

THE CITY OF WINNIPEG

TENDER

TENDER NO. 455-2019

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 NORTH EAST EXCHANGE DISTRICT CURB & SIDEWALK RENEWALS – WESTBROOK STREET AND LOMBARD AVENUE

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, June 11, 2019.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Tender, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Tender will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Tender will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

- B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:
 - (a) was known to the Bidder before receipt hereof; or
 - (b) becomes publicly known other than through the Bidder; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Tender to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Tender, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/bidopp.asp
- B6.4 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 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.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D3.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Tender.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
 - (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute:
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.

- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.
- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B18.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
 - (a) Form A: Bid;
 - (b) Form B: Prices, hard copy;
 - (c) Form G1: Bid Bond and Agreement to Bond.
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely.
- B8.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Tender number and the Bidder's name and address.
- B8.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Tender number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B8.4.2 A hard copy of Form B: Prices must be submitted with the Bid.
- B8.5 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B18.1(a).
- B8.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.8 Bids shall be submitted to:

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

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
 - (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B9.4 Paragraph 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.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.1.1 Prices stated on Form B: Prices shall not include any costs which may be incurred by the Contractor with respect to any applicable funding agreement obligations as outlined in D29. Any such costs shall be determined in accordance with D29.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

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B11. DISCLOSURE

- B11.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B11.2 The Persons are:
 - (a) N/A
- B11.3 Additional Material:
 - (a) N/A

B12. CONFLICT OF INTEREST AND GOOD FAITH

- B12.1 Bidders, by responding to this Tender, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B12.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:
 - (a) other commitments;
 - (b) relationships;
 - (c) financial interests; or
 - (d) involvement in ongoing litigation;

that could or would be seen to:

- exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Bids or award of the Contract; or
- (ii) compromise, impair or be incompatible with the effective performance of a Bidder's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the Tender process or the Work; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Tender process) of strategic and/or material relevance to the Tender process or to the Work that is not available to other bidders and that could or would be seen to give that Bidder an unfair competitive advantage.
- B12.3 In connection with its Bid, each entity identified in B12.2 shall:
 - (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
 - (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Tender process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
 - (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.
- B12.4 Without limiting B12.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies,

procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

- B12.5 Without limiting B12.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
 - (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of its employees proposed for the Work;
 - require the removal or replacement of any employees proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
 - (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B12.4 to avoid or mitigate a Conflict of Interest: and
 - (d) disqualify a Bidder if the Bidder, or one of its employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B12.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B13. QUALIFICATION

- B13.1 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.
- B13.2 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 https://winnipeg.ca/finance/findata/matmgt/listing/debar.pdf
- B13.3 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);
- B13.4 Further to B13.3(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™) in the form of:
 - (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/.
- B13.5 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.
- B13.6 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.

B14. BID SECURITY

- B14.1 The Bidder shall provide bid security in the form of 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).
- B14.1.1 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.
- B14.1.2 All signatures on bid securities shall be original.
- B14.1.3 The Bidder shall sign the Bid Bond.
- B14.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.
- B14.2 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 contract securities are furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.
- B14.3 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 Tender.

B15. OPENING OF BIDS AND RELEASE OF INFORMATION

- B15.1 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.
- B15.1.1 Bidders or their representatives may attend.
- B15.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B14 will not be read out.
- B15.2 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/matmqt/

- B15.3 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/
- B15.4 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).
- B15.4.1 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.

B16. IRREVOCABLE BID

- B16.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B16.2 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 contract securities have been 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.

B17. WITHDRAWAL OF BIDS

- B17.1 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.
- B17.1.1 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.
- B17.1.2 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.
- B17.1.3 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 B17.1.3(b), declare the Bid withdrawn.
- B17.2 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 B16.2 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.

B18. EVALUATION OF BIDS

- B18.1 Award of the Contract shall be based on the following bid evaluation criteria:
 - (a) compliance by the Bidder with the requirements of the Tender, or acceptable deviation therefrom (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B13 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B7.
- B18.2 Further to B18.1(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.
- B18.3 Further to B18.1(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 qualified.
- B18.4 Further to B18.1(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.
- B18.4.1 Further to B18.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B18.4.2 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.

B19. AWARD OF CONTRACT

- B19.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B19.2 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 qualified, and the Bids are determined to be responsive.
- B19.2.1 Without limiting the generality of B19.2, 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.
- B19.3 The Work of this Contract is contingent upon Council approval of sufficient funding in the 2019 Capital Budget. If the Capital Budget approved by Council does not include sufficient funding for the Work, the City will have no obligation to award a Contract.
- B19.4 Where an award of Contract is made by the City, the award shall be made to the qualified idder submitting the lowest evaluated responsive Bid, in accordance with B18.
- B19.4.1 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 2019-01-15) 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 Tender 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) Curb Renewal and Streetscaping
 - (i) East Side of Westbrook Street from Lane to Lombard Avenue
 - (ii) South Side of Lombard Avenue from Westbrook to Mill Street
 - (iii) North East corner at Lombard Avenue and Westbrook
 - (iv) South East corner of Lombard Avenue and Mill Street
- D2.2 The major components of the Work are as follows:
 - (a) Curb Renewal
 - (i) Removal and replacement of existing curb;
 - (ii) Pavement planning;
 - (iii) Asphalt patching along gutter;
 - (iv) Adjustment of water valves and manholes; and
 - (v) Renewal of existing concrete approach.
 - (b) Streetscaping
 - (i) Removal of sidewalk;
 - (ii) Removal of existing unit pavers for re-use;
 - (iii) Placement of geotextile fabric;
 - (iv) Placement and compaction of base and sub-base material;
 - (v) Placement of drainage pipe;
 - (vi) Placement of conduit;
 - (vii) Supply pedestrian light fixtures;
 - (viii) Construction of new sidewalk with blockouts, dowels and curb ramps including detectable tile;
 - (ix) Placement of unit pavers;
 - (x) Construction of structural soil cells;
 - (xi) Placement of trees;
 - (xii) Sodding; and
 - (xiii) Landscape maintenance.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is HTFC Planning and Design, represented by:

James Hudson, AALA, MALA, CSLA Associate

Telephone No. 204 944 9907 Email Address jhudson@htfc.mb.ca

- D3.2 At the pre-construction meeting, the Contract Administrator 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 B8.

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 identified in D3.
- 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 B8.

D7. FURNISHING OF DOCUMENTS

D7.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Tender. If the Contractor requires additional sets of the Tender, 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.

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- 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. CONTRACT SECURITY

- D11.1 The Contractor shall provide and maintain the performance bond and the labour and material payment bond 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; and
 - (b) a labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H2: Labour and Material Payment Bond), in an amount equal to fifty percent (50%) of the Contract Price.
- D11.2 The Contractor shall provide the City Solicitor with the required performance and labour and material payment bonds within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D11.3 The Contractor shall, as soon as practicable after entering into a contract with a Subcontractor:
 - (a) give the Subcontractor written notice of the existence of the labour and material payment bond in D11.1(b); and
 - (b) post a notice of the bond and/or a copy of that bond in a conspicuous location at the Site of the Work.

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 preconstruction 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: etailed 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 contract 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 commence the Work on the Site before June 17, 2019 and shall commence the Work no later than July 22, 2019.

D16. WORKING DAYS

- D16.1 Further to C1.1(II);
- 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.

D18. WORK BY OTHERS

- D18.1 Work by others on or near the Site will include but not necessarily be limited to:
 - (a) City of Winnipeg Traffic Signals Department signals upgrade at the intersection of Westbrook and Lombard.
 - (b) Manitoba Hydro Pedestrian Lighting installation of new pedestrian lights including wiring, bases, poles, and pedestrian light fixtures on Westbrook and Lombard.

- (c) Richardson Innovation Centre Contractors
 - (i) Building and site construction at the south east corner of Westbrook and Lombard. Richardson site work will be immediately adjacent to City Work.
 - (ii) Concrete curb, curb ramp, CIP concrete sidewalk and roadway repair within the roadway right-of-way.
 - (iii) Co-operation and coordination will be required with Richardson Innovation Centre Contractors.

D19. SEQUENCE OF WORK

D19.1 Further to C6.1, the sequence of work shall be managed to minimize disruption to businesses, traffic and site work at the Richardson Innovation Centre throughout the course of construction.

D20. SUBSTANTIAL PERFORMANCE

- D20.1 The Contractor shall achieve Substantial Performance by August 30, 2019.
- D20.2 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.
- D20.3 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.

D21. TOTAL PERFORMANCE

- D21.1 The Contractor shall achieve Total Performance by September 13, 2019.
- D21.2 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.
- D21.3 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.

D22. LIQUIDATED DAMAGES

- D22.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City One Thousand dollars (\$1000.00) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D22.2 The amount specified for liquidated damages in D22.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D22.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D23. SCHEDULED MAINTENANCE

- D23.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
 - (a) Maintenance of sod as specified in City of Winnipeg Specification CW 3510;
 - (b) Maintenance of trees as specified in Part E Specifications;
- D23.2 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

D24. JOB MEETINGS

- D24.1 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.
- D24.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D25. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D25.1 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).

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

Purther to B13.4, 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 B13.4.

MEASUREMENT AND PAYMENT

D27. PAYMENT

D27.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D28. WARRANTY

D28.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

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- D28.2 Notwithstanding C13.2 or D28.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total 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.
- D28.2.1 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.

THIRD PARTY AGREEMENTS

D29. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D29.1 In the event that funding for the Work of the Contract is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, the following terms and conditions shall apply, as required by the applicable funding agreements.
- D29.2 Further to D29.1, in the event that the obligations in D29 apply, actual costs legitimately incurred by the Contractor as a direct result of these obligations ("Funding Costs") shall be determined by the actual cost to the Contractor and not by the valuation method(s) outlined in C7.4. In all other respects Funding Costs will be processed in accordance with Changes in Work under C7.
- D29.3 For the purposes of D29:
 - (a) "Government of Canada" includes the authorized officials, auditors, and representatives of the Government of Canada; and
 - (b) "Government of Manitoba" includes the authorized officials, auditors, and representatives of the Government of Manitoba.
- D29.4 Modified Insurance Requirements
- D29.4.1 If not already required under the insurance requirements identified in D10, the Contractor will be required to provide wrap-up liability insurance in an amount of no less than two million dollars (\$2,000,000) inclusive per occurrence. Such policy will be written in the joint names of the City, Contractor, Consultants and all sub-contractors and sub-consultants and include twelve (12) months completed operations. The Government of Manitoba and its Ministers, officers, employees, and agents shall be added as additional insureds.
- D29.4.2 If not already required under the insurance requirements identified in D10, the Contractor will be required to provide builders' risk insurance (including boiler and machinery insurance, as applicable) providing all risks coverage at full replacement cost, or such lower level of insurance that the City may identify on a case-by-case basis, such as an installation floater.
- D29.4.3 The Contractor shall obtain and maintain third party liability insurance with minimum coverage of two million dollars (\$2,000,000.00) per occurrence on all licensed vehicles operated at the Site. In the event that this requirement conflicts with another licensed vehicle insurance requirement in this Contract, then the requirement that provides the higher level of insurance shall apply.
- D29.4.4 Further to D10.3, insurers shall provide satisfactory Certificates of Insurance to the Government of Manitoba prior to commencement of Work as written evidence of the insurance required. The Certificates of Insurance must provide for a minimum of thirty (30) days' prior written notice to the Government of Manitoba in case of insurance cancellation.
- D29.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D29.5 Indemnification By Contractor

D29.5.1 In addition to the indemnity obligations outlined in C17 of the General Conditions for Construction, the Contractor agrees to indemnify and save harmless the Government of Canada and the Government of Manitoba and each of their respective Ministers, officers, servants, employees, and agents from and against all claims and demands, losses, costs, damages, actions, suit or other proceedings brought or pursued in any manner in respect of any matter caused by the Contractor or arising from this Contract or the Work, or from the goods or services provided or required to be provided by the Contractor, except those resulting from the negligence of any of the Government of Canada's or the Government of Manitoba's Ministers, officers, servants, employees, or agents, as the case may be.

D29.6 Records Retention and Audits

- D29.6.1 The Contractor shall maintain and preserve accurate and complete records in respect of this Contract and the Work, including all accounting records, financial documents, copies of contracts with other parties and other records relating to this Contract and the Work during the term of the Contract and for at least six (6) years after Total Performance. Those records bearing original signatures or professional seals or stamps must be preserved in paper form; other records may be retained in electronic form.
- D29.6.2 In addition to the record keeping and inspection obligations outlined in C6 of the General Conditions for Construction, the Contractor shall keep available for inspection and audit at all reasonable times while this Contract is in effect and until at least six (6) years after Total Performance, all records, documents, and contracts referred to in D29.6.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.

D29.7 Other Obligations

- D29.7.1 The Contractor consents to the City providing a copy of the Contract to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D29.7.2 If the Lobbyists Registration Act (Manitoba) applies to the Contractor, the Contractor represents and warrants that it has filed a return and is registered and in full compliance with the obligations of that Act, and covenants that it will continue to comply for the duration of this Contract.
- D29.7.3 The Contractor shall comply with all applicable legislation and standards, whether federal, provincial, or municipal, including (without limitation) labour, environmental, and human rights laws, in the course of providing the Work.
- D29.7.4 The Contractor shall properly account for the Work provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.

FORM H1: PERFORMANCE BOND

(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ day of _____ , 20___ .

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 (hereinaft 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 are assigns, jointly and severally, firmly by these presents.
WHEREAS the Principal has entered into a written contract with the Obligee for
TENDER NO. 455-2019
NORTH EAST EXCHANGE DISTRICT CURB & SIDEWALK RENEWALS – WESTBROOK STREET AND LOMBARD AVENUE 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:
 carry out and perform the Contract and every part thereof in the manner and within the times s forth in the Contract and in accordance with the terms and conditions specified in the Contract; perform the Work in a good, proper, workmanlike manner; make all the payments whether to the Obligee or to others as therein provided; 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, are demands of every description as set forth in the Contract, and from all penalties, assessment claims, actions for loss, damages or compensation whether arising under "The Worke 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 Sure 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 the 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 contraint notwithstanding.
IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

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SIGNED AND SEALED in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)	
Per:	(Seal)
Per:	
(Name of Surety)	
By: (Attorney-in-Fact)	(Seal)

FORM H2: LABOUR AND MATERIAL PAYMENT BOND (See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Principal"), and	
his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Surety"), are he and firmly bound unto THE CITY OF WINNIPEG (hereinafter called the "Obligee"), for the use and bene of claimants as herein below defined, in the amount of	
dollars (\$	

of lawful money of Canada, for the payment whereof we, the Principal and the Surety jointly and severally bind ourselves firmly by these presents.

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

TENDER NO. 455-2019

NORTH EAST EXCHANGE DISTRICT CURB & SIDEWALK RENEWALS – WESTBROOK STREET AND LOMBARD AVENUE

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 promptly make payment to all claimants as hereinafter defined, for all labour, service and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void, otherwise it shall remain in full force and effect subject, however, to the following conditions:

- (a) A claimant is defined as one having a direct contract with the Principal for labour, service and material, or any of them, used or reasonably required for use in the performance of the contract, labour, service and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment (but excluding rent of equipment where the rent pursuant to an agreement is to be applied towards the purchase price thereof) directly applicable to the Contract;
- (b) The above-named Principal and Surety hereby jointly and severally agree with the Obligee that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work, labour or service was done or performed, or materials were furnished by such claimant, may sue on this bond, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon:
- (c) No suit or action shall be commenced hereunder by any claimant
 - (ii) unless claimant shall have given written notice to the Principal and the Surety above-named, within one hundred and twenty (120) days after such claimant did or performed the last of the work, labour or service, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work, labour or service was done or performed. Such notice shall be served by mailing the same by registered mail to the Principal, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the Province of Manitoba;

- (iii) after the expiration of one (1) year following the date on which Principal ceased work on said Contract; including work performed under the guarantees provided in the Contract;
- (iv) other than in a court of competent jurisdiction in the Province of Manitoba.
- (d) The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.
- (e) The Surety shall not be liable for a greater sum than the specified penalty of this bond.

The Principal and Surety hereby agree that The Guarantors' Liability Act (Manitoba) shall apply to this Bond.

	oal has hereunto set its hand affixed its seal, an with its corporate seal duly attested by the autho	
day of	_ , 20	
SIGNED AND SEALED in the presence of: (Witness as to Principal if no seal)	(Name of Principal) Per: Per:	(Seal)
	(Name of Surety) By: (Attorney-in-Fact)	(Seal)

FORM J: SUBCONTRACTOR LIST

(See D12)

Portion of the Work	Name	Address	
I .			

FORM K: EQUIPMENT

(See D13)

1. Categor	y/type:	
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
2. Categor	y/type:	
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
3. Categor		
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		

FORM K: EQUIPMENT

(See D13)

4. Categor	y/type:	
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
5. Categor	y/type:	
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
Make/Model/Year:		Serial No.:
Registered owner:		
6. Categor	y/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)

Items of Work	ch cumulative percentage to be completed will be achieved. Percentage of Work Completed				
nome of work	Start	25%	50%	75%	100%
Removal and replacement of existing curb					
Renewal of existing concrete approach					
Asphalt patching along gutter					
Removal of sidewalk					
Placement of drainage pipe					
Placement of conduit					
Construction of structural soil cells					
Supply of pedestrian light fixtures					
Construction of new sidewalk					
Placement of unit pavers					
Placement of trees					
Sodding					

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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 Tender shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B7. In every instance where a brand name or design specification is used, the City will also consider approved equals and/or approved alternatives in accordance with B7.
- E1.4 The following are applicable to the Work:

Drawing No.	Drawing Name/Title	<u>Drawing</u>
_		(Original) Sheet
		<u>Size</u>
L-00	COVER SHEET	A1
C-01	CIVIL PLAN	A1
L-1.1	MATERIALS & PLANTING PLAN	A1
L-2.1	STRUCTURAL SOIL CELL DETAILS	A1
L-2.2	SECTIONS, PAVING LAYOUT & DETAILS	A1

E2. TRAFFIC CONTROL

- E2.1 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 CW3410.
 - (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.
- E2.2 Notwithstanding E2.1, 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,

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 - (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.
- E2.2.1 An exception to E2.2 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.
- E2.2.2 Further to E2.2, 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.

E3. TRAFFIC MANAGEMENT

- E3.1 Further to clause 3.7 of CW 1130:
- E3.1.1 The Contractor shall schedule construction activities to meet the following:
 - (a) Lombard Avenue at least one lane for local access traffic and bus traffic shall be maintained along this street during construction in both eastbound and southbound directions.
 - (b) Westbrook Street at least one lane for local access traffic and bus traffic shall be maintained along this street during construction in both eastbound and southbound directions.
 - (c) Intersecting street and private approach access shall be maintained at all times.
- E3.1.2 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 24 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.
- E3.1.3 Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E4. PEDESTRIAN SAFETY

E4.1 During the project, a temporary snow fence shall be installed where open excavation is present. 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.

E5. WATER OBTAINED FROM THE CITY

E5.1 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.

E6. SURFACE RESTORATIONS

E6.1 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.

E7. PEDESTRIAN LIGHT FIXTURES

E7.1 Description

- E7.1.1 This Specification covers all operations relating to the supply of pedestrian light fixtures to Manitoba Hydro and installation of conduit at light fixtures supplied by Manitoba Hydro.
- E7.1.2 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 Works hereinafter specified.

E7.2 References

- (a) Manitoba Hydro Appendix A Electrical Standards (2019 Streetlight Installations)
 - (i) CD 300-6 Installation of Precast Concrete Base
 - (ii) CD 305-1 Plowing and Trenching Details for Underground Street Light Circuits
 - (iii) CD 310-1 Installation of Street Light Cables

E7.3 Materials

E7.3.1 Conduit

(a) Orange plastic pipe, 2" dia. supplied by Manitoba Hydro.

E7.3.2 Pedestrian Light Fixture

(a) Pedestrian light fixture to be Selux Astro 1 light fixture part number AST1-R3-1-LG4500-30-18-SV-120 silver in colour, or approved equal. A link to the manufacturer's specifications is provided:

http://www.selux.us/fileadmin/us/exterior/Spec Sheet/Astro/AST ss.pdf

E7.4 Submittals

E7.4.1 Prior to construction submit manufacturer's specification sheet for the light fixture. Ensure all items are filled out to match the materials specified.

E7.5 Construction Methods

- E7.5.1 Identify any utility vaults and protect during excavation.
- E7.5.2 Install conduit supplied by Manitoba Hydro, to Manitoba Hydro Standards.
- E7.5.3 Pull conduit 1m above grade at each street light standard location.
- E7.5.4 Supply of Pedestrian Light Fixture
 - (a) The Contractor shall obtain the pedestrian light fixtures and deliver to a location designated by Manitoba Hydro. Manitoba Hydro is responsible for installing pedestrian light fixtures on Hydro installed round tapered aluminum poles on Westbrook.

E7.6 Measurement and Payment

- E7.6.1 Supply of Pedestrian Lighting Fixtures shall be measured on a unit basis and will be paid for at the contract Unit Price for the number of "Supply of Pedestrian Light Fixture" supplied in accordance with this specification and accepted and measured by the Contract Administrator.
- E7.6.2 Conduit shall be measured on a length basis and paid for at the Contract Unit Price per metre for "Conduit", which per price shall be paid in full for performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.

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E8. STRUCTURAL SOIL CELL SYSTEM

E8.1 Description

E8.1.1 Provide all labour, materials, methods, equipment and accessories for the supply and installation of structural cell system.

E8.2 Submittals

- E8.2.1 Product Data: For each type of product, submit manufacture's product literature with technical data sufficient to demonstrate that the product meets these specifications.
- E8.2.2 Shop Drawings: Submit manufacturer supplied shop drawings for structural soil cell system.
- E8.3 Delivery, Storage and Handling
- E8.3.1 Deliver materials in manufacturer's original, unopened, undamaged palletized units with identification numbers intact.
- E8.3.2 Bulk Materials:
 - (a) Do not deliver or place backfill, soils and soil amendments in frozen, wet, or muddy conditions
 - (b) Do not dump or store bulk materials near structures, utilities, sidewalks, pavements, and other facilities, or on existing turf areas or plants.
 - (c) Provide protection including tarps, plastic and or matting between bulk materials and finished surfaces sufficient to protect the finish material.
- E8.3.3 Provide erosion-control measures to prevent erosion or displacement of bulk materials and discharge of soil-bearing water runoff or airborne dust to adjacent properties, water conveyance systems, and walkways. Provide additional sediment control to retain excavated material, backfill, soil amendments and planting mix within the project limits as needed.
- E8.3.4 Protect structural cells from damage during delivery, storage and handling.
 - (a) Store under tarp to protect from sunlight when time from delivery to installation exceeds one week. Storage should occur on smooth surfaces, free from dirt, mud and debris.
 - (b) Handling is to be performed with equipment appropriate to the size (height) of cells and site conditions, and may include, hand, handcart, forklifts, extension lifts, small cranes, etc., with care given to minimize damage to structural cell components.
- E8.3.5 Be responsible for the supply, safe storage and handling of all materials.

E8.4 Materials

- E8.4.1 Structural Cell System
 - (a) Tree Grate: 1.5 x 1.5m square Clyde ADA tree grate, corten finish, including frame. Surface mount frame to concrete blockout using a 3/8" wedge or Tapcon anchor per manufacturer's shop drawings.
 - (b) Structural Cells: Rootspace module, polyethylene and fiberglass structures including frames and decks designed to support sidewalk loads (ASHHTO H-20) and designed to be filled with soil for the purpose of growing tree roots.
 - (c) Filtergrid heavy grade non-woven filter fabric with reinforcing grid.
 - (d) RS400 rootstop barrier.
 - (e) RRARB2 rootdrain arborvent dual inlet.
 - (f) Manufactured by Green Blue Urban, 71 Bysham Park Drive, Woodstock, Ontario, N4T 1P1, Telephone: 1-866-282-2743, Web: www.greenblue.com/na, or approved equal.

E8.6.1

E8.4.2	Aggregate sub-base to CW3110.
E8.4.3	Granular drainage material in accordance with specification CW3120 - Installation of Sub Drains.
Ξ 8.4.4	Drainage pipe: 150mm dia. perforated PVC pipe.
E8.4.5	Geotextile to CW3130.
E8.4.6	Backfill Material: Aggregate base material to CW3130. Granite material only – no limestone.
≣8.4.7	Compacted planting medium mound material to planting medium & finished grading specification.
Ξ 8.5	Construction Method
E8.5.1	Layout Approval: Prior to the start of work layout and stake the limits of excavation and horizontal and vertical control points sufficient to install the structural cells and required drainage features in the correct locations.
E8.5.2	The Contractor must ensure that all buried utilities and services are located and if necessary, protected and exposed prior to any excavation in accordance with specification CW1120
E8.5.3	Excavate and confirm to the dimensions and depth shown on the Drawings, including provision for drainage and base course layer, allowing 200mm (8") additional clearance in length and width. Side walls of excavated pit to be clean, straight, and within 15° of vertical. Soft dig / day lighting process to be used in area of existing underground utilities. Ensure subgrade slopes to sub drain trench toward perforated drainage pipe system (min 2.0% slope).
≣8.5.4	Clear excavation of all construction debris, trash, rubble and any foreign material. Excavate and remove oil spills and other soil contamination sufficiently to remove the harmful material. Fill over excavations with approved fill and compact to the required subgrade compaction.
E8.5.5	All excavated material shall be disposed of off-site in accordance with specification CW1130.
E8.5.6	Compact sub-grade in accordance with specification CW3110.
E8.5.7	Install geotextile fabric for aggregate sub base in accordance with CW3130.
E8.5.8	Install aggregate sub-base below structural cell system to the depths indicated in the Drawings and compact to a minimum of 95% of maximum dry density at optimum moisture content, in accordance with ASTM D 698 Standard Proctor Method.
E8.5.9	Assemble and install structural cell system in accordance with manufacturer's specifications.
E8.5.10	Install planting medium, RS400 rootstop barrier and backfill as instructed by the manufacturer. These three materials must be installed and compacted together in alternating operations to achieve correct compaction relationships within the structural cell system.
E8.5.11	Compact planting medium within the rootspace modules and backfill material outside modules in alternating lifts until desired elevations and density is achieved.
E8.5.12	Obtain final approval by Consultant of planting medium and backfill installation prior to installation of structural cell deck and filtergrid.
E8.6	Protection

Maintain a minimum of 100mm of aggregate sub-base over the geotextile material during construction. Use only low-pressure tire or low impact track vehicles with a maximum

surface pressure under vehicle of 4 pounds per square inch, on top of structural cells prior to the installation of final paving.

- E8.6.2 When vehicle must cross structural cells that does not have final paving surfaces installed, use plates or mats to distribute vehicle loads to levels that would be expected at deck surface once final paving has been installed. Use low-pressure tire or low impact track vehicles.
- Ensure that all construction traffic is kept away from limits of structural cells until final surface materials are in place. No vehicles shall drive directly on the structural cell deck.
- E8.7 Measurement and Payment
- E8.8 The construction of structural cell system shall be measured on a lump sum basis as accepted by the Contract Administrator for "Structural Cell System" inclusive of excavation, sub grade compaction, aggregate sub base, geotextile fabric, filtergrid non-woven filter fabric, structural cells, rootstop barrier, backfill, and tree grate w/frame. Price shall be payment in full for supplying materials and for performing the Work in accordance with this Specification and accepted and measured by the Contract Administrator.
- E8.9 Drainage Pipe shall be measured on a length basis and paid for at the Contract Unit Price per metre for "Drainage Pipe", which per price shall be paid in full for supplying materials and performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.

E9. UNIT PAVING

- E9.1 Description
- E9.1.1 Provide all labour, materials, methods, equipment and accessories for the supply and installation of unit paving as indicated on the Drawings.
- E9.2 References
- E9.2.1 CW 3330 Installation of Interlocking Paving Stones
- E9.2.2 CW 3335 Installation of Interlocking Paving Stones on a Lean Concrete Base
- E9.3 Materials
- E9.3.1 Unit Pavers:
 - (a) Pavers available from Barkman Concrete Ltd. Ph. 204-667-3310, or approved equal:
 - (i) 300 x 151 x 100mm Boadway paver, charcoal colour.
 - (ii) 210 x 105 x 60mm Holland 6CM paver, charcoal colour.
 - (b) Unit pavers stockpiled from south west corner of Lombard Avenue and Mill Street:
 - (i) Munic, holland, holland square, and clay pavers, stockpiled from sidewalk.
 - (c) 194 x 93 x 57mm clay brick paver, dark ironspot.
- E9.3.2 Paver Restraint: Brickblock aluminum paver restraint, 1.9mm x 69.9mm with 2.03mm top lip, Mill finish natural aluminum. Install per manufacturer's drawing & specifications. Available from Permaloc Corporation 1.800.356.9660, or approved equal.
- E9.3.3 Bedding Sand: shall be fine aggregate to the requirements of specification CW3330.
- E9.3.4 Joint Sand: to the requirements of specification CW3330.
- E9.4 Construction Method
- E9.4.1 Contractor to verify the exact dimensions of all unit pavers types prior to the construction of blockouts in concrete sidewalk. Use physical samples of specified pavers when constructing form work for blockouts.

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- E9.4.2 Contractor to review paving layout and patterns with Contract Administrator.
- E9.4.3 Install concrete sidewalk w/blockouts, and roadway w/blockouts as specified on Drawings.
- E9.4.4 Install aluminum paver restraint where unit pavers are adjacent to sod. Install paver restraint per manufacturer drawings and specifications. Ensure concrete blockout below extends 38mm beyond edge of unit paver to accommodate paver restraint.
- E9.4.5 Preparation of Sand Base
 - (a) Remove all accumulated debris from blockouts.
 - (b) Install bedding sand to the depths indicated on the Drawings and to CW3330.
 - (c) Do not compact sand base prior to installing pavers.

E9.4.6 Installation of Unit Pavers

- (a) Unit pavers shall be installed in formed concrete blockouts and compacted subgrade in accordance with the specification CW3330 and CW3335, set in locations and patterns as shown on the Drawings. Spaces between joints shall be 5mm maximum and shall be uniform and consistent while maintaining true patterns as indicated on the Drawings.
- (b) Commence installation of pavers against edge to obtain straightest possible course for installation.
- (c) Pavers shall be cut with saw only to obtain true even undamaged edges. Chipped pavers are unacceptable.
- (d) Crews shall work on installed pavers, not on sand layer.
- (e) Place pavers and spread and fine grade joint sand over paving surface and sweep into joints.
- (f) Sweep remaining sand over all paving areas and remove from site.
- (g) Replace at no extra cost all whole or cut stones marked as unacceptable.
- (h) Remove cracked, chipped, broken or otherwise damaged paving materials from Site immediately.
- (i) Upon completion, clean in accordance with manufacturer's recommendations.

E9.5 Quality Assurance

E9.5.1 All workmanship and all materials furnished and supplied under this Specification are subject to close and systematic inspection and testing by the Contract Administrator including all operations, from the selection and production of materials, through to final acceptance of the Work. The Contractor shall be wholly responsible for the control of all operations incidental thereto notwithstanding any inspection of approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or works that are not in accordance with the requirements of this specification.

E9.6 Measurement and Payment

- E9.6.1 Unit Pavers will be measured on an area basis and will be paid for at the Contract Unit Price per square metre for the following items of Work, 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 inclusive of bedding sand, joint sand and plastic edge support. The area to be paid for shall be the total installed area of each type of unit paving accepted and measured by the Contract Administrator.
 - (a) Items of Work:
 - (i) Broadway paver, charcoal
 - (ii) Holland 6CM paver, charcoal
 - (iii) Munic, Holland, Holland Square paver from stockpile
 - (iv) Clay brick paver, dark ironspot

- (v) Clay brick paver from stockpile
- E9.6.2 Paver Restraint shall be measured on a length basis and paid for at the Contract Unit Price per metre for "Paver Restraint", which per price shall be paid in full for supplying materials and performing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.

E10. PLANTING MEDIUM AND FINISHED GRADING

- E10.1 Description
- E10.1.1 Provide all labour, materials, methods, equipment and accessories for the supply and installation of planting medium for structural soil cells and sod areas.
- E10.2 References
- E10.2.1 Agriculture and Agri-Food Canada
 - .1 The Canadian System of Soil Classification, Third Edition, 1998.
- E10.2.2 Canadian Council of Ministers of the Environment (CCME) Guidelines.
- E10.2.3 The City of Winnipeg Standard Construction Specifications
 - .1 CW 1130 Site Requirements
 - .2 CW 3540 Topsoil and Finish Grading for Establishment of Turf Areas
- E10.3 Submittals
- E10.3.1 Submit 0.5kg sample of planting medium to National Testing Laboratory, or approved alternate, and indicate present use and intended use. Prepare and ship sample in accordance with Provincial regulations and testing laboratory requirements. Submit samples for:
 - (a) Clay-Rich Planting Medium for Structural Soil Cells and Tree Wells.
 - (b) Planting Medium for Sod Areas.
- E10.3.2 Submit two (2) copies of soil analysis and recommendations for corrections to Contract Administrator.
- E10.3.3 Submit two (2) litre sample of compost to Contract Administrator with manufacturers literature and material certification that the product meets the CCME guidelines.
- E10.4 Quality Assurance
- E10.4.1 Inform Contract Administrator of proposed source of materials to be supplied and provide a sample for review by Contract Administrator prior to installation.
- E10.4.2 Testing of planting medium to be carried out and paid for by Contractor. Prepare and ship planting medium samples to approved laboratory in accordance with Provincial regulations and laboratory requirements, indicating intended use on each sample.
- E10.4.3 Test planting medium for nutrients N, P, K, micronutrients, soluble salt content, pH value and OM (organic matter).
- E10.4.4 Acceptance of planting medium is subject to an inspection of material and confirmation of test results. Do not commence soft landscaping work until Contract Administrator has accepted planting medium.
- E10.5 Delivery, Storage and Handling
- E10.5.1 Store materials in a dry area, protected from freezing, sedimentation and contamination.
- E10.5.2 Deliver and store fertilizer in waterproof bags labeled with weight, analysis and name of manufacturer.

- E10.6 Materials
- E10.6.1 Black Topsoil: In accordance with CW 3540 for topsoil except organic matter to be in the range of 5-10%.
- E10.6.2 Peatmoss: deliver from partially decomposed fibrous or cellular stems and leaves of species of sphagnum mosses. Elastic and homogeneous, brown in colour. Free of wood and deleterious material that could prohibit growth. Shredded particle minimum size: 5 mm.
- E10.6.3 Compost:
 - (a) mixture of soil, decomposing organic matter used as fertilizer, mulch or soil conditioner.
 - (b) Dark brown in colour, no objectionable odour.
 - (c) Processed organic matter containing 40% or more organic matter as determined by Walkley-Black or Lost On Ignition (LOI) test.
 - (d) Must be sufficiently decomposed (i.e. stable) so that any further decomposition does not adversely affect plant growth (C:N ratio below 25:1) and contain no toxic or growth inhibiting contaminates.
 - (e) Composed bio-solids to: CCME Guidelines for Compost Quality, Category A.
- E10.6.4 Sand: hard fine silica sand, well washed and free of impurities, chemical or organic matter. Coarse texture, and to the following gradation:

Particle Size (mm)	% Passing through Screen
2.0	100%
1.0	95 to 100%
0.5	80 to 100%
0.25	0 to 30%
0.15	0 to 8%
0.075	0 to 1%

- E10.6.5 Fertilizer: Synthetic start-up slow release fertilizer with a N-P-K analysis of 12-36-15 ratio at a rate of 4 kg per 100 m2 which is 8 pounds per 100 sq ft.
- E10.6.6 Clay-Rich Planting Medium Mix for Soil Cells and Tree Wells: planting medium for structural soil cells and tree wells shall be a blend of black topsoil, compost, and course sand mixed to the following proportion:

<u>Material</u>	% by volume
Black Topsoil	70%
Compost	15%
Coarse Sand	15%

E10.6.7 Planting Medium for Sod Areas: planting medium for sod areas shall be a blend of black topsoil, compost, and course sand mixed to the following proportion:

Material	% by volume
Black Topsoil	40%
Peat Moss	40%
Compost	10%
Coarse Sand	10%

- E10.7 Construction Method
- E10.7.1 Excavation

- (a) Excavate tree vaults by hand or using approved soft digging technology unless otherwise directed by Contract Administrator. Dispose of all rock, clay soils and other deleterious materials off Site.
- (b) Protect bottom of excavations against freezing.
- (c) Remove water that has entered the excavated tree pit prior to planting. Notify Contract Administrator if water source is groundwater.
- (d) Verify and obtain approval by Contract Administrator of tree vaults with geotextile prior to compacted soil mound and planting medium placement.

E10.7.2 Planting Medium Placement

- (a) Place planting medium in uniform layers over approved, unfrozen sub-grade, to the depth indicated on the Drawings.
- (b) Eliminate rough spots and low areas, Prepare a loose, friable bed, boot firm and level.

E10.7.3 Soil Amendments

- (a) Apply lime, sulphur, or other soil amendment at a rate determined and recommended from planting medium sample test.
- (b) Mix soil amendment well into full depth topsoil prior to application of fertilizer.

E10.7.4 Finished Grading and Rolling

- (a) Per CW3540.
- (b) Fine grade entire soil area to elevations as indicated on the Drawings. Eliminate rough spots and low areas. Leave surfaces smooth, uniform and firm against foot printing with a fine loose texture.

E10.8 Surplus Material

E10.8.1 Dispose of unused planting medium off site in accordance with CW1130.

E10.9 Cleaning

E10.9.1 Perform cleaning to remove accumulated environmental dirt from all paved surfaces of building faces. Remove surplus materials, rubbish, tools and equipment barriers.

E10.10 Measurement and Payment

- E10.10.1 Supply and placement of clay-rich planting medium mix for soil cells and tree wells shall be measured on a volume basis and paid for at the Contract Unit Price per cubic metre as "Clay-Rich Planting Medium Mix for Soil Cells and Tree Wells". The volume to be paid for shall be the total cubic metre volume installed in accordance with this specification, accepted and measured by the Contract Administrator.
- E10.10.2 Supply and placement of planting medium for sod areas shall be measured on an area basis and paid for at the Contract Unit Price per square metre for "Planting Medium for Sod Areas". The area to be paid shall be the total square metre area in accordance with this specification, accepted and measured by the Contract Administrator.

E11. SODDING

E11.1 Description

E11.1.1 General

- (a) This specification shall amend and supplement City of Winnipeg Standard Construction Specification CW 3510 "Sodding", and covers all operations relating sod supply and installation, including preparation of finish grade, watering and rolling, and thirty (30) day maintenance.
- (b) 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 Works as hereinafter specified.

E11.2 References

- E11.2.1 City of Winnipeg Standard Construction Specifications:
 - (a) CW 3510 Sodding
 - (b) CW 3540 Topsoil and Finished Grading
- E11.2.2 City of Winnipeg Standard Details:
 - (a) SD-243 Sodding Details

E11.3 Materials

E11.3.1 General

(a) The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this Specification. All materials supplied under this Specification shall be subject to inspection and acceptance by the Contract Administrator.

E11.3.2 Turf Grass Sod

- (a) Turf grass sod shall conform to CW 3510.
- (b) Sod shall be a mixture of ninety-five percent (95%) Kentucky bluegrass, using equal proportions of any three (3) Class 2 cultivars, and five percent (5%) Creeping Red fescue.
- (c) Soil and fine grading shall conform to CW 3540 and Planting Medium & Finish Grading Specification.

E11.4 Construction Methods

- E11.4.1 Installation of Topsoil and Finish Grading, Preparation of Finish Grade, Placement of Sod, Watering, Rolling and 30-Day Maintenance:
 - (a) Install 75 mm topsoil in accordance with CW 3540.
 - (b) Sod placement, watering and rolling and thirty (30) day maintenance shall conform to CW 3510-R9 and SD-243.
- E11.5 Measurement and Payment
- E11.6 Turf Grass Sod will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Sodding". The area to be paid shall be the total square metre area in accordance with this specification, accepted and measured by the Contract Administrator.

E12. TREE PLANTING

- E12.1 Description
- E12.1.1 Provide all labour, materials, methods, equipment and accessories for the supply and installation of trees.
- E12.2 References
- E12.2.1 Agriculture and Agri-Food Canada (AAFC)
 - (a) Plant Hardiness Zones in Canada-2000.
- E12.2.2 Canadian Nursery Landscape Association (CNLA)
 - (a) Plant Canadian Standards for Nursery Stock-2001.
- E12.2.3 Department of Justice Canada (JUS)
 - (a) Plant Canadian Environmental Protection Act (CEPA), 1999, c. 33.

- (b) Transport of Dangerous Goods Act (TDGA), 1992, c.34.
- E12.2.4 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
 - (a) Materials Safety Data Sheets (MSDS).
- E12.3 Submittals
- E12.3.1 Submit product data for:
 - (a) Fertilizer.
- E12.4 Source Quality Control
- E12.4.1 Obtain approval from Contract Administrator of plant material at source.
- E12.4.2 Notify Contract Administrator of source of material at least seven (7) days in advance of shipment. No work under this Section is to proceed without approval.
- E12.4.3 Acceptance of plant material at source does not prevent rejection on Site prior to or after planting operations.
- E12.4.4 Plant material imported from other nations will not be accepted.
- E12.4.5 Bare root plant material will not be accepted.
- E12.5 Storage and Protection
- E12.5.1 Coordinate the shipping of plants and excavation of tree vaults to ensure minimum time laps between digging and planting.
- E12.5.2 Protect plant material from frost, excessive heat, wind and sun during delivery.
- E12.5.3 Protect plant material from damage during transportation:
 - (a) When delivery distance is less than 30 km and vehicle travels at speeds under 80 km/h, tie tarpaulins around plants or over vehicle box.
 - (b) When delivery distance exceeds 30 km or vehicle travels at speeds over 80 km/h, use enclosed vehicle where practical.
 - (c) Protect foliage and rootballs using anti-desiccants and tarpaulins, where use of enclosed vehicle is impractical due to size and weight of plant material.
- E12.5.4 Protect stored plant material from frost, wind and sun as follows:
 - (a) For balled and burlapped and wire basket rootballs, place to protect branches from damage. Maintain moisture level in root zones.
- E12.5.5 Remove broken and damaged roots with sharp pruning shears. Make clean cut and cover cuts over 20mm (3/4") diameter with wound dressing.
- E12.5.6 Keep roots moist and protect from sun and wind. Heel-in trees that cannot be planted immediately in shaded areas and water well.
- E12.6 Scheduling
- E12.6.1 Order plant material as soon as possible after award of contract to ensure plant availability. Request substitutes as required.
- E12.6.2 Provide Contract Administrator a written schedule fourteen (14) days in advance of shipment of plant material. Schedule to include: quantity and type of plant material, shipping dates, arrival dates on Site, and planting dates.
- E12.7 Warranty of Nursery Stock
- E12.7.1 For all plant material a two (2) year warranty period is required.
- E12.7.2 During the warranty period, upon written notification from the Contract Administrator, the Contractor warrants to replace and replant any nursery stock found dead and/or in poor

condition as soon as possible thereafter, without cost to The City. "Poor Condition" shall be interpreted as meaning nursery stock on which branches are dead or dying, or have not shown satisfactory growth in leaves. Exempted is nursery stock damaged by accidental causes or vandalism, which stock shall be replaced at the cost of The City.

- E12.7.3 At the end of the two (2) year warranty period an inspection will be conducted by Contract Administrator.
- E12.7.4 Contact Administrator reserves the right to extend Contractor's warranty responsibilities for an additional one (1) year if, at end of initial warranty period, leaf development and growth is not sufficient to ensure future survival.

E12.8 Replacements

- E12.8.1 During warranty period, remove and replace any plant material that has died or failed to grow satisfactorily, at no cost to the City, as directed by the Contract Administrator.
- E12.8.2 A two (2) year warranty period shall be required on all replacement plant material.
- E12.8.3 All replacement plant material shall be the same size and species as specified, and shall be supplied and planted in accordance with the original Drawings and Specifications.
- E12.8.4 Should the replaced plant material not survive, the Contractor will be responsible for a third replacement and a two (2) year warranty period shall be required.

E12.9 Plant Material

- E12.9.1 Type of root preparation, sizing, grading and quality shall comply to the Canadian Standards for Nursery Stock.
- E12.9.2 Source of plant material: grown in Zone 3 only in accordance with Plant Hardiness Zones in Canada. Plant material must be planted in zone indicated as appropriate for its species.
- E12.9.3 Plant material free of disease, insects, defects or injuries and structurally sound with strong fibrous root system.
- E12.9.4 Substitutions to plant material as indicated on planting plan are not permitted unless written approval has been obtained as to type, variety and size. Plant substitutions must be of similar species and of equal size as those originally specified.
- E12.9.5 Refer to Plant Specification List on the Drawings and the Drawings for species, quantities, size and quality of plant materials.

E12.10 Water

- E12.10.1 Water free of impurities that would hinder plant growth. The Contractor shall provide water, so that all costs to provide water for the watering operation and all associated costs shall be borne by the Contractor. These costs may include hydrant permit and meter rental fees.
- E12.10.2 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs associated with obtaining water in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.
- E12.11 Planting Medium: backfill with planting medium as specified in Planting Medium Specification.
- E12.12 Fertilizer: synthetic start-up slow release fertilizer with a N-P-K analysis of 12-36-15 ratio at a rate of 4 kg per 100 m2 which is 8 pounds per 100 sq ft.

E12.13 Pre-Planting Preparation

- E12.13.1 Obtain approval from Contract Administrator of finish grading, and planting medium installation prior to commencing Work in this section.
- E12.13.2 Ensure plant material is acceptable to the Contract Administrator.

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E12.13.3 Remove damaged roots and branches from plant material with sharp clean equipment treating wounds as necessary to maintain plant health.

- E12.13.4 Apply anti-desiccant to deciduous trees in leaf in accordance with manufacturer's instructions.
- E12.14 Plant Material Layout
- E12.14.1 Prepare planting areas. Refer to Planting Medium Specification.
- E12.14.2 For individual trees:
 - (a) Excavate tree pits to depths and widths indicated on the Drawings.
 - (b) Remove rocks, roots, debris and toxic material from the tree pit.
- E12.14.3 Remove water that has entered the excavated tree pit prior to planting. Notify Contract Administrator if water source is groundwater.
- E12.15 Planting
- E12.15.1 For jute burlap rootballs, cut away top one third of wrapping and wire basket without damaging rootball. Do not pull burlap or rope from under rootball.
- E12.15.2 For container stock or rootballs in non-degradable wrapping, remove entire container or wrapping without damaging rootball. Loosen rootball to encourage bonding with planting medium and subgrade.
- E12.15.3 Plant vertically in locations as indicated. Orient plant material to give best appearance in relation to structure, roads and walks.
- E12.15.4 Set plants and trees at elevations indicated on the drawings with no more than 50mm of soil above the root flair. Review with City Forestry representative and Contract Administrator when trees are on site, prior to installation.
- E12.15.5 For trees:
 - (a) Prepare compacted soil mound below tree root ball. Ensure top of mound is set to suit the depth of rootball.
 - (b) Backfill soil in 150 mm (6") lifts. Tamp each lift to eliminate air pockets. When two thirds of depth of planting pit has been backfilled, fill remaining space with water. After water has penetrated into soil, backfill to finish grade.
- E12.15.6 Water plant material thoroughly. Report extreme ponding in planters indicative of malfunctioning drains to the Contract Administrator immediately.
- E12.15.7 After soil settlement has occurred, fill with soil to finish grade.
- E12.15.8 Dispose of burlap, wire and container material off Site.
- E12.16 Pruning
- E12.16.1 Undertake corrective pruning after planting to eliminate torn and broken branches. Do not damage lead branches or remove smaller twigs along main branches. Do not prune to compensate for root loss.
- E12.17 Maintenance
- E12.18 Maintain plant material from date of planting to the end of the two (2) year warranty period. Refer to Landscape Maintenance Specification.
- E12.19 Measurement and Payment
- E12.19.1 Supply and installation of trees shall be measured on a unit basis, and shall be paid for at the Contract Unit Price per unit for installed plants, as accepted and measured in the field by the Contract Administrator, for the following Items of Work, 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.

E12.19.2 Items of Work:

- (a) Trees
 - (i) Dropmore Linden

E13. LANDSCAPE MAINTENANCE

E13.1 Description

- E13.1.1 Provide all labour, materials, methods, equipment and accessories for the maintenance of trees following acceptance of the plant material to start warranty.
- E13.1.2 In general, the Work shall include:
 - (a) Fertilizing
 - (b) Watering
 - (c) Weed Control
 - (d) Pest and disease Control
 - (e) Winter Preparation
- E13.1.3 Maintenance shall be performed on a bi-weekly basis at a minimum.
- E13.2 Maintenance and Warranty Period
- E13.2.1 Thirty (30) days after the planting installation has been completed, the Contract Administrator shall perform an inspection of the plant material to determine if the plant material is acceptable to start warranty.
- E13.2.2 The maintenance and warranty period shall begin following acceptance of plant material by Contract Administrator and shall be for a period of two (2) years.

E13.3 Submittals

- (a) Submit maintenance log to Contract Administrator indicating date, times, employee, start time, stop time and maintenance activities.
- (b) Payment will not be processed without receipt of maintenance logs.
- E13.4 Materials and Equipment
- E13.4.1 Materials shall conform to the requirements of related Specification sections.
- E13.4.2 Provide all equipment to properly execute Work. Maintain such equipment in a workable, safe condition while in use during this project.
- E13.4.3 Contract Administrator shall review equipment to be used to execute Work prior to execution.

E13.5 Method

E13.5.1 General

- (a) Provide watering service within 24 hours, weeding services within 48 hours of the request by the Contract Administrator. Monitor the Site and advise the Contract Administrator of conditions that might void the Contractor's warranty responsibilities.
- (b) Provide maintenance schedule to Contract Administrator prior for the two (2) year maintenance period.
- (c) Contractor shall notify Contract Administrator of the exact time Contractor proposes to commence each application.

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 - (d) Schedule operations in accordance with growth, health, weather conditions, and use of Site.
 - (e) Perform each operation continuously and completely within a reasonable time period.
 - (f) Store equipment and materials off Site.
 - (g) Collect and dispose of debris or excess material on the day the maintenance is undertaken.

E13.5.2 Maintenance of Trees:

- (a) Fertilizing: Apply fertilizer only at frequency, ratio and rates as recommended by manufacturer. Water immediately after fertilizing. Apply fertilizer no later than May 30th of each maintenance year.
- (b) Watering: Apply water as required to supplement rainfall and to maintain optimum growing conditions. In general, water once a week to achieve rates as indicated. Allow soil to adequately dry between watering to prevent over saturation without creating water stress. Subject to the above-noted requirements, the Contractor must water at least once a week between May 1st and October 15th inclusive. A complete record is to be kept of each series of waterings for all planted trees noting location and date of watering. This record is to be given to the Contract Administrator when requested. Apply 40 litres of water per 25 mm calliper per application using a deep root feeder or low pressure open flow nozzle and hose. The water stream must not gouge the soil.
- (c) Weed Control: Inspect and undertake weed control weekly during the first year of maintenance and monthly during the second year. By hand, remove all weeds with their roots from tree pits and tree beds and dispose of off Site. When weeding operation is complete, replace and rake displaced soil to its original condition.
- (d) Pests and Diseases: Obtain written approval of Contract Administrator prior to using any pesticide. Control pests and disease through pruning or application of pesticides. Use species specific pesticides where possible. Use only pesticides of low mammalian toxicity. Strictly follow manufacturer's written instructions.
- (e) Pruning: The Contractor shall provide a person with a Manitoba Arborists Certificate for each work crew or Work Site. Prune as required to remove dead, broken or damaged limbs. Prune back to healthy growth while maintaining balanced crown shape. Employ clean sharp tools. Make cuts smooth and flush with outer edge of branch collar near the main stem or branch. Cuts must be smooth and sloping to prevent accumulation of water on cut. Do not leave little stumps ("horns") on trunks or main branches. Prune according to accepted horticultural practices as outline in "The Pruning Manual", Publication No. 1505-1977 by Agriculture Canada.
- (f) Winter Preparation: Ensure adequate moisture in tree root zones prior to freeze-up.

E13.6 Measurement and Payment

E13.6.1 Landscape maintenance shall be paid for on a lump sum basis for the items of work listed below. Price shall be payment in full for supplying all material and performing all operations herein described and all other items incidental to the Work included in this specification and accepted by the Contract Administrator.

Items of Work:

- (i) Landscape Maintenance Year 1
- (ii) Landscape Maintenance Year 2