the Drawings. This shall include contacting all utilities and other owners of underground facilities in order to ensure that the proposed location of the posts is not in conflict with existing or proposed utilities and installations.

- (b) Should there be a conflict between a proposed location and any facility the Contract Administrator shall be notified immediately.

E25.5 Installation

- (a) The Contractor shall install the Charette Park sign in a location as directed by the Contract Administrator.
- (b) The installation method shall consist of two augured holes (one for each post) to a minimum depth of 1100 mm and a minimum diameter of 203 mm.
- (c) Install post to a depth of 1018 mm.
- (d) Backfill area around post and thoroughly tamp with 19 mm down crushed limestone.
- (e) The Contractor shall ensure that the sign is installed plumb.

E25.6 Cleaning

- (a) After installation of the sign has been completed, the sign shall be thoroughly cleaned to the satisfaction of the Contract Administrator.

MEASUREMENT AND PAYMENT

- E25.7 Removal, salvage and installation of sign, posts, and all related appurtenances will be measured on a per unit basis and paid for at the Contract Unit Price for the "Relocate Charette Park Sign".

E26. RELOCATE DECORATIVE PLANT STAND

DESCRIPTION

- E26.1 This Specification shall cover the relocation of the Decorative Plant Stand as identified on the Drawings.

REFERENCES

E26.2 Construction Methods

E26.2.1 Decorative Plant Stand Removal

- (a) The existing decorative plant stand and concrete base designated for removal to facilitate construction shall be carefully removed and salvaged. All components and all hardware shall be salvaged for reuse and stockpiled at a location designated by the Contract Administrator.
- (b) In the event of damage to any materials by the Contractor, the Contractor shall immediately notify the Contract Administrator and make all repairs or replacements necessary, at his own expense, to the satisfaction of the Contract Administrator. In no case shall the Contractor reinstall a damaged component.

E26.2.2 Site Inspection

- (a) Prior to commencing installation of the concrete base, the Contractor shall verify that it can be installed in strict accordance with the Drawings. This shall include contacting all utilities and other owners of underground facilities in order to ensure that the proposed location of the posts is not in conflict with existing or proposed utilities and installations.
- (b) Should there be a conflict between a proposed location and any facility the Contract Administrator shall be notified immediately.

E26.2.3 Re-Installation of Salvaged Plant Stand and Base

- (a) The existing decorative plant stand and base shall be re-installed to the satisfaction of the Contract Administrator.

MEASUREMENT AND PAYMENT

- E26.3 Removal, salvage and installation of base, posts, and all related appurtenances will be measured on a per unit basis and paid for at the Contract Unit Price for the "Relocate Decorative Plant Stand".