



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 774-2016

BROADWAY PLAZA AND WEBB PLACE SIDEWALK UPGRADE

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 BROADWAY PLAZA AND WEBB PLACE SIDEWALK UPGRADE

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, Thursday, October 27th, 2016.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the 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 Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

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

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B6.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.

- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- 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;
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B8.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B8.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B8.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B8.6 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B16.1(a).
- B8.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204 949-1178.
- B8.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B8.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

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 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/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;
 - (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.
- B9.4.2 All signatures shall be original.
- B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DISCLOSURE

- B11.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full

disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.

B11.2 The Persons are:

- (a) N/A

B12. QUALIFICATION

B12.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B12.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B12.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);

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

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

B12.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B12.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B13. OPENING OF BIDS AND RELEASE OF INFORMATION

- B13.1 Bids will not be opened publicly.
- B13.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B13.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B13.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B14. IRREVOCABLE BID

- B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B14.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B15. WITHDRAWAL OF BIDS

- B15.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B15.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B15.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.
- B15.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B14.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B16. EVALUATION OF BIDS

- B16.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity or acceptable deviation there from (pass/fail);

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

B16.2 Further to B16.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

B16.3 Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.

B16.4 Further to B16.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices adjusted, if necessary, as follows:

- (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price; or
- (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by deducting item 10 so a Total Bid Price within the budgetary provision is achieved.

B16.4.1 Further to B16.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B17. AWARD OF CONTRACT

B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B17.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B17.2.1 Without limiting the generality of B17.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B17.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B16.

B17.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

B17.4 Notwithstanding C4, the City may issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.

B17.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall be conducted in 2 separate Sites.

(a) The Work to be done at the Webb Place Site, from Colony to Vaughan St., shall include but not necessarily be limited to:

- (i) roadway joint repair and pedestrian crossing renovations;
- (ii) replacement of concrete sidewalk and curb;
- (iii) installation of curb ramps with detectable warning tiles.

(b) The Work to be done at the Broadway Site, within the median east of Edmonton St., shall consist of, but may not be limited to:

- (i) installation of reinforced concrete paving and curb wall construction;
- (ii) bench supply and install;
- (iii) planting bed preparation and planting of shrubs and perennials.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Scatliff+Miller+Murray, represented by:

Ana Hodych
Landscape Architect

Telephone No. 204 927-3444
Email Address ahodych@scatliff.ca

D3.2 At the pre-construction meeting, Ana Hodych 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.

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;

- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
- (b) the Contract, all deliverables produced or developed; and
- (c) any statement of fact or opinion regarding any aspect of the Contract.

D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.

D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:

The City of Winnipeg
Chief Financial Officer
Facsimile No.: 204 949-1174

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

D6.1 Bids Submissions must not be submitted to the above facsimile numbers. Bids must be submitted in accordance with B8.

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

D7.1 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.

D8. SAFE WORK PLAN

D8.1 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.

D8.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

D9. INSURANCE

D9.1 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 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) 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.

D9.2 Deductibles shall be borne by the Contractor.

D9.3 The Contractor shall provide the Contract Administrator 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 seven (7) Calendar Days from notification of the award of Contract by Purchase Order.

D9.4 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.

D10. PERFORMANCE SECURITY

D10.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D10.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

SCHEDULE OF WORK

D11. COMMENCEMENT

D11.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.

- D11.2 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 D7;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10
 - (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.
- D11.3 Commencement of Work on certain items included in this Contract contingent on the completion of work by others:
- (a) Webb Place north west sidewalk Work adjacent to Booth College may only commence following completion of concrete and paving work currently being done by others at the Booth College Entry. Construction is anticipated to be complete by the end of October 2016.
 - (b) No work within the Broadway median can commence until work is complete by others on the suspended dome art piece (Heaven Between) refer to L102. Construction is anticipated to be complete by the end of October 2016.
- D11.4 The Contractor shall commence the Work on Site within seven (7) Working Days following award of Contract or notice from the Contract Administrator that work by others, identified in D11.3 has been complete. Should work by others be delayed longer than indicated, Contract Administrator may approve delay in commencement till Spring of 2017.

D12. SUBSTANTIAL PERFORMANCE

- D12.1 The Contractor shall achieve Substantial Performance within forty (40) consecutive Working Days of the commencement of the Work as specified in D11.
- D12.2 Work temporarily suspended over the winter months shall be made safe by the Contractor prior to demobilization as specified in E 22 Temporary Surface Restoration.
- D12.3 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.
- D12.4 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.

D13. TOTAL PERFORMANCE

- D13.1 The Contractor shall achieve Total Performance within fifty (50) consecutive Working Days of the commencement of the Work as specified in D11.
- D13.2 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.
- D13.3 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.

D14. LIQUIDATED DAMAGES

- D14.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City two hundred and fifty dollars (\$250.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D14.2 The amount specified for liquidated damages in D14.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D14.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D15. SCHEDULED MAINTENANCE

- D15.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) 30 day sod maintenance as specified in E 23 Site Cleanup and CW 3510;
- D15.2 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

D16. JOB MEETINGS

- D16.1 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.
- D16.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D17. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D17.1 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).

D18. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

- D18.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4.

MEASUREMENT AND PAYMENT

D19. PAYMENT

D19.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D20. WARRANTY

D20.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

BID OPPORTUNITY NO. 774-2016

BROADWAY PLAZA AND WEBB PLACE SIDEWALK UPGRADE

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

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

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

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

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

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

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D10)

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 774-2016
BROADWAY PLAZA AND WEBB PLACE SIDEWALK UPGRADE

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

(Name of Contractor)

(Address of Contractor)

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

_____ Canadian dollars.

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

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

Partial drawings are permitted.

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

(Address)

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

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

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

(Date)

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

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

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

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
	Cover Sheet
L101 – R1	Broadway Plaza: Removals and Tree Protection
L102 – R1	Broadway Plaza: Site and Materials Plan
L103 – R1	Broadway Plaza: Layout and Grading Plan
L104 – R1	Broadway Plaza: Planting Plan and Details
L105 – R1	Broadway Plaza: Details
L201 - R1	Webb Place: Removals Plan
L202 - R1	Webb Place: Layout and Grading
C01 – R1	Webb Place: Civil Pavement and Joint Repairs Plan
69-734-6-2AR	DuMor Bench

E2. PRE-CONSTRUCTION MEETING

- E2.1 The Contractor shall not begin the Work under this Contract until a pre-construction meeting for each Site has been held between representatives of the General Contractor, the City of Winnipeg, and the Contract Administrator.

E3. SITE ACCESS

- E3.1 All access to be on the designated routes through the Site. These routes will be determined at the pre-construction meeting.
- E3.2 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E3.3 The Contractor's operation shall be limited to the minimum area necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on private property. Damage to areas beyond the marked routes shall be repaired by and at the expense of the Contractor to the satisfaction of the Contract Administrator.

E4. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

- E4.1 Further to CW 1130, the Contractor shall ensure access along roads and back lanes adjacent to construction remain unobstructed during construction.
- E4.2 Emergency vehicle access must be maintained at all times.

- E4.3 Broadway, Contractor shall:
- (a) take such measures as are necessary to ensure continued safe and convenient pedestrian access along across Broadway at Edmonton St.
- E4.4 Webb Place, Contractor shall:
- (a) coordinate Work on Webb Place so as to limit interference with pedestrian access to sidewalks along Colony, Vaughan Streets and the south side of Webb Place as well as vehicular travel along Webb and adjacent roadways;
 - (b) provide adequate sidewalk and roadway closure signage;
 - (c) ensure adequate ingress and egress to Booth College and neighbouring residential buildings are maintained during construction.

E5. SITE CONDITION

- E5.1 The Contractor and applicable Sub-Contractors shall examine the Site and make themselves familiar with the existing conditions (both above and below grade) and nature of Work to be done.
- E5.2 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. Surface and sub-surface conditions shown on the Drawings and included herein are provided for general information and variations there from shall not affect the terms of the Contract. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.
- E5.3 The Contractor shall set all necessary control lines, benchmarks, survey, elevation stakes and layout in accordance with the individual Site conditions and in consultation with the Contract Administrator.

E6. PROTECTION OF EXISTING TREES

- E6.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities:
- (a) All trees will have a 3m radius protective zone calculated from the circumference at the base of the trunk which will remain free of digging, trenching, grade changes, stock piling of materials and soil compaction, unless otherwise agreed to by the City and Contract Administrator throughout the duration of the Contract. Protective fencing around these areas is required.
 - (b) Trees within and immediately adjacent to proposed construction and those identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400 mm wood planks, or suitably protected as approved by the Contract Administrator. Do not use nails or other fasteners that penetrate the tree trunk. The width and length of strapping may be reduced to suit the tree being protected as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches) where 1 inch diameter equals 1 foot measured from the outside edge of the trunk of the tree at 6 inches above grade. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation with sharp tools to prevent crushing or pulling. No paint is required. All exposed roots must be immediately covered in mulch until such time as the excavated area can be filled in with clean earth to avoid exposure to sunlight and desiccation.
 - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the Work. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within

the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.

- (e) Work on-Site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- (f) Repair, replace and maintain tree protection materials during construction until the Project completion.
- (g) Carefully remove safety fencing and strapping material without harming the tree as soon as the construction and restoration Work is complete.

E6.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or their designate.

E6.3 The Contractor's attention is drawn to the existence of several mature and valuable trees within and adjacent to limits of Work on the Broadway median.

E6.4 The Contractor's attention is drawn to the existence of mature and valuable trees within, and adjacent to, the limits of Work on the Broadway median

E6.5 No separate measurement or payment will be made for the protection of existing trees.

E7. EXISTING SERVICES AND UTILITIES

E7.1 This Specification shall amend and supplement CW 1120.

E7.2 Other than as required to be done by the Contractor under the Work of this Contract, all necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing services utilities or structures, including but not limited to plant material, fences, paving, signage, or other public or privately owned facilities and equipment at or in the vicinity of the Site.

E7.3 Further to E7.3, any damage, disturbance or alteration incurred in the performance of the Work (either directly or indirectly), shall be repaired or replaced by the Contractor, whichever may be deemed necessary in the opinion of Contract Administrator, to the satisfaction of the Contract Administrator. The cost of repair or replacement shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City from all claims made directly or indirectly against it in respect to any such damage.

E7.4 The Contractor's attention is drawn to:

- (a) existing underground lines and services that may be located in the area of the Work, particularly along the median on Broadway;
- (b) existing mature and valuable trees located within the median on Broadway.

E7.5 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

E7.6 The Contractor will be required to make his own arrangements in connection with the temporary use of lighting, power, gas, sewer, water or other utilities, and pay all costs in connection therewith.

E7.7 All costs in connection with verifying location of existing underground services, obtaining related permits, fees for temporary use of utilities and other like expenses are considered incidental to the related Works, and shall be included in the Unit Prices bid for supply and installation of the related items included under this Contract.

E8. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E8.1 Further to C6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E8.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- E8.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E8.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.
- E8.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- E8.6 The Contractor and Sub-Contractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labor Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

E9. PROTECTION OF SURVEY INFRASTRUCTURE

- E9.1 This Specification shall supplement CW 1130.
- E9.2 Notwithstanding clause 4 "Protection of Survey Bars" of the Standard Provisions; Current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.
- E9.3 Further to C:6.26 (g), at least 72 hours prior to the commencement of the On-Site Work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 204-918-1360 (8:00 am to 4:00 pm Monday to Friday excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.
- E9.4 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.
- E9.5 Survey monuments and geodetic control monuments at or adjacent to the Site, not in the line of the proposed construction that are damaged or disturbed by the Contractor shall be replaced or relocated by the City or its agent and all associated costs shall be paid for by the Contractor. An approximate estimate of the costs involved to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contractors must ensure their landscaping and other sub-Contractors are aware of this clearance procedure and the potential restoration costs.
- E9.6 Where possible, amounts owed to the City in accordance with the above will be deducted from any payments to be made by the City to the Contractor.

E10. STAKES AND MARKS

- E10.1 Before commencing Work, the Contractor shall satisfy himself as to the meaning and correctness of the Drawings. If any error is suspected in the Drawings, Specifications or the

directions of the Contract Administrator. Work shall be discontinued until the errors are rectified or clarifications made, but no claims shall be made on account of any delay occasioned thereby.

E10.2 The Contractor will mark, to the extent he determines to be necessary or as specified herein, the location, alignment and elevation of the Work by means of stakes or marks, for review and approval by the Contract Administrator. The Contractor shall make the completed Works conform to the lines and marks thus approved and indicated.

E10.3 The Contractor will be responsible for the installation of the related Works as soon as possible after approval of stakes or marks by the Contract Administrator. No claims shall be made on account of delays resulting in damage, loss or movement of the stakes or marks.

E10.4 The Contractor shall determine and provide all dimensions and elevations measured from the stakes or marks.

E11. SITE ENCLOSURES

E11.1 The Contractor shall be solely responsible for Site enclosure and Site safety.

E11.2 Temporary Site enclosures, as defined below or as determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.

a) Broadway median: construction area to be enclosed by 1.83m height, modular, chain link panels for the duration of construction or until removal is approved by the Contract Administrator.

b) Webb Place sidewalk: construction barricades, pylons and directional signage in a quantity required to identify sidewalk and roadway closures.

E11.3 Site enclosures shall be considered incidental to the Contract Work.

E12. PRODUCT APPROVALS

E12.1 All Workmanship and materials furnished and supplied under this Specification are subject to close and systematic inspection and testing by the Contract Administrator. The Contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of the Specification.

E12.2 The Contractor shall be wholly responsible for the supply, safe storage, and handling of all materials, and the control of all operations incidental thereto, notwithstanding any inspection or approval that may have been previously given.

E13. SUBMITTALS

E13.1 Contractor shall submit product samples and other requirements as listed below to Contract Administrator for review and approval prior to commencement of associated Works.

E13.2 Notify Contract Administrator in writing at time of submission, identifying deviations from requirements of Contract Documents and stating reasons for deviations.

E13.3 Contractor to submit with reasonable promptness and in orderly sequence so as not to cause delays in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.

E13.4 Work affected by submittal shall not proceed until review and approval by the Contract Administrator.

E13.5 Contractor's responsibility for errors and omissions in submission is not relieved by the Contract Administrator's review of submittals.

E13.6 Product Samples

- a) The Contractor shall supply representative samples of: Coloured Concrete as specified in E17 Reinforced Concrete Broadway.
- b) Contractor to supply product samples a minimum of 5 (five) Working Days prior to placing material order. No Product order shall be placed prior to approval by Contract Administrator.

SITE DEVELOPMENT

E14. REMOVALS & SALVAGE

E14.1 Description

- E14.1.1 This specification shall amend and supplement City of Winnipeg Standard Construction Specifications CW 3110 "Sub-Grade, Sub-Base and Base Course Construction".
- E14.1.2 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 other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as herein specified.
- E14.1.3 Work shall include, but not necessarily be limited to, the following:
- (a) Remove and legal disposal of existing materials as described on Drawings L101 "Broadway Plaza: Removals and Tree Protection", and L201 "Webb Place Sidewalk: Removals";
 - (b) Salvage and stockpile for re-installation; street signage located on Webb Place.
 - (c) Salvage and handover concrete planter on Broadway.

E14.2 Construction Methods

- E14.2.1 The Contractor shall remove existing material as shown on Drawings, including all existing base course material.
- E14.2.2 In accordance with E 6 'Protection of Existing Trees', do not disturb or compact soil within branch spread of existing trees unless required by the performance of the Works and as approved by the Contract Administrator and the City of Winnipeg.
- E14.2.3 Disposal of material shall be understood to mean the hauling of all unsuitable material from the Site and the unloading in a safe and legal manner acceptable to the Contract Administrator. No material to be disposed of on Site.
- E14.2.4 Prior to commencement of removals operations, Contractor to meet on Site with Contract Administrator and representative of the City of Winnipeg to verify limits of removals. The Contractor is responsible for coordinating required Site inspections. No further Work shall proceed prior to approval by Contract Administrator.
- E14.2.5 The Contractor shall ensure that upon completion of the removal operations, the Site is left in a neat condition free from debris, etc. for approval by the Contract Administrator prior to placing clean fill.
- E14.2.6 Prevent damage to surface or underground utility lines which are to remain. Make good any damage.

E14.3 Method of Measurement

- E14.3.1 Removals and Salvage is a lump sum bid item. No measurement will be made for this work

E14.4 Basis of Payment

- E14.4.1 Removals and Salvage and related Work will be paid for at the Contract Unit Price. The amount to be paid for shall be for completed work, which price shall be for full payment for

supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.

E15. CONCRETE CURB, SIDEWALK AND RELATED WORKS – WEBB PLACE

E15.1 Description

E15.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified.

E15.1.2 Work shall include, but not necessarily be limited to, the supply and installation of:

- (a) concrete sidewalk with integrated unit paving bands
- (b) barrier curbs with curb inlet replacement
- (c) curb ramps with detectable warning surface tiles

E15.2 Material

E15.2.1 All material supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator

E15.2.2 All material supplied under this Specification shall also meet City of Winnipeg Specifications.

E15.2.3 Interlocking pavers shall be:

- (a) Barkman Holland Stone concrete pavers, 210x105x60mm
- (b) Charcoal in colour

E15.2.4 Bedding sand for interlocking pavers shall be fine aggregate as specified in CW 3330

E15.2.5 Filler sand for interlocking pavers shall have a maximum aggregate size of 2.5mm

E15.2.6 Detectable warning tiles shall be as specified in CW 3326

E15.2.7 Replacement curb and gutter inlet frame and cover shall be as defined on Civil Drawing C01.

E15.3 Construction Method

E15.3.1 All construction methods to comply with City of Winnipeg Standard Construction Specifications.

E15.3.2 Contractor to mark layout of sidewalk, curb ramps and paving bands and review on Site with Contract Administrator and City of Winnipeg prior to installation

E15.3.3 Finished grades of sidewalk and curb ramps to meet minimum and maximum slopes as described on Drawings and as defined in the City of Winnipeg Specifications

E15.3.4 Where new paving or curbs meet existing paving, be it public sidewalks or curbs or private entry paths, landings, steps, etc..., Contractor to ensure finished grades match unless otherwise noted in the Drawings or directed by Contract Administrator.

E15.3.5 Layout, angles, dimensions and slopes of curb ramps to meet City of Winnipeg Specifications. Contractor shall inform Contract Administrator of any proposed deviation from Specification for review and approval by City of Winnipeg prior to installation.

E15.3.6 Location, angle, and installation and cutting technique of detectable warning tiles to meet City of Winnipeg Specifications. Contractor shall inform Contract Administrator of any proposed deviation from Specification for review and approval by City of Winnipeg prior to installation.

- E15.3.7 Concrete sidewalks to be finished with a medium broom finish perpendicular to the path of travel
- E15.3.8 Concrete sidewalks to have sawn or tooled control joints meeting City of Winnipeg Standard Detail SD 228A. Joints to be clean, straight and installed perpendicular to the path of travel. Any deviation to be reviewed and approved by Contract Administrator and City of Winnipeg Prior to installation.
- E15.3.9 Interlocking paving stones shall be installed such that spaces between joints do not exceed 5 mm. Spaces between paving stones shall be uniform and consistent while maintaining straight and true patterns.
- E15.3.10 Contractor shall use full paver modules only and form bands into concrete in such a way as to ensure cut pieces are not required. Review any areas where this is not possible with Contract Administrator prior to pouring concrete. Should cut pavers be approved by Contract Administrator, no paver less than 50% of its original size will be accepted. Sawn or sheared edges shall be true, even and undamaged. No chipped, cracked or damaged pavers will be accepted.
- E15.3.11 Paving stones shall be compacted into the sand layer using approved vibratory compactors until they are at the proper grade, uniformly level and free of any movement. Filler sand shall be swept into the joints until full.
- E15.4 Method of Measurement
- E15.4.1 Concrete Sidewalk and related Work shall be measured on a square meter basis. The total quantity to be paid for shall be the total number of square meters that are installed in accordance with this Specification, the Drawings, and as acceptable to the Contract Administrator.
- E15.4.2 Repair of existing unit paver sidewalk where it meets new concrete sidewalk or curb is considered incidental to the installation of Concrete Sidewalk. No separate measurement or payment will be made.
- E15.4.3 Forming curb ramps within new concrete sidewalk and curb shall be included in the unit cost for Sidewalks and Curbs respectively. No separate measurement or payment will be made.
- E15.4.4 Detectable Warning Tile installation within new concrete sidewalk curb ramps shall be measured on a per unit bases. The total quantity to be paid for shall be the total number of detectable warning tiles that are installed in accordance with this Specification, the Drawings, and as acceptable to the Contract Administrator.
- E15.4.5 Renovated Curb Ramps c/w Detectable Warning Tiles and Curb renovation on Vaughan St.(north east, south east and south west corners) shall be measured on a lump sum basis. No measurement will be made for this item.
- E15.4.6 Unit Paver Bands and related Work shall be measured on a square meter basis. The total quantity to be paid for shall be the total number of square meters that are installed in accordance with this Specification, the Drawings, and as acceptable to the Contract Administrator.
- E15.4.7 Concrete base for Unit Pavers shall be included in the unit cost for Concrete Sidewalk. No separate measurement or payment will be made.
- E15.4.8 Curbs and related Work will be measured on a linear meter bases. The total quantity to be paid for shall be the total number of linear meters that are installed in accordance with this Specification, the Drawings, and as acceptable to the Contract Administrator.
- E15.4.9 Curb Inlet Replacement and related Work shall be measured on a per unit basis. The total quantity to be paid for shall be the total number of curb inlets that are installed in accordance with this Specification, the Drawings, and as acceptable to the Contract Administrator.
- E15.5 Basis of Payment

- E15.5.1 Concrete Sidewalk and related Work will be paid for at the Contract Unit Price per square meter. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.
- E15.5.2 Detectable Warning Tile installation and related Work will be paid for at the Contract Unit Price per tile. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.
- E15.5.3 Renovated Curb Ramps and related Work will be paid for at the Contract Lump Sum Unit Price. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.
- E15.5.4 Unit Paver Bands and related Work will be paid for at the Contract Unit Price per square meter. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.
- E15.5.5 Curbs and related Work will be paid for at the Contract Unit Price per linear meter. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.
- E15.5.6 Curb Inlets and related Work will be paid for at the Contract Unit Price per inlet. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.

E16. PEDESTRIAN CROSSWALK RENOVATIONS – WEBB PLACE

E16.1 Description

- E16.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified.
- E16.1.2 Work shall include, but not necessarily be limited to the:
- (a) removal of existing roadway paving and unit paver crosswalk
 - (b) installation of new roadway paving and concrete paver bands.

E16.2 Material

- E16.2.1 All material supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator
- E16.2.2 All material supplied under this Specification shall also meet City of Winnipeg Standard Construction Specifications.
- E16.2.3 Interlocking pavers shall be:
- (a) Barkman Holland Stone concrete pavers, 210x105x80mm
 - (b) Charcoal in colour
- E16.2.4 Bedding sand for interlocking pavers shall be fine aggregate as specified in CW 3330

E16.2.5 Filler sand for interlocking pavers shall have a maximum aggregate size of 2.5mm

E16.3 Construction Method

E16.3.1 All construction methods to comply with City of Winnipeg Standard Construction Specifications.

E16.3.2 Removals shall be as specified in E14 Removals and Salvage.

E16.3.3 Care shall be taken to protect existing roadway paving, drainage patterns and services.

E16.3.4 Contractor to lay out crossings and review on Site with Contract Administrator and City of Winnipeg Prior to installation.

E16.3.5 Unit Paver Installation shall be as Specified in E15.3.

E16.3.6 Contractor to ensure grades and lines comply with Drawings.

E16.4 Method of Measurement

E16.4.1 Pedestrian Crosswalk Renovations and related Work shall be measured on a lump sum basis. The total quantity to be paid for shall be the total number of linear meters that are installed in accordance with this Specification, the Drawings, and as acceptable to the Contract Administrator.

E16.5 Basis of Payment

E16.5.1 Pedestrian Crosswalk Renovations and related Work will be paid for at the Contract Lump Sum Unit Price. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.

E17. REINFORCED CONCRETE - BROADWAY

E17.1 Description

E17.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified.

E17.1.2 Work shall include, but not necessarily be limited to, the supply and installation of:

- (a) Reinforced concrete walkway and patio paving c/w coloured concrete inset
- (b) Reinforced concrete curb walls c/w integrated plaque pedestal
- (c) Installation of SS plaque in concrete pedestal (plaque to be supplied by others).

E17.2 Materials

E17.2.1 All material supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator

E17.2.2 All material supplied under this Specification shall also meet City of Winnipeg Specifications.

E17.2.3 Concrete, Reinforcing Steel and related items shall meet Specifications included on Drawings.

E17.2.4 Coloured Concrete shall be Dark, Charcoal Grey in colour. Contractor to submit sample to Contract Administrator for approval prior to material order per E13 Submittals.

E17.2.5 Plaque to be SS 8"x14", with integrated posts, to be supplied by the Winnipeg Art's Council. Contractor contact the Winnipeg Arts Council to coordinate plaque delivery.
W.A.C. Contact:

Tamara Rae Biebrich
Artist Projects Manager/ Winnipeg Arts Council
Phone: (204) 943-7668
Email: tamara.rae@winnipegarts.ca

E17.2.6 Silicone Caulk: to be clear colour and suitable for exterior concrete and metal surfaces

E17.3 Construction Methods

E17.3.1 Reinforcing steel shall be installed as indicated on Drawings.

E17.3.2 The Contractor shall mark final layout of concrete paving and walls and review, on Site, with Contract Administrator prior to Construction.

E17.3.3 All formwork to be installed and reviewed with Contract Administrator on Site prior to concrete installation.

E17.3.4 Formwork for circular, coloured concrete insert shall be cut to accommodate reinforcing steel.

E17.3.5 Anti-skateboard notches in wall shall be set into formwork. Contractor shall ensure notches are formed so that they are evenly spaced, parallel, true and as indicated on drawings. Notches on each wall shall align with each other and control joints in paving, as indicated on Drawing.

E17.3.6 Care shall be taken when laying out, forming, installing concrete to ensure compliance with geometries on Drawings. Plaza to be symmetrical and all angles, corners and transitions to be carefully executed. Plaza to be centered under suspended dome of art piece, coloured inset to be centered on plaza.

E17.3.7 Control joints to be installed as shown on Drawings. Contractor to review method of control joint installation and layout with Contract Administrator prior to installation

E17.3.8 Surface finish:

- (a) Reinforced Concrete Paving - light broom finish, north south orientation.
- (b) Concrete Curb Wall – all exposed surfaces, including back of curb wall to a min. of 300mm from top, to have a sack and rub finish. Care shall be taken to create an even surface finish free of bugholes over entire wall, including all corners. Care shall be taken to protect plaque from damage during finishing.

E17.3.9 Plaque installation:

- (a) Contractor to verify size and details of plaque and proper embedding technique with manufacturer prior to forming of concrete curb wall. Any variation of plaque size from that indicated herein or on Drawings will not be cause for additional claim by Contractor;
- (b) Details and dimensions of pedestal, including chamfer size, to be reviewed with Contract Administrator prior to installation;
- (c) Contractor to ensure plaque is aligned with edges of pedestal and centered as shown on Drawings;
- (d) Embed plaque to depth of posts so that back side of plaque to sit flush with top of pedestal. Ensure no gap under plaque;
- (e) Ensure any concrete is cleaned off exposed top and edges using a method safe for both materials. Protect plaque during wall finishing;
- (f) Caulk along edges with clear silicone caulking after concrete has cured sufficiently as needed to ensure no water penetration under plaque. Ensure small caulking bead with neat and tidy finish.

E17.4 Method of Measurement

- E17.4.1 Reinforced Concrete Paving shall be measured on a square meter basis. The amount to be paid for shall be the total number of square meters installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.
- E17.4.2 Coloured concrete shall be included in the unit cost for Reinforced Concrete Paving. No separate measurement or payment will be made.
- E17.4.3 Reinforced Concrete Curb Wall shall be measured on a lump sum basis. No measurement will be made for this item.
- E17.5 Basis of Payment
- E17.5.1 Reinforced Concrete Paving and related Work will be paid for at the Contract Unit Price per square meter. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.
- E17.5.2 Reinforced Concrete Curb Wall and related Work will be paid for at the Contract Lump Sum Unit Price. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.

E18. SITE FURNISHINGS

E18.1 Description

- E18.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as herein specified.
- E18.1.2 Work shall include, but not necessarily be limited to the supply and installation of wall mounted benches at the Broadway Plaza

E18.2 Materials

- E18.2.1 All material supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator

- E18.2.2 Benches shall be DuMor: 69-734-61-2AR Wall Mount per Drawing with back and 2 arm rests. All wood components to be lpe, all metal components to be powder coated black.
Contact:

Neil Buller
GAT Home Company Ltd.

Toll Free: 204-943-5050
Phone: (204)
Email: nbuller@mymts.net

- E18.2.3 Anchor bolts to be SS, vandal resistant, masonry anchors as specified by supplier.

E18.3 Construction Methods

- E18.3.1 Contractor to coordinate supply and delivery of Benches with DuMor. Benches to be inspected for defects, damage or inconsistency with specified details prior to installation.
- E18.3.2 Benches to be wall surface mounted as per manufacture's instructions and the attached Drawing.

- E18.3.3 All Work is to be located and installed in accordance with the drawings using approved non-rusting, vandal resistant fasteners to ensure solid, durable, finished Work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work.
- E18.3.4 All benches to be installed plumb and true to correct elevations and location as shown on Drawing and as directed by the Contract Administrator.
- E18.3.5 The Contractor shall confirm location of Benches with Contract Administrator prior to installation.
- E18.3.6 All site furnishings to be carefully handled so that no parts will be bent, broken or otherwise damaged. Hammering, which will injure or distort fixture, is prohibited.
- E18.4 Method of Measurement and Basis of Payment
- E18.4.1 Method of Measurement shall be as follows:
- (a) All site Furnishings will be measured on a per Unit basis. The total unit to be paid for shall be the total number of units that are installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.
- E18.4.2 Basis of Payment shall be as follows:
- (a) All site furnishings will be paid for at the Contract Unit Price as specified herein. This price shall be payment in full for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification and accepted by the Contract Administrator.

E19. SIGNAGE – WEBB PLACE

- E19.1 Description
- E19.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as herein specified.
- E19.1.2 Work shall include, but not necessarily be limited to, installation of salvaged and supply of new traffic control signage along Webb Place
- E19.2 Materials
- E19.2.1 All material supplied under this Specification shall be of a type approved by the Contract Administrator and the City of Winnipeg and shall be subject to inspection and testing by the Contract Administrator
- E19.2.2 Signs shall be standard City of Winnipeg traffic control signage reading ‘Loading 15 Mins’, one to have single arrow pointing left, one to have single arrow pointing right.
- E19.2.3 Stainless steel strapping c/w nuts and washers to be used for fastening signs to light standards.
- E19.2.4 Replacement sign poles to be surface mounted and match existing.
- E19.3 Construction Methods
- E19.3.1 Review location, sign details and method of installation with City of Winnipeg and Contract Administrator prior to material order.
- E19.3.2 Signs installed on light standards to be installed with double strapping at height to match surrounding signage. Signs to be facing roadway and direction of travel as applicable.
- E19.3.3 Salvaged signs and poles to be re-installed in locations described on the Drawings and as approved by the City of Winnipeg and the Contract Administrator.

E19.3.4 Poles shall be surface mounted on concrete and installed plumb and level and located as shown on Drawing and as approved.

E19.4 Method of Measurement

E19.4.1 The salvage, supply and installation of traffic control signage is a lump sum bid item. No measurement will be made for this work

E19.5 Basis of Payment

E19.5.1 Payment for Traffic Control Signage salvage, supply and installation will be at the Contract Lump Sum Price. The amount to be paid for shall be for completed work, which price shall be for full payment for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.

E20. PLANT BED PREPARATION – BROADWAY

E20.1 Description

E20.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as herein specified.

E20.1.2 Work shall include, but not necessarily be limited to, the supply and installation of topsoil and mulch for planting beds, as indicated on the Drawings.

E20.2 Materials

E20.2.1 All material supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator

E20.2.2 Mulch shall be locally available wood chip Enviro-mulch, as supplied by St. Boniface Pallet Company, or approved substitute. Mulch colour to be Brown.

E20.2.3 Topsoil shall be as specified in CW 3540

E20.3 Construction Methods

E20.3.1 Contractor shall co-ordinate Site excavation works with landscaping to ensure minimal additional excavation for shrub beds. All remaining areas to be excavated shall be to the shape shown on the Drawings. Beds shall be excavated to the finished depth (including mulch) as shown on Drawings.

E20.3.2 Excavation shall be filled with soil mixture. After filling, elevation of top of bed shall be level with surrounding grade unless otherwise noted on drawing. Soil should be firmly compacted and indicated soil depths shall be depth after compaction.

E20.3.3 All areas and locations provided for planting shall be staked according to layout shown on the Drawings. Excavation shall not proceed until the layout has been inspected and approved by the Consultant. Excavation shall not be undertaken until all underground utilities have been located and protected.

E20.3.4 Mulch shall be spread to a consistent depth over entire planting bed area and to depths as indicated on the Drawings. Care shall be taken not to damage the plants

E20.4 Method of Measurement

E20.4.1 Planting Bed Preparation will be measured on a square meter basis. The area to be paid for shall be the total number of square meters that are installed in accordance with this Specification and the Drawings, and as acceptable to the Contract Administrator.

E20.5 Basis of Payment

E20.5.1 Payment for Installation of Planting Bed Preparation shall be paid for at the Contract Unit Prices per square meter. This price shall be payment in full for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification and accepted by the Contract Administrator.

E21. PLANTING OF SHRUBS AND PERENNIALS

E21.1 Description

E21.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as herein specified.

E21.1.2 Work shall include, but not necessarily confined to, the supply and installation of shrubs and perennials as indicated on the Drawings.

E21.2 General

E21.2.1 Related Sections

- (a) Specification E20 Planting Bed Preparation

E21.2.2 Reference

- (a) All plants shall be supplied and installed as per the Canadian Standards for Nursery Stock Current Edition, published by the Canadian Nursery Trades Association, except where specified otherwise.

E21.2.3 Source Quality Control

- (a) All plant material shall be randomly inspected at the source upon request of the Contract Administrator.

E21.2.4 Maintenance

- (a) The Contractor shall be responsible for the maintenance of the shrubs and perennials during the entire duration of the contract until Total Performance has been achieved.
- (b) Maintenance shall include, but may not be limited to:
 - (i) Water to ensure soil moisture conditions for optimum growth and health of plant material. Ensure watering techniques do not cause erosion.
 - (ii) Reform damaged watering saucers.
 - (iii) Remove weeds weekly.
 - (iv) Replace or re-spread damaged, missing or disturbed mulch.
 - (v) For non-mulched areas, cultivate monthly to keep top layer of soil friable.
 - (vi) If required to control insects, fungus and disease, use appropriate control methods in accordance with Federal, Provincial and Municipal regulations. Obtain product approval from Contract Administrator prior to application.
 - (vii) Apply fertilizer as directed by manufacturer's specifications.
 - (viii) Remove dead, broken or hazardous branches from plant material.
 - (ix) Keep trunk protection and tree supports in proper repair and adjustment.
 - (x) Remove trunk protection, tree supports and level watering saucers at end of Warranty Period.
 - (xi) Remove and replace dead plants and plants not in healthy growing condition. Make replacements in same manner as specified for original plantings.
- (c) Contractor shall be responsible for keeping weekly written reports for submission to Contract Administrator upon request. Report shall include, at a minimum:
 - (i) Maintenance work carried out
 - (ii) Development and condition of plant material.

- (iii) Preventative or corrective measures required which are outside Contractor's responsibility.

E21.2.5 Warranty

- (a) The Contractor shall, at his/her expense, warrant the Work against any and all defects or deficiencies resulting from insect infestation, disease and mechanical damage due to improper handling, installation or maintenance, for a period of one (1) year from the date of Total Performance. The Contractor will not be held responsible for Nursery stock damaged by vandalism or for reasons beyond his or her control.
- (b) End-of-Warranty inspection will be conducted by the Contract Administrator.
- (c) The Contract Administrator reserves the right to request material replacement or extend the Contractor's Warranty an additional one (1) year if, at the end of the Warranty Period, leaf development and growth are not sufficient to ensure future survival of the plant material.

E21.2.6 Replacements

- (a) During the Warranty Period, the Contractor shall remove from Site any plant material that has died or failed to grow satisfactorily as determined by the Contract Administrator and replace as per Specifications within a maximum ten (10) day period from notification.

E21.3 Materials

E21.3.1 Planting Soil shall be topsoil as specified in CW 3540

E21.3.2 Mulch shall be as specified in E20 Planting Bed Preparation.

E21.3.3 Miscellaneous Materials

- (a) Water shall be potable and free of minerals which may be detrimental to plant growth.
- (b) Fertilizer shall be a slow release formulation of low nitrogen and high phosphorus e.g. 10-50-12. Apply quantities at rates stated by product manufacturer.

E21.3.4 Plant Material

- (a) All nursery stock supplied shall be Canadian Prairie nursery grown, and of species and sizes indicated in the plant list on the drawings. Its quality shall be in accordance with the "Guide Specification for Nursery Stock of the Canadian Nursery Trades Association".
- (b) Any nursery stock dug from native stands, wood lots, orchards, or neglected nurseries and which have not received proper cultural maintenance as advocated by the Canadian Nursery Trades Association shall be designated as "collected plants". The use of "collected plants" will not be permitted unless specified below.
- (c) Nomenclature of specified nursery stock shall conform to the International Code of Nomenclature for Cultivated Plants and shall be in accordance with the approved scientific names given in the latest edition of Standardized Plant Names. The names of varieties not named therein are generally in conformity with the names accepted in the nursery trade.
- (d) Plants larger than specified may be used if approved by the Contract Administrator. The use of such plants shall not increase the Contract price.
- (e) Plants shall be free of disease, insect infestation, rodent damage, or environmental stress.

E21.3.5 Shipment and Pre-Planting Care

- (a) Coordinate shipping of plants and planting bed preparation to ensure minimum time lapse between digging and planting.
- (b) Keep plants moist and protected from excel sun, wind or other damage at all times.

E21.4 Construction Methods

- E21.4.1 Plants to be installed at spacing and locations as described on Drawings.
- E21.4.2 Keep Site clean and planting holes drained. Immediately remove soil or debris spilled onto street pavement, grass or sidewalk.
- E21.4.3 Plant only under conditions that are conducive to health and physical conditions of plants.
- E21.4.4 After installing the plant in the planting bed, gentry tamp soil around the roots and water thoroughly.
- E21.4.5 All nursery stock shall be set plumb in the centre of pits and at levels as shown on the planting details after settlement has taken place.
- E21.4.6 Nursery stock shall be faced to give the best appearance or relationship to adjacent structure or vantage points and to the approval of the Contract Administrator.
- E21.4.7 Place mulch in a uniform layer in thickness as indicated on the Drawings. Ensure mulch does not come into direct contact with the base of the plant and does not cover any part of the plant.
- E21.4.8 Contractor to ensure planting and mulching is done in a careful manner. Shrubs or perennials damaged during the course of installation shall be removed and replaced by the Contractor at his or her own expense.
- E21.4.9 Dead or injured branches on shrubs shall be pruned using sharp, clean tools.
- E21.5 Method of Measurement
- E21.5.1 Supply and Installation of shrubs and perennials shall be measured on a per unit basis. The amount to be paid for shall be the total number of shrubs and perennials supplied and installed in accordance with this Specification and Drawings, and as acceptable to the Contract Administrator.
- E21.6 Basis of Payment
- E21.6.1 Payment for supply and installation of shrubs and perennials shall be paid for at the Contract Unit Prices. This price shall be payment in full for supplying all labor, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification and accepted by the Contract Administrator.

E22. TEMPORARY SURFACE RESTORATION

- E22.1 Further to Section 3.3 of CW 1130, the Contractor shall temporarily restore any Work commenced and not completed in the 2016 construction season to the satisfaction of the Contract Administrator and the City of Winnipeg. 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 restorations and their maintenance.

E23. SITE CLEAN UP

- E23.1 The Contractor shall, upon the completion of Work each day:
- (a) remove all excess spoiled concrete, reinforcing steel, granular and other material associated with the Works;
 - (b) remove or secure all machinery and equipment at the end of each day unless otherwise indicated by the Contract Administrator
- E23.2 Unless otherwise specified, Total Performance of the Work will not be granted until the Contractor has restored all areas disturbed during construction to as good as or better than original condition, to the satisfaction of the Contract Administrator and the City of Winnipeg.
- E23.3 Turf Repair – Broadway:

- (a) Repair surrounding turf areas by installing mineral sod and a minimum 75mm compacted thickness of topsoil, as required to repair all damage and meet surrounding grade, and in accordance with CW 3510 and CW 3540.
- (b) Contractor to ensure sod elevation meets new plaza elevation and feathers gradually and evenly to meet existing grades all sides after settling.
- (c) Joints and edges of existing turf shall be topdressed and seeded as required to ensure even grass growth over entire area.
- (d) Contractor to maintain and warrant sod for a minimum of 30 days per CW3540.

E23.4 Any costs in connection with Site Cleanup Works are considered incidental and no payment shall be made.