



THE CITY OF WINNIPEG

TENDER

TENDER NO. 652-2026

OLD EXHIBITION GROUNDS COMMUNITY GARDEN

TABLE OF CONTENTS

PART A - BID SUBMISSION

- Form A: Bid/Proposal
- Form B: Prices

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Confidentiality	2
B6. Addenda	2
B7. Substitutes	2
B8. Bid Components	3
B9. Bid	3
B10. Prices	4
B11. Disclosure	5
B12. Conflict of Interest and Good Faith	5
B13. Qualification	6
B14. Opening of Bids and Release of Information	7
B15. Irrevocable Bid	7
B16. Withdrawal of Bids	7
B17. Evaluation of Bids	8
B18. Award of Contract	8

PART C - GENERAL CONDITIONS

C0. General Conditions	1
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PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	2
D4. Contractor's Supervisor	2

Submissions

D5. Authority to Carry on Business	2
D6. Safe Work Plan	3
D7. Insurance	3
D8. Contract Security	4
D9. Subcontractor List	5
D10. Detailed Work Schedule	5
D11. Requirements for Site Accessibility Plan	6

Schedule of Work

D12. Commencement	7
D13. Work By Others	7
D14. Substantial Performance	7
D15. Total Performance	7
D16. Liquidated Damages	8
D17. Scheduled Maintenance	8

Control of Work

D18. Job Meetings	8
D19. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	9
D20. The Workplace Safety and Health Act (Manitoba) – Qualifications	9

Warranty

D21. Warranty	9
---------------	---

Indemnity

D22. Indemnity	9
Form J: Subcontractor List	10

PART E - SPECIFICATIONS

General

E1. Applicable Specifications And Drawings	1
E2. Traffic Control	2
E3. Existing Services And Utilities	3
E4. Access To Site	3
E5. Permits, Notices, Licenses, Certificates, Laws And Rules	4
E6. Pedestrian Safety	4
E7. Water Obtained From The City	5
E8. Surface Restorations	5
E9. Shop Drawings	5
E10. Samples	5
E11. Test Reports	6
E12. Setting Out The Work	6
E13. Protection Of Existing Trees And Site Infrastructure	7
E14. Removals	8
E15. Excavaton And Grading	9
E16. Concrete Foundations	10
E17. Exterior Site Carpentry	11
E18. Signage	13
E19. Park Pathway Crushed Limestone	14
E20. Chain Link Fence	15
E21. Site Furniture	16
E22. Planting Medium And Finished Grading	17
E23. Sodding	20
E24. Trees, Shrubs And Wood Mulch	21
E25. Trees And Shrubs Maintenance	25

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 OLD EXHIBITION GROUNDS COMMUNITY GARDEN

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, August 14, 2026.

B2.2 The Contract Administrator or the Manager of Purchasing 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.

B3.2 The Bidder is responsible for determining:

- (a) The location of any utility which can be determined from the records or other information available at the office of any public authored or person, including a municipal corporation and any board or commission thereof, having jurisdiction or control over the utility;
- (b) The nature of the surface and subsurface conditions at the Site;
- (c) The location, nature, quality or quantity of the materials to be removed or to be employed in the performance of the Work;
- (d) The nature, quality or quantity of the Plant needed to perform the Work;
- (e) All matters concerning access to the Site, power supplies, location of existing services, utilities or materials necessary for the completion of the Work; and
- (f) All other matters which could in any way affect their Bid or the performance of the Work.

B3.3 The Bidder is responsible for inspecting the Site, the nature of the Work to be done and all conditions that might affect their Bid or their performance of the Work, and shall assume all risk for conditions existing or arising in the course of the Work which have been or could have been determined through such inspection.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Tender, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Tender will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Tender will be provided by the Contract Administrator only to the Bidder who made the enquiry.

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

B4.6 Any enquiries concerning submitting through MERX should be addressed to:
MERX Customer Support
Phone: 1-800-964-6379

Email: merx@merx.com

B5. CONFIDENTIALITY

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

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Tender, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the MERX website at www.merx.com.
- B6.4 The Bidder is responsible for ensuring that they have received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Bid non-responsive
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D3.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Tender.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;

- (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
- (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.

B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in their 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 they wish 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 their Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B17.

B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

B8.1 The Bid shall consist of the following components:

- (a) Form A: Bid/Proposal;
- (b) Form B: Prices.

B8.2 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely.

B8.3 The Bid shall be submitted electronically through MERX at www.merx.com.

B8.3.1 Bids will **only** be accepted electronically through MERX.

B8.4 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B17.1(a).

B9. BID

B9.1 The Bidder shall complete Form A: Bid/Proposal, making all required entries.

B9.2 Paragraph 2 of Form A: Bid/Proposal shall be completed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in their own name, their 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 their 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/Proposal, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B9.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in their 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 their duly authorized officer or officers;
- (d) if the Bidder is carrying on business under a name other than their 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/Proposal should be entered 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.

B10.1.1 Prices stated on Form B: Prices shall not include any costs which may be incurred by the Contractor with respect to any applicable funding agreement obligations as outlined in C24. Any such costs shall be determined in accordance with C24.

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).

B10.5 The Bidder shall enter the Total Bid Price from Form B: Prices into the Total Bid Price field in MERX.

B10.5.1 Bidders are advised that the calculation indicated in B17.4 will prevail over the Total Bid Price entered in MERX.

DISCLOSURE

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

B11.2 The Persons are:

(a) N/A

B11.3 Additional Material:

(a) N/A

B12. CONFLICT OF INTEREST AND GOOD FAITH

B12.1 Further to C3.3, Bidders, by responding to this Tender, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B12.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:

- (a) other commitments;
- (b) relationships;
- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Bids or award of the Contract; or
- (ii) compromise, impair or be incompatible with the effective performance of a Bidder's obligations under the Contract.
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of their participation in the Tender process or the Work; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Tender process) of strategic and/or material relevance to the Tender process or to the Work that is not available to other bidders and that could or would be seen to give that Bidder an unfair competitive advantage.

B12.3 In connection with their Bid, each entity identified in B12.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Tender process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B12.4 Without limiting B12.3, the City may, in their sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in their sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be

acceptable to the City, in their sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

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

B13. QUALIFICATION

- B13.1 The Bidder shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B13.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Purchasing Division website at <https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf>
- B13.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
 - (d) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B13.5 and C6.19).
- B13.4 Further to B13.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) or

- (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. A list of acceptable reviewers and the review template are available at <http://www.winnipeg.ca/matmgt/Safety/default.stm>.

B13.5 Further to B13.3(d), the Bidder acknowledges that they and all Subcontractors have obtained training required by the Accessibility for Manitobans Act (AMA) available at <https://accessibilitymb.ca/resources-events-and-training/online-training.html> for anyone that may have any interaction with the public on behalf of the City of Winnipeg.

B13.6 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B13.7 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B14. OPENING OF BIDS AND RELEASE OF INFORMATION

B14.1 Bids will not be opened publicly.

B14.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the MERX website at www.merx.com.

B14.3 After award of Contract, the name(s) of the successful Bidder(s) and their Contract amount(s) will be available on the MERX website at www.merx.com.

B14.4 The Bidder is advised that any information contained in any Bid may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).

B14.4.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Bid Submission identified by the Bidder as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B15. IRREVOCABLE BID

B15.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B15.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B16. WITHDRAWAL OF BIDS

B16.1 A Bidder may withdraw their Bid without penalty prior to the Submission Deadline.

B17. EVALUATION OF BIDS

- B17.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Tender or acceptable deviation therefrom (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B13 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B7.
- B17.2 Further to B17.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B17.3 Further to B17.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in their Bid or in other information required to be submitted, that they are qualified.
- B17.4 Further to B17.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B17.4.1 Further to B17.1(a), in the event that a unit price is not provided on Form B: Prices, the City may determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B17.4.2 Where MRST is shown on Form B as a separate line item, if that Line item is not completed, the MRST shall be considered to be included in the Total Bid Price.
- B17.4.3 Bidders are advised that the calculation indicated in B17.4 will prevail over the Total Bid Price entered in MERX.

AWARD OF CONTRACT

- B18.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B18.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be qualified, and the Bids are determined to be responsive.
- B18.2.1 Without limiting the generality of B18.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with their own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B18.3 If funding for the Work is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, Bidders are advised that the terms of C24 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B18.4 Where an award of Contract is made by the City, the award shall be made to the qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B17.
- B18.5 Further to Paragraph 7 of Form A: Bid/Proposal and C4, the City may issue a purchase order to the successful Bidder in lieu of the execution of a Contract.

B18.5.1 The Contract Documents, as defined in C1.1(p), in their entirety shall be deemed to be incorporated in and to form a part of the purchase order notwithstanding that they are not necessarily attached to or accompany said purchase order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2025-11-01) 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, Purchasing Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Tender to a section, clause or subclause with the prefix “C” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of a Community Garden located at the Old Exhibition Grounds near the intersection of Sinclair Street and Dufferin Avenue in Winnipeg, Manitoba.

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

- D2.2.1 Protection of existing infrastructure including: above and below ground utilities, manholes, buildings, stairs, light poles, site furniture, play equipment, sidewalks, asphalt, trees, fencing, rip rap, culverts, etc;
- D2.2.2 Removal of existing light poles
- D2.2.3 Removal of chain link fence
- D2.2.4 Removal of existing trees
- D2.2.5 Removal of asphalt and subgrade
- D2.2.6 Removal of sod, topsoil and subgrade
- D2.2.7 Removal of granular pathway and subgrade
- D2.2.8 Protection and use of existing meter pit
- D2.2.9 Protection of existing trees including root pruning of exposed tree roots
- D2.2.10 Earthwork and grading
- D2.2.11 Construction of concrete sidewalk
- D2.2.12 Construction of Reinforced concrete path
- D2.2.13 Construction of footbridges including concrete foundations
- D2.2.14 Construction of community garden sign
- D2.2.15 Construction of compost bin
- D2.2.16 Construction of park path crushed limestone path
- D2.2.17 Chain link fence modification
- D2.2.18 Supply and install catch basin rings
- D2.2.19 Relocate memorial plaque
- D2.2.20 Supply and installation of accessible planters
- D2.2.21 Installation of planter boxes
- D2.2.22 Supply and installation of accessible picnic table
- D2.2.23 Supply and installation of picnic tables
- D2.2.24 Supply and installation of harvest tables and benches
- D2.2.25 Supply and installation of water tote and accessories

- D2.2.26 Supply and installation of waste receptacles
 - D2.2.27 Supply and placement of planting medium
 - D2.2.28 Sodding
 - D2.2.29 Supply and installation of trees, shrubs and perennials
 - D2.2.30 Supply and installation of wood mulch pathway
 - D2.2.31 Two (2) year landscape maintenance
 - D2.2.32 New water service connection from existing mains to the existing meter pit.
 - D2.2.33 New seasonal water service connection from meter pit to new hose bib.
 - D2.2.34 Supply and installation of new seasonal water service connection from meter pit to new water fountain
 - D2.2.35 Supply and installation of new hose bib
 - D2.2.36 Supply and installation of concrete pad for new fountain
 - D2.2.37 Supply and installation of new fountain including drain line and drain pit
 - D2.2.38 Catch basin adjustment
 - D2.2.39 Restorations
 - D2.2.40 Refer to Bienenstock drawings for a description of items of work associated with Bienenstock Natural Playgrounds
- D2.3 The funds available for this contract are \$675,000.

CONTRACT ADMINISTRATOR

- D3.1 The Contract Administrator is HTFC Planning & Design, represented by:
James Hudson, AALA, MALA, CSLA
Senior Associate
HTFC Planning & Design
500-115 Bannatyne Ave.
Winnipeg, MB R3B 0R3

Telephone No. 204 944-9907
Email Address jhudson@htfc.ca
- D3.2 At the pre-construction meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

CONTRACTOR'S SUPERVISOR

- D4.1 At the pre-construction meeting, the Contractor shall identify their designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

SUBMISSIONS

D5. AUTHORITY TO CARRY ON BUSINESS

- D5.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor

does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D6. SAFE WORK PLAN

- D6.1 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.
- D6.2 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, Purchasing Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>
- D6.3 Notwithstanding B13.4 at any time during the term of the Contract, the City may, at their sole discretion and acting reasonably, require an updated COR Certificate or Annual Letter of good Standing. A Contractor, who fails to provide a satisfactory COR Certificate or Annual Letter of good Standing, will not be permitted to continue to perform any Work.

D7. INSURANCE

- D7.1 The Contractor shall provide and maintain the 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, contractual liability, unlicensed motor vehicle liability (contractor's equipment), non-owned automobile liability and products and completed operations endorsement, 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.
 - (d) all risks course of construction insurance in the amount of one hundred percent (100%) of the total Contract Price, written in the name of the Contractor and The City of Winnipeg, at all times during the performance of the Work and until the date of Total Performance
- D7.2 Deductibles shall be borne by the Contractor.
- D7.3 All policies shall be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D7.4 The Contractor shall provide:
- (a) The certificate of insurance, in a form satisfactory to the Supervisor of Insurance, to:

The City of Winnipeg
Risk Management
Insurance Section
185 King Street, 3rd Floor
Winnipeg, MB R3B 1J1
 - (b) The Contract Administrator with a copy of the certificate of insurance.

At least two (2) Business Days of notification of the award of the Contract and prior to the commencement of any Work on the Site.

- D7.5 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 Supervisor of Insurance.

CONTRACT SECURITY

- D8.1 The Contractor shall provide and maintain contract 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 amount of fifty percent (50%) of the Contract Price; and
- (b) a labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in an amount equal to fifty percent (50%) of the Contract Price.

- D8.1.1 Bonds are available at:

- (a) Performance Bond <https://www.winnipeg.ca//media/4928/>
 - (i) Performance Bond – Schedule A - Form of Notice
<https://www.winnipeg.ca//media/4831/>
 - (ii) Performance Bond – Schedule B – Surety's Acknowledgement
<https://www.winnipeg.ca//media/4832/>
 - (iii) Performance Bond – Schedule C – Surety's Position
<https://www.winnipeg.ca//media/4833/>
- (b) Labour & Material Payment Bond <https://www.winnipeg.ca//media/4930/>
 - (i) L&M Bond – Schedule A – Notice of Claim
<https://www.winnipeg.ca//media/4834/>
 - (ii) L&M Bond – Schedule B – Acknowledgement of a Notice
<https://www.winnipeg.ca//media/4835/>
 - (iii) L&M Bond – Schedule C – Surety's Position
<https://www.winnipeg.ca//media/4836/>

- D8.1.2 Where the contract security is a performance bond, it may be submitted in hard copy or digital format. If submitted in digital format the contract security must meet the following criteria:

- (a) the version submitted by the Contractor must have valid digital signatures and seals;
- (b) the version submitted by the Contractor must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
- (c) the version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
- (d) the verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
- (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding D8.1.2(b).

- D8.1.3 Digital bonds failing the verification process will not be considered to be valid and may be determined to be an event of default in accordance with C18.1. If a digital bond fails the verification process, the Contractor may provide a replacement bond (in hard copy or digital format) within seven (7) Calendar Days of the City's request or within such greater period of time as the City in their discretion, exercised reasonably, allows.

- D8.1.4 Digital bonds passing the verification process will be treated as original and authentic.

- D8.2 The Contractor shall provide:
- (a) the required Contract Security to:

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

- (b) The Contract Administrator with copies of the required Contract Security.

within seven (7) Calendar Days of notification of the award of the Contract and prior to the commencement of any Work on the Site.

- D8.3 The Contractor shall, as soon as practicable after entering into a contract with a Subcontractor:
- (a) give the Subcontractor written notice of the existence of the labour and material payment bond in D8.1(b); and
 - (b) post a notice of the bond and/or a copy of that bond in a conspicuous location at the Site of the Work.

D9. SUBCONTRACTOR LIST

- D9.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site.

D10. DETAILED WORK SCHEDULE

- D10.1 The Contractor shall provide the Contract Administrator with a detailed work schedule (Form L: Detailed Work Schedule) at least two (2) Business Days prior to the commencement of any Work on the Site.
- D10.2 The detailed work schedule shall consist of the following:
- (a) a critical path method (C.P.M.) schedule for the Work;
 - (b) a Gantt chart for the Work based on the C.P.M. schedule;
- all acceptable to the Contract Administrator.
- D10.3 Further to D10.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:
- (a) Commencement of work;
 - (b) Site mobilization, layout, and temporary construction fencing;
 - (c) Site grading and earthwork;
 - (d) New Water Service connection from existing mains to the existing meter pit;
 - (e) New seasonal water service connection from meter pit to new hose bib;
 - (f) Supply and installation of new seasonal water service connection from meter pit to new water fountain;
 - (g) Supply and installation of new hose bib;
 - (h) Supply and installation of concrete pad for new fountain;
 - (i) Supply and installation of new fountain, including drain line and drain pit;
 - (j) Restorations;
 - (k) Substantial performance date; and

(l) Total performance date.

D10.4 Further to D10.2(b), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

D11. REQUIREMENTS FOR SITE ACCESSIBILITY PLAN

D11.1 The Contractor shall provide the Contract Administrator with an Accessibility Plan at least five (5) Business Days prior to the commencement of any Work on the Site.

D11.2 The Accessibility Plan shall demonstrate how the Contractor will accommodate the safe passage of pedestrians and cyclists in accordance with the Manual of Temporary Traffic Control, the Contract Drawings, Staging Plans, and Streets By-Law No. 1481/77 at all times for the duration of the Construction. Unless noted in the Contract, the Accessibility Plan must include a written plan for the following:

- (a) How the Contractor will maintain at least one crossing in each direction for each intersection (one north/south crosswalk and one east/west crosswalk).
- (b) How the Contractor will maintain access to bus stops within the site.
- (c) How the Contractor will maintain access to pedestrian corridors and half signals.
- (d) How the Contractor will maintain cycling facilities.
- (e) How the Contractor will maintain access to residents and businesses unless otherwise noted in the Contract.
- (f) Any required detour signage at adjacent crossings to facilitate sidewalk or active transportation pathway closures.

D11.3 The Accessibility Plan may also include figures, sketches, or drawings to demonstrate the proposed plan.

D11.4 The Accessibility Plan shall include written details on how the Contractor intends to review, maintain, and document all items related to the Accessibility Plan on-site during Construction, including, but not limited to:

- (a) Signage
- (b) Temporary Ramping
- (c) Transit Stops
- (d) Detour Signage

D11.5 At minimum, the Contractor shall review the site conditions on a daily basis to ensure that all features related to the Accessibility Plan are in place. The site review is intended to correct deficiencies as a result of unforeseen events such as wind, traffic, or the general public. Deficiencies that are direct result of the Contractors actions must be corrected immediately.

D11.6 Any changes to the Accessibility Plan must be approved by the Contract Administrator.

D11.7 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the site has been maintained.

D11.8 Deficiencies as a direct result of actions by the Contractor that are not immediately corrected and/or failure to produce records that demonstrate that the site was maintained in compliance with the Accessibility Plan may result in a pay adjustment via the monthly Progress Payment. The rate of pay adjustment will be as per the following schedule:

- (a) First Offence – A warning will be issued and documented in the weekly or bi-weekly site meeting.
- (b) Second Offence – A field instruction to immediately correct the site will be issued by the Contract Administrator.

- D11.9 Third and subsequent Offences – A pay reduction will be issued in the amount of \$250.00 per instance and per day.

SCHEDULE OF WORK

D12. COMMENCEMENT

- D12.1 The Contractor shall not commence any Work until they are in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D12.2 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 D5;
 - (ii) evidence of the workers compensation coverage specified in C6.17;
 - (iii) the Safe Work Plan specified in D6;
 - (iv) evidence of the insurance specified in D7;
 - (v) evidence of the contract security specified in D8;
 - (vi) the Subcontractor list specified in D9;
 - (vii) the detailed work schedule specified in D10;
 - (viii) the Requirements for Site Accessibility Plan as specified in D11 and
 - (ix) the direct deposit application form specified in C12.20.
 - (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.
- D12.3 The Contractor shall commence the Work on the Site within ten (10) Working Days of receipt of the Purchase Order.
- D12.4 The City intends to award this Contract by September 4, 2026.

WORK BY OTHERS

- D13.1 Further to C6.26, the Contractor's attention is directed to the fact that other Contractors, the personnel of Utilities and the staff of the City may be working within the project limit, approach roadway, adjacent roadways or right-of-way. The activities of these agencies may coincide with the Contractors execution of work and it will be the Contractor's responsibility to cooperate to the fullest extent with other personnel working in the area, and such cooperation is an obligation of the Contractor under the terms of Contract.

D14. SUBSTANTIAL PERFORMANCE

- D14.1 The Contractor shall achieve Substantial Performance on June 28, 2026.
- D14.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D14.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance on July 5, 2027.

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

D15.3 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.

D16. LIQUIDATED DAMAGES

D16.1 If the Contractor fails to achieve Critical Stages, Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:

- (a) Substantial Performance - five hundred dollars (\$500);
- (b) Total Performance – five hundred dollars (\$500).

D16.2 The amounts specified for liquidated damages in D16.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages, Substantial Performance or Total Performance by the days fixed herein for same.

D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D17. SCHEDULED MAINTENANCE

D17.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:

- (a) Sodding as specified.
- (b) Trees, Shrubs and Perennial Plantings as specified.
- (c) Landscape maintenance as specified.

D17.2 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

D18. JOB MEETINGS

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

D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever they deem it necessary.

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

D19.1 Further to C6.27, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

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

D20.1 Further to B13.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at their sole discretion and acting reasonably, require updated proof of compliance, as set out in B13.4.

WARRANTY

D21. WARRANTY

D21.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter, except where longer warranty periods are specified in the respective Specification sections, unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

INDEMNITY

D22. INDEMNITY

D22.1 Indemnity shall be as stated in C17.

(See D9)

OLD EXHIBITION GROUNDS COMMUNITY GARDEN

Address

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 their 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, Purchasing Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Tender shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B7. In every instance where a brand name or design specification is used, the City will also consider approved equals and/or approved alternatives in accordance with B7.
- E1.4 The following are applicable to the Work:

<u>City of Winnipeg Specification No.</u>	<u>Specification Title</u>
CW 1110	General Instructions
CW 1120	Existing Services, Utilities and Structures
CW 1130	Site Requirements
CW 2110	Water Mains
CW 2160	Concrete Underground Structures and Works
CW 3010	Clearing and Grubbing
CW 3110	Sub-Grade, Sub-Base and Base Course Construction
CW 3130	Supply and Installation of Geotextile Fabrics
CW 3170	Earthwork and Grading
CW 3325	Portland Cement Concrete Sidewalks
CW 3510	Sodding
CW 3540	Topsoil and Finished Grading for Establishment of Turf Areas
CW 3550	Chain Link and Drift Fence
<u>Drawing No.</u>	<u>Drawing Name/Title</u>
HTFC Planning & Design	
0.0	Cover Page
1.1	Demolition Plan
1.2	Materials Plan
1.3	Layout Plan
1.4	Grading Plan
1.5	Planting Plan
2.1	Details
SD-012	Water Service 20 millimetre to 50 millimetre
SD-241	Typical Double Check Valve Assembly and Meter in C.S.P. Enclosure
SD-243	Sodding Details
SCD-119	Waste Receptacle Side Opening Metal Slat Type
SCD-122	Tache Style Metal Frame Picnic Table
SCD-122A	Tache Style Accessible Metal Frame Picnic Table

SCD-646	Park Pathway Crushed Limestone
SCD-649	Wood Mulch Path
SCD-653A	Accessible Planter Detail 4'x8' – Raised Multi-Level
SCD-654A	Raised Planter Detail 4'x8' Boards High
SCD-663	125mm (5") Thick Reinforced Concrete Path
Bienenstock Natural Playgrounds	
L0-00	Cover Sheet
L0-01	General Notes
L1-01	Materials Schedule
L1-02	Materials Schedule
L2-01	Grading and Drainage – Sensory Play Area
L2-02	Grading and Drainage – Climber
L2-03	Grading and Drainage Details
L3-01	Hardscape General Layout
L3-02	Hardscape Sensory Plan Area
L3-03	Hardscape Layout – Sensory Play Area
L3-04	Hardscape Details – Sensory Play Area
L3-05	Hardscape Climber
L3-06	Hardscape Climber
L3-07	Hardscape Layout – Climber
L3-08	Hardscape Details – Climber
L3-09	Hardscape Details
L3-10	Surfacing Details
L4-01	Softscape Sensory Play Area
L4-02	Softscape Climber
Sandbox Design & Consulting	
C1.0	Servicing Plan
C2.0	Details

TRAFFIC CONTROL

- E2.1 In accordance with the Manual of Temporary Traffic Control on City Streets (MTTC), the Contract Administrator shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place, maintain, and remove all regulatory signs and traffic control devices authorized and/or required by the Traffic Management Branch in the following situations:
- (a) Parking restrictions,
 - (b) Stopping restrictions,
 - (c) Turn restrictions,
 - (d) Diamond lane removal,
 - (e) Full or directional closures on a Regional Street,
 - (f) Traffic routed across a median,
 - (g) Full or directional closure of a non-regional street where there is a requirement for regulatory signs (turn restrictions, bus stop relocations, etc.) to implement the closure.
 - (h) Approved Designated Construction Zones with a temporary posted speed limit reduction. Traffic Services will be responsible for placing all of the advance signs and 'Construction Ends' (TC-4) signs. The Contractor is still responsible for all other temporary traffic control including but not limited to barricades, barrels and tall cones.
- E2.2 Further to E2.1(c), the Contractor shall make arrangement with the Traffic Services Branch of the City of Winnipeg to supply regulatory signs as required.
- E2.3 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the Site has been maintained.

- E2.4 Further to E2.1(c) and E2.1(d) the Contractor shall make arrangements with the Traffic Services Branch of the City of Winnipeg to reinstall the permanent regulatory signs after the Contract Work is complete. At this time the Contractor shall make arrangements to drop off the stockpiled materials to Traffic Services at 495 Archibald Street.
- E2.5 Any changes to the approved traffic management plan must be submitted to the Contract Administrator a minimum of (five) 5 Working Days prior to the required change for approval.
- E2.6 If the Contract Administrator determines that the Contractor is not performing Traffic Control in accordance with this specification, Traffic Services Branch may be engaged to perform the Traffic Control. In this event the Contractor shall bear the costs associated charged to the project by the Traffic Services Branch of the City of Winnipeg in connection with the required Works undertaken by the Contractor.

E3. EXISTING SERVICES AND UTILITIES

- E3.1 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.
- E3.2 Prior to the commencement of construction, the Contractor shall inspect the Site and examine all available records and contact all relevant utilities as necessary to determine the location of all existing surface and underground works. Locations of underground structures if shown are based on the best information available. No guarantee is given that all existing locations are exact.
- E3.3 The Contractor shall be responsible for and take all necessary precautions to preserve and protect all public utilities (i.e. telephone lines and cables, hydro lines and cables, gas lines, sewer mains and services, watermains and services, etc.) existing drains and surface drains or parts thereof which may be affected by their operations.
- E3.4 The Contractor shall make all requests directly to each utility for the location of their existing works prior to the start of construction in the area.
- E3.5 The Contractor shall indemnify and save harmless the City and the Contract Administrator or their Sub-Consultants against damages for consequential loss and against any claim made against the City or the Contract Administrator of any such main, line, conduit or other such structure or utility for any loss or damage in respect of third party claims or which may be suffered by any such City because of damage to any such main, line, conduit, or other such structure or utility, in any way caused by the operations of the Contractor in the performance of this Contract.

E4. ACCESS TO SITE

- E4.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at their own expense and approved by the Contract Administrator.
- E4.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and they shall be responsible for all damage resulting from their Work on private property.
- E4.3 The Contractor shall co-operate with the City so as to cause the least inconvenience throughout the area at all times. The Site contains an off-leash dog park with associated amenities that will be in operation during the construction of this project. The Contractor shall minimize impacts on these operations. Signage requesting that the dog park changes to an on-leash dog park during the times of construction is strongly recommended for the safety and security of both the users, their dogs, and the contractors. Signage to be provided at the parking lots and park entrances at the contractors expense and should outline the times and days which the dog park should become on-leash.

- E4.4 The Contractor's operations shall be limited to the minimum area necessary for undertaking the work and they shall be responsible for all damage resulting from their work on private property.
- E4.5 Confine apparatus, the storage of products and the operations of workers to limits indicated by laws, ordinances, permits and by directions of the Contract Administration.
- E4.6 Do not unreasonably encumber Site with materials or equipment.
- E4.7 Do not load or permit to be loaded any part of the work with a weight, load or force that will endanger its safety.
- E4.8 Obtain, pay for, and maintain on site sanitary facilities from startup to Total Performance.
- E4.9 Maintain the project site during construction.
- E4.10 Be responsible for damage due to weather, vandalism, etc.
- E4.11 Complete works in a manner that shall result in good surface drainage during periods of precipitation.
- E4.12 Assume full responsibility for the protection and safekeeping of products under the Contract, stored on the Site.

E5. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E5.1 Further to C6.13, 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.
- E5.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- E5.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E5.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.
- E5.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- E5.6 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 their encountering of suspected hazardous material during their course of Work

E6. PEDESTRIAN SAFETY

- E6.1 During the project, the Contractor shall ensure that proper and adequate signage and barricades area in place during sidewalk construction to direct any pedestrians within the construction zone either around the construction area or to the sidewalk on the opposite side of the street. The Contractor may also be required to install snow fencing to protect and keep pedestrians safely away from the construction area. The Contractor shall be responsible for maintaining the signage, barricades, and snow fence is a proper working condition, to the satisfaction of the Contract Administrator. No measurement for payment shall be made for this work.

E7. WATER OBTAINED FROM THE CITY

- E7.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

E8. SURFACE RESTORATIONS

- E8.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs area completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E9. SHOP DRAWINGS

- E9.1 Further to CW 1110, the Contractor shall provide within thirty (30) Calendar Days of award all shop drawings required as indicated on the Drawings and Specifications and at minimum the following:
- E9.1.1 Concrete foundation
 - E9.1.2 Entry sign
 - E9.1.3 Drinking fountain
 - E9.1.4 Hose bib
 - E9.1.5 Curb stops
 - E9.1.6 Double backflow valve
- E9.2 Shop drawings will be reviewed by the Contract Administrator and the City Project Manager for general conformance to the City's requirements and the design intent only. All detailed drawings shall be drawn to a suitable scale and include scale, north arrow, dimensions and appropriate elevations and cross-sections.
- E9.3 The level of detail and scope of information provided on the shop drawings shall be sufficient to satisfy construction needs and permitting requirements. Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been co-ordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- E9.4 Adjustments made on shop drawings by the Contract Administrator are not intended to change Contract Price. If adjustments affect the value of Work, state such in writing to the Contract Administrator prior to proceeding with Work.
- E9.5 Measurement and Payments
- E9.5.1 There shall be no separate measurement of payment for shop drawings.

E10. SAMPLES

- E10.1 The Contractor shall provide within thirty (30) Calendar Days of award all samples required as indicated on the Drawings and Specifications.
- E10.2 Identify samples with name of project, date, name of Contractor, name of supplier/manufacturer and use of material represented by sample.
- E10.3 Do not proceed with delivery of materials until samples are reviewed by the Contract Administrator. No deviation is permitted after approval of sample.

E10.4 Approval of samples does not imply acceptance of finished Work.

E10.5 Where required, submit a range of samples, as may be reasonable.

E11. TEST REPORTS

E11.1 Where required per the Drawings and Specifications, the Contractor shall provide certified copies of tests upon materials to be used in construction of the Work, indicating that the materials comply with the Specifications.

E11.2 Submit test results to the Contract Administrator.

E11.3 Measurement and Payment

E11.3.1 All testing costs shall be the responsibility of the Contractor, and there shall be no separate measurement of payment for testing.

E12. SETTING OUT THE WORK

E12.1 Description

E12.1.1 This specification shall cover setting out and layout of the work for Contract Administrator review prior to starting excavation or site grading works.

E12.2 Methods

E12.2.1 The Contractor shall be responsible for setting control and completing all grading, underground services, utilities and other work executed under this contract to all lines, elevations, reference points and measurements based on plans, specifications, basic control points and benchmark(s) supplied by Contract Administrator.

E12.2.2 The Contractor shall employ competent person(s) to lay out work.

E12.2.3 If requested, the Contract Administrator will provide the Contractor with the basic layout plan in CAD format. The Contract Administrator will not provide any survey points, survey data, contours, or DTMs.

E12.2.4 Supply Contract Administrator all survey data utilized upon request of Contract Administrator.

E12.2.5 The Contractor will mark, to the extent they determine to be necessary, 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.

E12.2.6 The Contractor shall notify the Contract Administrator immediately of the disturbance of any such stakes or marks. The cost of correcting any errors arising out of neglect of the Contractor to so notify the Contract Administrator shall be borne entirely by the Contractor, as well as the cost of replacing any disturbed stakes or marks.

E12.2.7 Before commencing Work, the Contractor shall satisfy themselves as to the meaning and correctness of all stakes and marks and no claims shall be entertained by the City on account of any alleged inaccuracies. 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, but no claims shall be made on account of any delay occasioned thereby.

E12.2.8 The Contractor shall determine and provide all dimensions and elevations measured from the stakes or marks.

E12.2.9 The Contract Administrator shall be advised of the staking of the work layout at least forty-eight (48) hours in advance in order that the layout may be inspected and adjusted as required prior to construction. The cost of correcting any errors arising out of neglect of the Contractor to so notify the Contract Administrator shall be borne entirely by the Contractor.

E12.2.10 The Contract Administrator shall only review the stakes and marks for general conformance to the proposed design. The Contractor shall not rely on this review as authoritative or comprehensive review of the staking and shall remain responsible for conformance to the design intent and drawings following this review.

E12.3 Measurement and Payment

E12.3.1 There shall be no separate payment for the layout of the works or the provision of stakes or marks, these items being considered incidental to the items of work being laid out.

E13. PROTECTION OF EXISTING TREES AND SITE INFRASTRUCTURE

E13.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing buildings, trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, transformers, cables, conduits, sewers or other existing facilities and equipment at the Site of the Work. For all damage incurred in the performance of the Work (either directly or indirectly), the Contractor shall either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to City of Winnipeg Contract Administrator, and the cost of which 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.

E13.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction.

E13.2.1 A 2.4m Tree Protection Zone shall be fenced off for all trees within the construction limits of work using plastic UV stabilized, high density polyethylene web snow fencing, 1.2m in height, and supported by rolled steel T-bar fence posts, or approved equal material strong enough to remain erect during inclement weather. The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2.4m metres of trees.

E13.2.2 All trees within the construction limits of work and withing 5 metres beyond the limits of construction are to be strapped with 25 x 100 x 2400mm wood planks, or suitable protection as approved by the Contract Administrator.

E13.2.3 Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.

E13.2.4 Operation of equipment within the drip line of the trees shall be kept to a minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the drip lines of trees. The drip line 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.

E13.2.5 Do not place in excess of 6" of fill over existing tree root zones defined by their drip lines. Do no excavate or dig under existing tree canopies in dry or excessively hot weather.

E13.2.6 If roots are exposed for an extended period of time, cover exposed roots with approved temporary root cover material such as soil, mulch, or damp burlap immediately after exposure. Temporary root covers shall be kept damp as long as they are in place.

E13.2.7 The Contractor will water and fertilize trees within limit of work zone regularly and as directed by the Contract Administrator to maintain tree health especially during extended periods of heat with no precipitation or if the tree shows signs of stress. Signs of stress will be flagged by the Contract Administrator during regular field visits.

E13.2.8 Repair, replace and maintain tree protection materials during construction until the project completion.

- E13.2.9 Carefully remove safety fencing and strapping materials without harming the trees as soon as the construction and restoration work is complete.
- E13.3 American elm trees are not to be pruned between April 1st and August 1st and Siberian elm trees between April 1st and July 1st of any year under provisions of The Dutch Elm Disease Act.
- E13.4 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.
- E13.5 Root Protection, Cutting and Care
- (a) Avoid cutting roots. If root cutting appears to be necessary, obtain approval from the Contract Administrator before proceeding. If required and approved, root pruning must be performed under the direction of the Forestry Branch.
 - (b) Cut roots cleanly with sharp, sterilized hand tools to promote quick wound closure and regeneration.
 - (c) Minimize damage by avoiding excavation during hot, dry weather.
 - (d) Keep protected plants well watered before and after digging.
 - (e) Cover exposed roots with approved temporary root cover material such as soil, mulch, or damp burlap immediately after exposure. Temporary root covers shall be kept damp as long as they are in place.
- E13.6 Should any trees on site be found to be damaged beyond salvage the Contract Administrator will apply a financial tree replacement penalty equal to the replacement value of the tree in question based on the current replacement cost of the same sized tree. *Note when trees are in excess of 7.5m high and 300mm ø caliper, replacement cost penalties may be as high as \$25,000 per tree.
- E13.7 Materials
- (a) Barrier Material: plastic UV stabilized, high density polyethylene web snow fence, international orange colour, 1.22 meter height, or approved equal.
 - (b) Snow Fence Supports: rolled steel T-bar fence posts, or approved equal.
- E13.8 Measurement and Payment
- E13.8.1 There shall be no separate measurement of payment for the protection of trees and site infrastructure.

E14. REMOVALS

- E14.1 Description
- E14.1.1 This specification shall cover the removal of:
- (a) Existing chain link fence;
 - (b) Existing trees;
 - (c) Existing asphalt and subgrade;
 - (d) Existing sodding, topsoil and subgrade;
 - (e) Existing granular pathway and subgrade; and
 - (f) Existing light poles.
- E14.1.2 All items to remain shall be protected during construction to the satisfaction of the Contract Administrator.
- E14.2 References
- E14.2.1 The City of Winnipeg Standard Construction Specifications
- (a) CW 3010 – Clearing and Grubbing

E14.3 Methods

- E14.3.1 Equipment to be used for breaking up of concrete and removals shall be approved by the Contract Administrator.
- E14.3.2 All concrete and asphalt shall be removed entirely. Base materials may be left in place to the satisfaction of the Contract Administrator.
- E14.3.3 Supplemental to CW 3010, topsoil and sod to be removed to depths required by Works.
- E14.3.4 All materials, to be demolished and removed, are to be removed from the Site and disposed of in a safe and legal manner. Excavated materials shall be recycled or legally disposed of off-site.

E14.4 Measurement and Payment

- E14.4.1 Removals shall be measured on a Lump Sum basis and paid for at the Contract Lump Sum Price for "Removals". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E15. EXCAVATION AND GRADING

E15.1 Description

- E15.1.1 Further to CW 3110 and CW 3170, this specification shall cover the excavation and legal disposal of existing earthen materials and site grading, including the cut and fill required to achieve the proposed site grades.
- E15.1.2 Engage a professional to layout all grades and features as indicated on the Drawings.
- E15.1.3 Excavation includes the removal of items (i.e. earthen materials) as indicated on the Drawings and as directed by the Contract Administrator. Work includes the satisfactory disposal of unsuitable site material such as clays susceptible to frost-heaving, silts, rock, rubble, rubbish and any surplus suitable site material.
- E15.1.4 Work shall include but not be limited to the following:
 - (a) Excavate and add clean fill if necessary and grade to the limits shown on the Drawings to the depths and elevations necessary to achieve finished grades as indicated on the Drawings.
 - (b) All extraneous materials are to be removed from Site and disposed of in a safe and legal manner.
- E15.1.5 The Work to be completed by the Contractor under this Specification shall include the supply of materials, and the furnishings of all superintendence, overhead, labour, equipment, tools, and all other things necessary for and incidental to the satisfactory completion of all the Work shown on the Drawings and specified herein.

E15.2 References

- E15.2.1 The City of Winnipeg Standard Construction Specifications
 - (a) CW 3110 – Sub-Grade, Sub-Base and Base Course Construction
 - (b) CW 3170 – Earthwork and Grading

E15.3 Construction Methods

E15.3.1 Excavation

- (a) Stockpile suitable, approved material on Site for reuse (clean topsoil, clean earthen fill) in a secure location. Remove and dispose of unsuitable material.
- (b) Disposal of material shall be understood to mean the hauling of all unsuitable material from the Site and the unloading in a legal manner acceptable to the Contract Administrator. If arrangements are made in advance excavated material may be disposed on Site at a location designated by the Contract Administrator.

- (c) Contractor must coordinate with the Contract Administrator to ensure removals have occurred.
- (d) Excavate to the limits shown as necessary to achieve finished grades as indicated on the Drawings. Where design grades are not shown, the new surface materials shall be installed to meet flush with surrounding grades, and sloped so as not to impede the existing drainage pattern.
- (e) The Contractor shall construct all sub-grades in accordance with CW 3110. This shall include the use of suitable compaction equipment as approved by the Contract Administrator to achieve a minimum compaction of 98% Standard Proctor Density below all paved areas and 90% Standard Proctor Density in all other areas disturbed under this Contract unless otherwise indicated. Lifts shall not exceed a compacted thickness of 150mm.
- (f) Where new sod will meet existing, employ a vertical shearing operation, such as using a sharp spade or edger, along the outside edges of the excavation to create a clean and definite line for the new sod to abut flush to.
- (g) Construction area is to be excavated or filled to achieve rough grade.

E15.3.2 Grading

- (a) Site grading shall be per the Drawings.
- (b) The design grade shall be considered to be straight grade between finished design elevations shown. Changes in grade at swales or where it meets existing sod shall be gently contoured to allow for ease of grass mowing operations.
- (c) Contractor to ensure site grading does not create tripping hazards and no areas of standing water remain.
- (d) If necessary the Contractor shall import clean fill to achieve grades per the Drawings.
- (e) Backfill shall be placed in a dry, thawed condition and shall be maintained free of moisture or frost.
- (f) In fill areas where the difference between the existing ground elevation and the new finished design elevation is less than 300mm, the Contractor shall scarify the existing ground to a minimum depth of 50mm prior to placement of fill.
- (g) In areas where new grades are greater than 75mm than existing grade, clean fill shall be used to achieve finished subgrade levels. Clean fill can be used from on-site grading operations. If additional clean fill is required, it must be hauled in from off-site.

E15.3.3 Finished Grading

- (a) Following earthmoving, rough grading and compaction, the Work areas shall be finish graded to provide a maximum deviation of 50mm in 10 meters from the design grade with no low areas that hold water. The finished surface of all disturbed areas shall be dragged and smoothed in such a manner that there are no loose soil particles greater than 50mm.
- (b) All surplus fill material shall be removed and legally disposed of off-site.
- (c) Do not disturb adjacent items designated to remain in place.

E15.4 Measurement and Payment

- E15.4.1 Site grading shall be measured on a Lump Sum basis and paid for at the Contract Lump Sum Price for "Site Grading". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E16. CONCRETE FOUNDATIONS

E16.1 Description

- E16.1.1 This specification shall cover the supply and installation of footbridge concrete foundations.

E16.1.2 The Work to be completed by the Contractor under this Specification shall include the supply of all materials, and the furnishings of all superintendence, overhead, labour, equipment, tools, and all other things necessary for and incidental to the satisfactory completion of all the Work shown on the Drawings and specified herein.

E16.2 References

E16.2.1 The City of Winnipeg Standard Construction Specifications
(a) CW 2160 – Concrete Underground Structures and Works

E16.3 Testing and Shop Drawings

E16.3.1 Concrete inspection and testing to CW 2160.

E16.3.2 Shop drawings to CW 2160.

E16.4 Materials

E16.4.1 All materials as per CW 2160.

E16.5 Construction Methods

E16.5.1 Construction methods to CW 2160.

E16.5.2 Cold Weather Concrete

- (a) Cold weather concreting shall be as per Section 3.9 of CW 2160 and CSA A23.1.
- (b) All material and equipment needed for adequate protection and curing shall be on hand and ready to use before concrete placement is started.
- (c) Before concrete is placed all ice, snow, and frost shall be removed from formwork and all surfaces against which concrete will be placed.
 - (i) Temperatures of adjacent surfaces shall be raised to and maintained at 5° C minimum, prior to and during concreting.
 - (ii) Calcium chloride or other de-icing salts shall not be used as a de-icing agent in the forms.
- (d) Heating equipment and enclosures shall be per CW 2160 and CSA A23.1.

E16.6 Measurement and Payment

E16.6.1 The supply and placement of concrete foundations shall be measured on a Cubic Meter basis and paid for at the Cubic Meter Price for "Footbridge Concrete Foundation". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E17. EXTERIOR SITE CARPENTRY

E17.1 Description

E17.1.1 Provide all labour, materials, methods, equipment and accessories for the fabrication and installation of footbridge wood decking, compost bin and entry sign.

E17.2 References

E17.2.1 Canadian

- (a) CSA B111, Wire, Nails, Spikes and Staples
- (b) CSA 0141 Softwood Lumber

E17.3 Samples

- (a) Submit samples of powdercoated rail hanger.

E17.4 Shop Drawings

- (a) Provide shop drawings for rail hangers.

E17.5 Materials

E17.5.1 Wood to be No. 2 grade or better cedar and pressure treated cedar tone brown wood free of checks, warping, & major knots, and shall conforming to requirements of CSA 0141 (latest) and graded in accordance with the national lumber grades authority "standard grading rules". Maximum moisture content of 17%. Sound, square edges, no bark, no rot, no wane on any surface. All wood to be kiln dried. Contractor shall obtain a certificate of grade and origin prior to installation.

E17.5.2 Hardware

- (a) Rust-proof or acid-proof L-brackets, hinges, latches, pull handles, rail hangers and joist hangers must be used and be powdercoated black aluminum to avoid discolouration of the wood.
- (b) Bolts nuts, washers, lag screws, to be stainless steel or acid proof where noted, sizes to suit application. Galvanize hardware is not acceptable.
- (c) Use plastic or neoprene washers between disparate materials such as concrete, wood and metal to prevent corrosion.

E17.6 Quality Assurance

E17.6.1 Carpentry shall be performed by trained and qualified craftspeople with demonstrable experience sourcing and work.

E17.6.2 Conduct a pre-installation meeting with the Contract Administrator to verify requirements.

E17.6.3 Lumber Identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.

E17.6.4 All wood to be free of defects. Any warped, checked or bent materials will be rejected.

E17.7 Construction Method

E17.7.1 Handle and install wood in a manner that will avoid damage to timbers.

E17.7.2 Construct all work as indicated on the Drawings using adequate fastening methods to ensure solid durable finished work suitable for the purpose intended.

E17.7.3 Orient timbers with most presentable faces exposed.

E17.7.4 Do all fastening neatly, evenly and thoroughly.

E17.7.5 Install all members true to line, levels and elevations.

E17.7.6 Where indicated, set plumb and space uniformly. Shim with hot dip galvanized washers if necessary to create consistent height for bench seat boards and consistent depth for bench back members.

E17.7.7 Inform Contract Administrator of any gaps between members greater than 100mm that could create an entrapment hazard.

E17.7.8 Countersink bolts and fasteners.

E17.8 Measurement and Payment

E17.8.1 The supply and installation of Site Carpentry will be paid for on a unit each basis for the Items of Work listed below. Price shall be payment in full for supplying materials and for performing the Work as accepted by the Contract Administrator. Price for entry sign shall exclude metal sign which shall be paid for under Signage Specification. Price for footbridge shall exclude concrete foundation which shall be paid for under Concrete Foundations Specification.

- (a) Items of Work:
 - (i) Footbridge wood decking
 - (ii) Entry sign wood fencing

(iii) Compost bin

E18. SIGNAGE

E18.1 Description

E18.1.1 Provide all labour, materials, methods, equipment and accessories for the fabrication and installation of entry sign.

E18.2 Submittals

E18.2.1 Digital Proofs: submit full size dull colour digital proofs of the entry sign to Contract Administrator for approval.

E18.2.2 Samples: submit one (1) 200 x 200mm full scale, full colour sample of the entry sign. Samples will be reviewed for resolution, registration, legibility, gloss and colour matching.

E18.2.3 Shop Drawings: submit shop drawings indicating proposed mounting to wood fence.

E18.3 Artwork

E18.3.1 Artwork to be provided in digital (EPS) format by the Contract Administrator.

E18.3.2 The artwork shall not be reproduced in any other form or in excess of the amount contracted for, except by written approval of the Contract Administrator and City of Winnipeg Public Works Department.

E18.4 Materials

E18.4.1 Entry sign to be aluminum powder-coated, graffiti resistant, UV protection, fade resistant, echo friendly.

E18.4.2 Wall mount to wood fence w/stainless steel tamper-proof screws.

E18.4.3 Available form Alto Aluminum ph. 1-866-525-4349, or approved equal.

E18.5 Construction Methods

E18.5.1 Quality Assurance

(a) Sign production shall be performed by trained and qualified workers with a minimum of five (5) years experience, under controlled conditions

E18.5.2 Mounting Holes

(a) Mounting hole locations must be accurately placed, within 2mm of the locations indicated on the Drawings and approved shop drawings to suit the pre-drilled mounting holes in the sign supports.

E18.5.3 Installation

(a) Confirm locations and orientation of sign with Contract Administrator prior to installation.

(b) Sign to be installed plum and level using approved hardware.

E18.6 Warranty

E18.6.1 Entry sign aluminum panels shall have a lifetime warranty under normal use as designed, any such sign fades and/or shows substantial peeling, cracking, flaking, or splitting to the extent that it is not effective for its intended purpose when viewed at normal viewing, the Contractor will remove the defective sign and install a new duplicate sign in exchange for the original at no cost to Owner.

E18.6.2 Damage due to improper use, accidents, negligence, structure settlement, chemical damage, severe weather, improper repairs by others or vandalism will not be subject to warranty repair.

E18.6.3 The contractor shall warrant materials, fabrication and installation including work by sub-trades.

E18.7 Measurement and Payment

E18.7.1 Signage shall be measured on a Square Meter basis and paid for at the lump sum Price for "Entry Sign". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E19. PARK PATHWAY CRUSHED LIMESTONE

E19.1 Provide all labour, materials, methods, equipment and accessories for the supply and install of park pathway crushed limestone.

E19.2 References

E19.2.1 City of Winnipeg Standard Construction Specifications
(a) CW 3110 – Sub Grade, Sub Base & Base Course Construction
(b) CW 3130 – Supply and Installation of Geotextile Fabrics

E19.2.2 City of Winnipeg Standard Details
(a) SCD-646 – Park Pathway Crushed Limestone

E19.3 Testing

E19.3.1 All materials set forth in this Specification shall be subject to inspection and testing by the Contract Administrator or by the testing laboratory designated by the Contract Administrator.

E19.4 Materials

E19.4.1 Crushed limestone topping, crushed limestone base course, crushed limestone sub-base and compacted subgrade to CW 3110.

E19.4.2 Non-woven geotextile fabric to CW 3130.

E19.5 Construction Methods

E19.5.1 Excavate to the subgrade based on the lines and grades shown on the Drawings.

E19.5.2 Place non-woven geotextile and crushed limestone sub-base immediately after sub-grade is inspected and testing is approved by Contract Administrator. Construct sub-base to depths as indicated on SCD-646 and to the grades indicated on the Drawings, and compact to 98% of SPMDD.

E19.5.3 Place limestone base course immediately after sub-base is inspected and testing is approved by the Contract Administrator. Construct base course to depths as indicated on SCD-646 and to the grades indicated on the Drawings, and compact to 98% of SPMDD.

E19.5.4 Place limestone topping immediately after base course is inspected and testing is approved by the Contract Administrator. Construct topping to depths as indicated on SCD-646 and to the grades indicated on the Drawings, and compact to 95% of SPMDD.

E19.5.5 Begin spreading topping on down line or high side of cross slope. Place topping using methods which do not lead to segregation or degradation.

E19.5.6 Do not place frozen or excessively wet material. Do not place materials when daytime temperatures are below -5 °C. Place material only on clean unfrozen surface, free from snow and ice.

E19.5.7 For spreading and shaping of topping, use spreader boxes having adjustable templates or screens, which will place material in uniform layers of required thickness

- E19.5.8 Place limestone layers to full width in uniform layers not exceeding 150mm compacted thickness.
- E19.5.9 Shape each layer to smooth contours and compact to specified density before succeeding layer is placed.
- E19.5.10 Remove and replace any portion of each lift in which material becomes segregated during spreading and commence installation from a firm compacted surface.
- E19.5.11 Compact each limestone layer to CW 3110. Add water as necessary between passes to achieve required compaction
- E19.5.12 Remove surplus material off site.
- E19.6 Measurement and Payment
- E19.6.1 The supply and installation of park pathway crushed limestone shall be measured on a Square Meter basis and paid for at the Square Meter Price for "Park Pathway Crushed Limestone". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E20. CHAIN LINK FENCE

E20.1 Description

- E20.1.1 Further to CW 3550, this specification shall cover the modification of existing chain link fence to accommodate a new entry sign to City of Winnipeg Standard Construction Specifications and as shown on the Drawings.

E20.2 References

- E20.2.1 City of Winnipeg Standard Construction Specifications
(a) CW 3550 – Chain Link and Drift Control Fence

E20.3 Materials

- E20.3.1 Further to CW 3550 and the Drawings:
- (a) Fence height to match existing.
 - (b) Posts, Braces and Rails: To CAN/CGSB-138.2, galvanized steel pipe. Dimensions as indicated: gate posts schedule 40 pipe; end and corner posts .125 wall; line posts .100 wall. Gate, end and corner posts: 89mm diameter. Line posts: 60mm diameter. Rails: Minimum 43mm diameter.
 - (c) Bottom Tension Wire: To CAN/CGSB-138.1, Table 2, single strand, galvanized steel wire, 5 mm $\varnothing$.
 - (d) Tie Wire Fasteners: To CAN/CGSB-138.1, Table 2 (steel wire), single strand, galvanized conforming to requirements of fence fabric.
 - (e) Tension Bar: To ASTM A653/A653M, 5 x 20 mm minimum galvanized steel.
 - (f) Gates: N/A.
 - (g) Gate Frames: N/A.
 - (h) Fittings and Hardware: To CAN/CGSB-138.2, cast aluminium alloy, galvanized steel or malleable or ductile cast iron. Post caps to provide waterproof fit, to fasten securely over posts and to carry top rail.
 - (i) Organic Zinc Rich Coating: To CAN/CGSB-1.181.

E20.4 Methods

- E20.4.1 Per CW 3550 and the Drawings.

E20.5 Measurement and Payment

- E20.5.1 The modification of existing chain link fencing shall be measured on a Lump Sum basis and paid for at the Lump Sum Price for "Chain Link Fence Modification". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E21. SITE FURNITURE

E21.1 Description

- E21.1.1 Provide all labour, materials, methods, equipment and accessories for:
- (a) The installation of City supplied accessible planters and planter boxes;
 - (b) The supply and installation of picnic tables, picnic table-custom colour, waste receptacle, water tote including accessories; and
 - (c) The installation of an existing memorial plaque located on site.

E21.2 References

- E21.2.1 City of Winnipeg Standard Details
- (a) SCD-653A Accessible Planter Detail 4'x8' – Raised Multi-Level
 - (b) SCD-654A Raised Planter Detail 4'x8' Boards High
 - (c) SCD-122A Tache Style Accessible Metal Frame Picnic Table
 - (d) SCD-122 Tache Style Metal Frame Picnic Table

E21.3 Submittals

- E21.3.1 Submit product data and shop drawings for bench and waste receptacle. Indicate sizes, assembly, finishes and installation details.

E21.4 Materials

- E21.4.1 Accessible Planters
- (a) To City of Winnipeg detail SCD-653A supplied by the City of Winnipeg.
- E21.4.2 Planter Box
- (a) To City of Winnipeg detail SCD-654A supplied by City of Winnipeg.
- E21.4.3 Accessible Picnic Table
- (a) Tache Style Accessible Metal Frame Picnic Table drawing number SCD-122A. Sod mounted with 2 duckbill anchors.
 - (b) Available to order from Centralized Park Services (CPS) cps-orderdesk@winnipeg.ca. Contact CPS for order form and details.
- E21.4.4 Picnic Table
- (a) Tache Style Metal Frame Picnic Table drawing number SCD-122. Sod mounted with 2 duckbill anchors.
 - (b) Available to order from Centralized Park Services (CPS) cps-orderdesk@winnipeg.ca. Contact CPS for order form and details.
- E21.4.5 Waste Receptacle
- (a) Waste receptacle side opening metal slat type drawing number SCD-119.
 - (b) Available to order from Centralized Park Services (CPS) cps-orderdesk@winnipeg.ca. Contact CPS for order form and details.
- E21.4.6 Water Tote & Accessories
- (a) 48 x 40 x 53" 330 gallon IBC tank, steel pallet model #H-4420.
 - (b) ¾" male garden hose threaded IBC adapters, model H-12035.

- (c) Available from ULINE, 1.800.295.5510, or approved equal.

E21.4.7 Existing Memorial Plaque

- (a) Re-locate existing memorial plaque currently located on site as indicated on the Drawings.

E21.5 Construction Methods

E21.5.1 All work is to be located and installed in accordance with the Drawings and manufacturers specifications.

E21.5.2 All furnishings to be installed plumb and true to correct elevations and location, as directed by the Contract Administrator. The Contractor shall confirm proposed locations of all site furnishings with Contract Administrator prior to installation.

E21.5.3 All furnishings to be carefully handled so that no parts will be bent, broken, or otherwise damaged. Contractor is responsible for replacing any damaged furnishings, prior to installation, at no cost to the City.

E21.6 Measurement and Payment

E21.6.1 The supply and installation of site furnishings shall be measured on a Unit Each basis and paid for at the Unit Each Price per unit for the items of Work listed below. The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E21.6.2 Items of Work:

- (a) Accessible planter
- (b) Planter box
- (c) Accessible picnic table
- (d) Picnic table
- (e) Picnic table – custom colour
- (f) Waste receptacle
- (g) Water tote
- (h) Threaded IBC adaptor
- (i) Memorial plaque

E22. PLANTING MEDIUM AND FINISHED GRADING

E22.1 Description

E22.1.1 Provide all labour, materials, methods, equipment and accessories for the supply and installation of planting medium for planting beds.

E22.2 References

E22.2.1 Agriculture and Agri-Food Canada

- (a) The Canadian System of Soil Classification, Third Edition, 1998.

E22.2.2 Canadian Council of Ministers of the Environment (CCME) Guidelines.

E22.2.3 The City of Winnipeg Standard Construction Specifications

- (a) CW 1130 – Site Requirements
- (b) CW 3540 – Topsoil and Finished Grading for Establishment of Turf Areas

E22.3 Submittals

- E22.3.1 Submit 0.5kg sample of planting medium to National Testing Laboratory, or approved alternate, and indicate present use and intended use. Prepare and ship sample in accordance with Provincial regulations and testing laboratory requirements.
- E22.3.2 Submit two (2) copies of soil analysis and recommendations for corrections to Contract Administrator.
- E22.3.3 Submit two (2) litre sample of compost to Contract Administrator with manufacturers literature and material certification that the product meets the CCME guidelines.
- E22.4 Quality Assurance
- E22.4.1 This project shall use locally produced planting medium, amended as required.
- E22.4.2 Inform Contract Administrator of proposed source of materials to be supplied and provide a sample for review by Contract Administrator prior to installation.
- E22.4.3 Testing of planting medium to be carried out and paid for by Contractor. Prepare and ship planting medium samples to approved laboratory in accordance with Provincial regulations and laboratory requirements, indicating intended use on each sample.
- E22.4.4 Inspection and testing of planting medium will be carried out by a Testing Laboratory chosen by the Contractor. Testing laboratory to be certified in accordance with CSA A283.
- E22.4.5 A minimum of three (3) tests area required:
- (a) Test 1 – planting medium.
 - (b) Test 2– amended planting medium based on the results of test 1.
 - (c) Test 3 – re-testing of planting medium if required, to meet specifications.
- E22.4.6 Test planting medium for nutrients N, P, K, micronutrients, soluble salt content, pH value and OM (organic matter).
- E22.4.7 Acceptance of planting medium is subject to an inspection of material and confirmation of test results. Do not commence soft landscaping work until Contract Administrator has accepted planting medium.
- E22.5 Delivery, Storage and Handling
- E22.5.1 Store materials in a dry area, protected from freezing, sedimentation and contamination.
- E22.5.2 Deliver and store fertilizer in waterproof bags labeled with weight, analysis and name of manufacturer.
- E22.6 Materials
- E22.6.1 Topsoil: In accordance with CW 3540 for topsoil except organic matter to be in the range of 5-10%.
- E22.6.2 Peatmoss: deliver from partially decomposed fibrous or cellular stems and leaves of species of sphagnum mosses. Elastic and homogeneous, brown in colour. Free of wood and deleterious material that could prohibit growth. Shredded particle minimum size: 5 mm.
- E22.6.3 Compost:
- (a) A mixture of soil, decomposing organic matter used as fertilizer, mulch or soil conditioner.
 - (b) Dark brown in colour, no objectionable odour.
 - (c) Processed organic matter containing 40% or more organic matter as determined by Walkley-Black or Lost On Ignition (LOI) test.
 - (d) Must be sufficiently decomposed (i.e. stable) so that any further decomposition does not adversely affect plant growth (C:N ratio below 25:1) and contain no toxic or growth inhibiting contaminants.
 - (e) Composted bio-solids to: CCME Guidelines for Compost Quality, Category A.

- E22.6.4 Sand: hard fine silica sand, well washed and free of impurities, chemical or organic matter. Coarse texture, and to the following gradation:

<u>Particle Size (mm)</u>	<u>% Passing Thru Screen</u>
2.0mm	100%
1.0mm	95-100%
0.5mm	80-100%
0.25mm	0 to 30%
0.15mm	0 to 8%
0.075mm	0 to 1%

E22.6.5 Planting Medium

- (a) All planting media shall be a thorough blend of the materials noted above in the proportions and to the fertility parameters noted below.
- (b) Keep all materials moist during blending stage to facilitate uniform mixing and to minimize peat, soil and sand separation.
- (c) Final mix shall have a pH of between 6.5 and 8 unless otherwise noted.
- (d) Provide a two (2) gallon sample of the planting medium tested including test results.
- (e) Planting medium for planting beds, tree pits and sod areas to contain (by volume):
 - (i) 40% Topsoil
 - (ii) 35% Peat
 - (iii) 20% Coarse Sand
 - (iv) 5% Compost

- E22.6.6 Fertilizer: Synthetic start-up slow release fertilizer with a N-P-K analysis of 12-36-15 ratio at a rate of 4 kg per 100 m2 which is 8 pounds per 100 sq ft.

E22.7 Construction Method

E22.7.1 Excavation

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

E22.7.2 Planting Medium Placement

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

E22.7.3 Soil Amendments

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

E22.7.4 Finished Grading and Rolling

- (a) Per CW 3540.

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

E22.8 Surplus Material

- E22.8.1 Dispose of unused planting medium off site in accordance with CW 1130

E22.9 Cleaning

- E22.9.1 Perform cleaning to remove accumulated environmental dirt from all paved surfaces of building faces. Remove surplus materials, rubbish, tools and equipment barriers.

E22.10 Measurement and Payment

- E22.10.1 The supply and placement of planting medium shall be measured on a Cubic Meter basis and paid for at the Cubic Meter Price for "Planting Medium". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E23. SODDING

E23.1 Description

- E23.1.1 This specification shall amend and supplement City of Winnipeg Standard Construction Specification CW 3510 "Sodding", and covers all operations relating sod supply and installation, including preparation of finish grade, watering and rolling, and thirty (30) day maintenance.
- E23.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies, and all things necessary for and incidental to the satisfactory performance and completion of all Works as hereinafter specified.

E23.2 References

- E23.2.1 City of Winnipeg Standard Construction Specifications:
 - (a) CW 3510 – Sodding
 - (b) CW 3540 – Topsoil and Finished Grading for Establishment of Turf Areas
- E23.2.2 City of Winnipeg Standard Details:
 - (a) SD-243 – Sodding Details

E23.3 Materials

- E23.3.1 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this Specification. All materials supplied under this Specification shall be subject to inspection and acceptance by the Contract Administrator.
- E23.3.2 Topsoil shall conform to CW 3540 and Planting Medium & Finished Grading Specification.
- E23.3.3 Sod shall conform to CW 3510.

E23.4 Construction Methods

- E23.4.1 The Contractor shall install sod at locations shown on the Drawings.
- E23.4.2 Any areas damaged beyond the areas indicated on the Drawings shall be the responsibility of the Contractor to restore through topsoil and sod, unless otherwise directed by the Contract Administrator.
- E23.4.3 Areas to be sodded are to be laid out on Site and approved by the Contract Administrator before commencing Work. Work outside the limit approved by the Contract Administrator

will not be measured and will not be paid for under this Specification and shall be considered incidental to the Work.

- E23.4.4 Where new sod will meet existing, employ a vertical sheering operation, such as using a sharp spade or edger, along the outside edges of the excavation to create a clean and definite line for the new sod to abut flush too.

E23.5 Maintenance

- E23.5.1 Thirty (30) day maintenance period on sod will commence at Total Performance.

- E23.5.2 Termination of maintenance period shall be per CW 3510 section 9.10.

E23.6 Measurement and Payment

- E23.6.1 Sodding shall be measured on a Square Meter basis and paid for at the Square Meter Price for "Sodding". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E24. TREES, SHRUBS AND WOOD MULCH

E24.1 Description

- E24.1.1 Provide all labour, materials, methods, equipment and accessories for the supply and installation of trees, shrubs, and wood mulch pathway.

E24.2 References

- E24.2.1 Agriculture and Agri-Food Canada (AAFC)
(a) Plant Hardiness Zones in Canada-2000.
- E24.2.2 Canadian Nursery Landscape Association (CNLA)
(a) Plant Canadian Standards for Nursery Stock-2001.
- E24.2.3 Department of Justice Canada (JUS)
(a) Plant Canadian Environmental Protection Act (CEPA), 1999, c.33.
(b) Transport of Dangerous Goods Act (TDGA), 1992, c.34.
- E24.2.4 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
- E24.2.5 City of Winnipeg Standard Construction Specifications
(a) CW 1120 – Existing Services, Utilities and Structures
- E24.2.6 City of Winnipeg Standard Details
(a) SCD-649 Wood Mulch Pathway

E24.3 Submittals

- E24.3.1 Submit product data for:
(a) Fertilizer.
- E24.3.2 Submit samples for:
(a) wood mulch.

E24.4 Source Quality Control

- E24.4.1 Obtain approval from Contract Administrator of plant material at source.
- E24.4.2 Notify Contract Administrator of source of material at least seven (7) days in advance of shipment. No work under this Section is to proceed without approval.
- E24.4.3 Acceptance of plant material at source does not prevent rejection on Site prior to or after planting operations.

- E24.4.4 Plant material imported from other nations will not be accepted.
- E24.4.5 Bare root plant material will not be accepted.
- E24.5 Storage and Protection
- E24.5.1 Coordinate the shipping of plants and excavation of tree vaults to ensure minimum time laps between digging and planting.
- E24.5.2 Protect plant material from frost, excessive heat, wind and sun during delivery.
- E24.5.3 Protect plant material from damage during transportation:
- (a) When delivery distance is less than 30 km and vehicle travels at speeds under 80 km/h, tie tarpaulins around plants or over vehicle box.
 - (b) When delivery distance exceeds 30 km or vehicle travels at speeds over 80 km/h, use enclosed vehicle where practical.
 - (c) Protect foliage and rootballs using anti-desiccants and tarpaulins, where use of enclosed vehicle is impractical due to size and weight of plant material.
- E24.5.4 Protect stored plant material from frost, wind and sun as follows:
- (a) For balled and burlapped and wire basket rootballs, place to protect branches from damage. Maintain moisture level in root zones.
- E24.5.5 Remove broken and damaged roots with sharp pruning shears. Make clean cut and cover cuts over 20mm (3/4") diameter with wound dressing.
- E24.5.6 Keep roots moist and protect from sun and wind. Heel-in trees that cannot be planted immediately in shaded areas and water well.
- E24.6 Scheduling
- E24.6.1 Order plant material as soon as possible after award of contract to ensure plant availability. Request substitutes as required.
- E24.6.2 Provide Contract Administrator a written schedule fourteen (14) days in advance of shipment of plant material. Schedule to include: quantity and type of plant material, shipping dates, arrival dates on Site, and planting dates.
- E24.7 Warranty of Nursery Stock
- E24.7.1 For all plant material a two (2) year warranty period is required.
- E24.7.2 During the warranty period, upon written notification from the Contract Administrator, the Contractor warrants to replace and replant any nursery stock found dead and/or in poor condition as soon as possible thereafter, without cost to The City. "Poor Condition" shall be interpreted as meaning nursery stock on which branches are dead or dying, or have not shown satisfactory growth in leaves. Exempted is nursery stock damaged by accidental causes or vandalism, which stock shall be replaced at the cost of The City.
- E24.7.3 At the end of the two (2) year warranty period an inspection will be conducted by Contract Administrator.
- E24.7.4 Contract Administrator reserves the right to extend Contractor's warranty responsibilities for an additional one (1) year if, at end of initial warranty period, leaf development and growth is not sufficient to ensure future survival.
- E24.8 Replacements
- E24.8.1 During warranty period, remove and replace any plant material that has died or failed to grow satisfactorily, at no cost to the City, as directed by the Contract Administrator.
- E24.8.2 A one (1) year warranty period shall be required on all replacement plant material
- E24.8.3 All replacement plant material shall be the same size and species as specified, and shall be supplied and planted in accordance with the original Drawings and Specifications.

E24.8.4 Should the replaced plant material not survive, the Contractor will be responsible for a third replacement and an additional one (1) year warranty period.

E24.9 Plant Material

E24.9.1 Type of root preparation, sizing, grading and quality shall comply to the Canadian Standards for Nursery Stock.

E24.9.2 Source of plant material: grown in Zone 3 only in accordance with Plant Hardiness Zones in Canada. Plant material must be planted in zone indicated as appropriate for its species.

E24.9.3 Plant material free of disease, insects, defects or injuries and structurally sound with strong fibrous root system.

E24.9.4 Substitutions to plant material as indicated on planting plan are not permitted unless written approval has been obtained as to type, variety and size. Plant substitutions must be of similar species and of equal size as those originally specified.

E24.9.5 Refer to Plant Specification List on the Drawings and the Drawings for species, quantities, size and quality of plant materials.

E24.10 Water

E24.10.1 Water free of impurities that would hinder plant growth. The Contractor shall provide water, so that all costs to provide water for the watering operation and all associated costs shall be borne by the Contractor. These costs may include hydrant permit and meter rental fees.

E24.10.2 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs associated with obtaining water in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.

E24.11 Planting Medium: backfill with planting medium as specified in Planting Medium Specification.

E24.12 Stakes: 76mm dia. x 2440mm ht. wooden stakes

E24.13 Heavy Duty Baler Twine: polypropylene baler twine, UV protected.

E24.14 Tree Tie: biodegradable or polyethylene fabric strapping min. 38mm wide.

E24.15 Guying Wire: 9 gauge, flexible, non-corrosive strand wire.

E24.16 Wire Tightener: PG wire tightener.

E24.17 Clamps: U- bolt: galvanized, 12mm (1/2") $\varnothing$, c/w curved retaining bar and hex nuts.

E24.18 Anchor: Drive-in Type: 12mm (1/2") $\varnothing$ x 300mm (12") long, aluminum.

E24.19 Tree Protection: plastic, 13 mm $\varnothing$, nylon reinforced garden hose over guy wire.

E24.20 Fertilizer: synthetic start-up slow release fertilizer with a N-P-K analysis of 12-36-15 ratio at a rate of 4 kg per 100 m² which is 8 pounds per 100 sq ft.

E24.21 Wood mulch for wood mulch pathway to SCD-649.

E24.22 Pre-Planting Preparation

E24.22.1 Obtain approval from Contract Administrator of finish grading, and planting medium installation prior to commencing Work in this section.

E24.22.2 Ensure plant material is acceptable to the Contract Administrator.

E24.22.3 Remove damaged roots and branches from plant material with sharp clean equipment treating wounds as necessary to maintain plant health.

E24.22.4 Apply anti-desiccant to deciduous trees in leaf in accordance with manufacturer's instructions.

E24.23 Plant Material Layout

E24.23.1 Prepare planting areas. Refer to Planting Medium Specification

E24.23.2 For individual trees:

- (a) Stake out locations of all trees and obtain approval from Contract Administrator prior to excavating tree pits.
- (b) Excavate tree pits to depths and widths indicated on the Drawings.
- (c) Remove rocks, roots, debris and toxic material from the tree pit.

E24.23.3 For Shrubs and Perennials:

- (a) Prepare planting beds. Refer to Planting Medium Specification.
- (b) Lay out plants as indicated on the Drawings and ensure spacing as specified.
- (c) Obtain Contract Administrator approval of plant layouts and make any necessary adjustments on Site.

E24.23.4 Remove water that has entered the excavated tree pit prior to planting. Notify Contract Administrator if water source is groundwater.

E24.24 Planting

E24.24.1 For jute burlap rootballs, cut away top one third of wrapping and wire basket without damaging rootball. Do not pull burlap or rope from under rootball.

E24.24.2 For container stock or rootballs in non-degradable wrapping, remove entire container or wrapping without damaging rootball. Loosen rootball to encourage bonding with planting medium and subgrade.

E24.24.3 Plant vertically in locations as indicated. Orient plant material to give best appearance in relation to structure, roads and walks.

E24.24.4 Set plants and trees at elevations indicated on the drawings with no more than 50mm of soil above the root flair. Review with City Forestry representative and Contract Administrator when trees are on site, prior to installation.

E24.24.5 For Trees and Shrubs:

- (a) Backfill soil in 150 mm (6") lifts. Tamp each lift to eliminate air pockets. When two thirds of depth of planting pit has been backfilled, fill remaining space with water. After water has penetrated into soil, backfill to finish grade.
- (b) Form watering saucer as indicated on the Drawings.

E24.24.6 For Perennials:

- (a) backfill soil evenly to finished grade and tamp to eliminate air pockets.

E24.24.7 Water plant material thoroughly. Report extreme ponding in planters indicative of malfunctioning drains to the Contract Administrator immediately.

E24.24.8 After soil settlement has occurred, fill with soil to finish grade.

E24.24.9 Dispose of burlap, wire and container material off Site.

E24.25 Tree Supports

E24.25.1 Install tree supports as indicated on the Drawings taking care not to damage or puncture underground utilities.

E24.25.2 Use double stake tree support for deciduous trees:

- (a) Place first stake on prevailing wind side of tree trunk.
- (b) Drive stakes minimum 150mm into undisturbed soil beneath bottom of root ball. Ensure stakes are secure, vertical and unsplit.
- (c) Install tree tie 1200mm above grade.

E24.26 Pruning

- E24.26.1 Undertake corrective pruning after planting to eliminate torn and broken branches. Do not damage lead branches or remove smaller twigs along main branches. Do not prune to compensate for root loss.

E24.27 Mulching

- E24.27.1 Obtain approval of planting placement from Contract Administrator before mulching material is applied.
- E24.27.2 Ensure soil settlement has been corrected prior to mulching.
- E24.27.3 Spread wood chip mulch as indicated on the Drawings and to SCD-649.

E24.28 Maintenance

- E24.28.1 Maintain plant material from date of planting to the end of the two (2) year warranty period. Refer to Landscape Maintenance Specification.
- E24.28.2 Maintain mulch elevations until end of warranty. Top up mulch as required to elevations indicated on the drawings through the two (2) year warranty period.

E24.29 Measurement and Payment

- E24.29.1 The supply and installation of trees, shrubs and perennials shall be measured on a Unit Each basis and paid for at the Unit Each Price per unit for the items of Work listed below. The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.
- E24.29.2 Items of Work:
- (a) Deciduous trees
- E24.29.3 Wood mulch shall be measured on a Square Meter basis and paid for at the Square Meter Price for "Wood Mulch Pathway". The price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E25. TREES AND SHRUBS MAINTENANCE

E25.1 Description

- E25.1.1 Provide all labour, materials, methods, equipment and accessories for the maintenance and warranty of all plant material following acceptance, for a period of two (2) years.

E25.1.2 In general, the Work shall include:

- (a) Fertilizing
- (b) Watering
- (c) Weed Control
- (d) Pest and Disease Control
- (e) Winter Preparation

- E25.1.3 Maintenance shall be performed on a bi-weekly basis at a minimum.

E25.2 Maintenance and Warranty Period

- E25.2.1 Thirty (30) days after the planting installation has been completed, the Contract Administrator shall perform an inspection of the plant material to determine if the plant material is acceptable to start warranty.
- E25.2.2 The maintenance and warranty period shall begin following acceptance of plant material by Contract Administrator and shall be for a period of two (2) years.

E25.3 Submittals

E25.3.1 Submit maintenance log to Contract Administrator indicating date, times, employee, start time, stop time and maintenance activities.

E25.3.2 Payment will not be processed without receipt of maintenance logs.

E25.4 Materials and Equipment

E25.4.1 Materials shall conform to the requirements of related Specification sections.

E25.4.2 Provide all equipment to properly execute Work. Maintain such equipment in a workable, safe condition while in use during this project.

E25.4.3 Contract Administrator shall review equipment to be used to execute Work prior to execution.

E25.5 Method

E25.5.1 General

- (a) Provide watering service within 24 hours, weeding services within 48 hours of the request by the Contract Administrator. Monitor the Site and advise the Contract Administrator of conditions that might void the Contractor's warranty responsibilities.
- (b) Provide maintenance schedule to Contract Administrator prior for the two (2) year maintenance period.
- (c) Contractor shall notify Contract Administrator of the exact time Contractor proposes to commence each application.
- (d) Schedule operations in accordance with growth, health, weather conditions, and use of Site.
- (e) Perform each operation continuously and completely within a reasonable time period.
- (f) Store equipment and materials off Site.
- (g) Collect and dispose of debris or excess material on the day the maintenance is undertaken.

E25.5.2 Maintenance of Trees and Shrubs

- (a) Fertilizing: Apply fertilizer only at frequency, ratio and rates as recommended by manufacturer. Water immediately after fertilizing. Apply fertilizer no later than May 30th of each maintenance year.
- (b) Watering: Apply water as required to supplement rainfall and to maintain optimum growing conditions. In general, water once a week to achieve rates as indicated. Allow soil to adequately dry between watering to prevent over saturation without creating water stress. Subject to the above-noted requirements, the Contractor must water at least once a week between May 1st and October 15th inclusive. A complete record is to be kept of each series of waterings for all planted trees noting location and date of watering. This record is to be given to the Contract Administrator when requested. Apply 40 litres of water per 25 mm calliper per application using a deep root feeder or low pressure open flow nozzle and hose. The water stream must not gouge the soil.
- (c) Weed Control: Inspect and undertake weed control weekly during the first year of maintenance and monthly during the second year. By hand, remove all weeds with their roots from tree pits and tree beds and dispose of off Site. When weeding operation is complete, replace and rake displaced soil to its original condition.
- (d) Pests and Diseases: Obtain written approval of Contract Administrator prior to using any pesticide. Control pests and disease through pruning or application of pesticides. Use species specific pesticides where possible. Use only pesticides of low mammalian toxicity. Strictly follow manufacturer's written instructions.
- (e) Pruning: The Contractor shall provide a person with a Manitoba Arborists Certificate for each work crew or Work Site. Prune as required to remove dead, broken or damaged limbs. Prune back to healthy growth while maintaining balanced crown

shape. Employ clean sharp tools. Make cuts smooth and flush with outer edge of branch collar near the main stem or branch. Cuts must be smooth and sloping to prevent accumulation of water on cut. Do not leave little stumps ("horns") on trunks or main branches. Prune according to accepted horticultural practices as outline in "The Pruning Manual", Publication No. 1505-1977 by Agriculture Canada.

- (f) Winter Preparation: Ensure adequate moisture in tree root zones prior to freeze-up.

E25.6 Measurement and Payment

E25.6.1 Tree and shrub maintenance shall be paid for on a Lump Sum basis for the items of work listed below and shall be payment in full for supplying all material and performing all operations herein described and all other items incidental to the Work included in this specification and accepted by the Contract Administrator.

E25.6.2 Items of Work:

- (a) Year one trees and shrubs maintenance
- (b) Year two trees and shrubs maintenance