



THE CITY OF WINNIPEG

TENDER

TENDER NO. 180-2021

THE OAKS FOREST SEATING AREA AND PLAY SPOT

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 THE OAKS FOREST SEATING AREA AND PLAY SPOT

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, April 16, 2021.

B2.2 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

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

B4. ENQUIRIES

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

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 he/she has 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 D4.

B7. SUBSTITUTES

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

- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.
- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with 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 his/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Bid/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 his/her own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B9.4.1 The name and official capacity of all individuals signing Form A: Bid/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 D24. Any such costs shall be determined in accordance with D24.

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 will prevail over the Total Bid Price entered in MERX.

B11. DISCLOSURE

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

B11.2 The Persons are:

- (a) n/a

B12. CONFLICT OF INTEREST AND GOOD FAITH

B12.1 Further to C3.2, 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 its participation in the Tender process or the Work; or
 - (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Tender process) of strategic and/or material relevance to the Tender process or to the Work that is not available to other bidders and that could or would be seen to give that Bidder an unfair competitive advantage.
- B12.3 In connection with its Bid, each entity identified in B12.2 shall:
- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
 - (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Tender process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
 - (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.
- B12.4 Without limiting B12.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.
- B12.5 Without limiting B12.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of its employees proposed for the Work;
 - (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 its sole discretion, determines cannot be avoided or mitigated;
 - (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B12.4 to avoid or mitigate a Conflict of Interest; and
 - (d) disqualify a Bidder if the Bidder, or one of its employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.

B12.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B13. QUALIFICATION

B13.1 The Bidder shall:

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

B13.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

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 on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).

B13.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B13.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B14. 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 his/her 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 there from (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 his/her Bid or in other information required to be submitted, that he/she is 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 adjusted, if necessary, as follows:
- (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price; or

- (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting item(s) 3, 19, and 20 in the order listed, until a Total Bid Price within the budgetary provision is achieved.

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

B18. AWARD OF CONTRACT

- B18.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B18.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be qualified, and the Bids are determined to be responsive.
 - B18.2.1 Without limiting the generality of B18.2, the City will have no obligation to award a Contract where:
 - (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B18.3 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 D24 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.
- B18.6 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2020-01-31) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Tender to a section, clause or subclause with the prefix “C” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of:

- (a) Excavation;
- (b) Earthwork and grading;
- (c) CIP concrete work;
- (d) Granular pavement;
- (e) Timber bridge and granular pad;
- (f) Natural play elements;
- (g) Sand safety surfacing;
- (h) Planting area & planting bed preparation;
- (i) Tree, shrub, perennial planting;
- (j) Site furnishings;
- (k) Soil and sod; and
- (l) Site restoration.

D2.2 The funds available for this Contract are \$97,000.00.

D3. DEFINITIONS

D3.1 When used in this Tender:

- (a) "**CW**" means current City of Winnipeg Standard Construction Specification;;
- (b) "**SD**" means current City of Winnipeg Standard Construction Detail; and
- (c) "**SCD**" means current City of Winnipeg Parks Planning Standard Construction Detail

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is:

L. Lagman
Landscape Designer
Telephone No. 204 451-4185
Email Address llagman@winnipeg.ca

D4.2 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.

D5. CONTRACTOR'S SUPERVISOR

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

D6. NOTICES

- D6.1 Except as provided for in C22.4, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid/Proposal.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator identified in D4.
- D6.3 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:
- The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

- D7.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D8. SAFE WORK PLAN

- D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.
- D8.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgmt/Safety/default.stm>
- D8.3 Notwithstanding B13.4 at any time during the term of the Contract, the City may, at its 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.

D9. INSURANCE

- D9.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;

- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) all risks installation floater, carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.

D9.2 Deductibles shall be borne by the Contractor.

D9.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.

D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D10. CONTRACT SECURITY

D10.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), 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 form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; and
- (b) a labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H2: Labour and Material Payment Bond), in an amount equal to fifty percent (50%) of the Contract Price; or
- (c) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H3: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (d) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D10.1.1 Where the 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 D10.1.1(b).

D10.1.2 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 its discretion, exercised reasonably, allows.

- D10.1.3 Digital bonds passing the verification process will be treated as original and authentic.
- D10.1.4 Where the contract security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as contract security.
- D10.2 The Contractor shall provide the City Solicitor with the required contract security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order or an award letter and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.
- D10.3 Where the Contract Security is provided in accordance with D10.1(a) and D10.1(b), 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 D10.1(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.

D11. SUBCONTRACTOR LIST

- D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

D12. DETAILED WORK SCHEDULE

- D12.1 The Contractor shall provide the Contract Administrator with a detailed work schedule (Form L: Detailed Work Schedule) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.

SCHEDULE OF WORK

D13. COMMENCEMENT

- D13.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D13.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D7;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the contract security specified in D10;
 - (vi) the Subcontractor list specified in D11; and
 - (vii) the detailed work schedule specified in D12.
 - (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.
- D13.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order.

D14. SUBSTANTIAL PERFORMANCE

- D14.1 The Contractor shall achieve Substantial Performance within fifteen (15) consecutive Working Days of the commencement of the Work as specified in D13.
- 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.

D15. TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance within twenty (20) consecutive Working Days of the commencement of the Work as specified in D13.
- 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 Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City five hundred dollars (\$500.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D17. COVID-19 SCHEDULE DELAYS

- D17.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Work shall be performed by the Contractor with due consideration to the health and safety of workers and the public, directives from health authorities and various levels of government and in close consultation with the Contract Administrator.
- D17.2 If the Contractor is delayed in the performance of the Work by reason of the COVID-19 pandemic, the Work schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D17.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether COVID-19 will affect the start date. The Contractor shall provide sufficient evidence that the delay is directly related to COVID-19, including but not limited to evidence related to availability of staff, availability of Material or work by others.

- D17.4 For any delay related to COVID-19 and identified after Work has commenced, the Contractor shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D17.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D17.5 The Work schedule, including the durations identified in D14 to D15 where applicable, will be adjusted to reflect delays accepted by the Contract Administrator. No additional payment will be made for adjustment of schedules except where seasonal work, not previously identified in the Contract, is carried over to the following construction season.
- D17.6 Where Work not previously identified is being carried over solely as a result of delays related to COVID-19, as confirmed by the Contract Administrator, the cost of temporary works to maintain the Work in a safe manner until Work recommences, will be considered by the Contract Administrator. Where the Work is carried over only partially due to COVID-19, a partial consideration of the cost of temporary works will be considered by the Contract Administrator.
- D17.7 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Contract Administrator, shall be documented in accordance with C7.

D18. SCHEDULED MAINTENANCE

- D18.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Sod as specified in E22;
 - (b) Trees as specified in E20;
 - (c) Shrubs as specified in E20; and
 - (d) Perennials Grasses as specified in E20.
- D18.2 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

D19. JOB MEETINGS

- D19.1 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.
- D19.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

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

- D20.1 Further to C6.26, 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).

D21. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D21.1 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 its sole discretion and acting reasonably, require updated proof of compliance, as set out in B13.4.

MEASUREMENT AND PAYMENT

D22. PAYMENT

D22.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D23. WARRANTY

D23.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year 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.

D23.1.1 For the purpose of contract security, the warranty period shall be one (1) year.

D23.2 Notwithstanding C13.2, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.

D23.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

THIRD PARTY AGREEMENTS

D24. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

D24.1 In the event that funding for the Work of the Contract is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, the following terms and conditions shall apply, as required by the applicable funding agreements.

D24.2 **NOTE: No funding from the Government of Manitoba or the Government of Canada is anticipated for the project at this time.**

D24.3 Further to D24.1, in the event that the obligations in D24 apply, actual costs legitimately incurred by the Contractor as a direct result of these obligations ("Funding Costs") shall be determined by the actual cost to the Contractor and not by the valuation method(s) outlined in C7.4. In all other respects Funding Costs will be processed in accordance with Changes in Work under C7.

D24.4 For the purposes of D24:

- (a) **"Government of Canada"** includes the authorized officials, auditors, and representatives of the Government of Canada; and
- (b) **"Government of Manitoba"** includes the authorized officials, auditors, and representatives of the Government of Manitoba.

D24.5 Modified Insurance Requirements

- D24.5.1 If not already required under the insurance requirements identified in D9, the Contractor will be required to provide wrap-up liability insurance in an amount of no less than two million dollars (\$2,000,000) inclusive per occurrence. Such policy will be written in the joint names of the City, Contractor, Consultants and all sub-contractors and sub-consultants and include twelve (12) months completed operations. The Government of Manitoba and its Ministers, officers, employees, and agents shall be added as additional insureds.
- D24.5.2 If not already required under the insurance requirements identified in D9, the Contractor will be required to provide builders' risk insurance (including boiler and machinery insurance, as applicable) providing all risks coverage at full replacement cost, or such lower level of insurance that the City may identify on a case-by-case basis, such as an installation floater.
- D24.5.3 The Contractor shall obtain and maintain third party liability insurance with minimum coverage of two million dollars (\$2,000,000.00) per occurrence on all licensed vehicles operated at the Site. In the event that this requirement conflicts with another licensed vehicle insurance requirement in this Contract, then the requirement that provides the higher level of insurance shall apply.
- D24.5.4 Further to D9.3, insurers shall provide satisfactory Certificates of Insurance to the Government of Manitoba prior to commencement of Work as written evidence of the insurance required. The Certificates of Insurance must provide for a minimum of thirty (30) days' prior written notice to the Government of Manitoba in case of insurance cancellation.
- D24.5.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D24.6 Indemnification By Contractor
- D24.6.1 In addition to the indemnity obligations outlined in C17 of the General Conditions for Construction, the Contractor agrees to indemnify and save harmless the Government of Canada and the Government of Manitoba and each of their respective Ministers, officers, servants, employees, and agents from and against all claims and demands, losses, costs, damages, actions, suit or other proceedings brought or pursued in any manner in respect of any matter caused by the Contractor or arising from this Contract or the Work, or from the goods or services provided or required to be provided by the Contractor, except those resulting from the negligence of any of the Government of Canada's or the Government of Manitoba's Ministers, officers, servants, employees, or agents, as the case may be.
- D24.7 Records Retention and Audits
- D24.7.1 The Contractor shall maintain and preserve accurate and complete records in respect of this Contract and the Work, including all accounting records, financial documents, copies of contracts with other parties and other records relating to this Contract and the Work during the term of the Contract and for at least six (6) years after Total Performance. Those records bearing original signatures or professional seals or stamps must be preserved in paper form; other records may be retained in electronic form.
- D24.7.2 In addition to the record keeping and inspection obligations outlined in C6 of the General Conditions for Construction, the Contractor shall keep available for inspection and audit at all reasonable times while this Contract is in effect and until at least six (6) years after Total Performance, all records, documents, and contracts referred to in D24.7.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.
- D24.8 Other Obligations

- D24.8.1 The Contractor consents to the City providing a copy of the Contract Documents to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D24.8.2 If the Lobbyists Registration Act (Manitoba) applies to the Contractor, the Contractor represents and warrants that it has filed a return and is registered and in full compliance with the obligations of that Act, and covenants that it will continue to comply for the duration of this Contract.
- D24.8.3 The Contractor shall comply with all applicable legislation and standards, whether federal, provincial, or municipal, including (without limitation) labour, environmental, and human rights laws, in the course of providing the Work.
- D24.8.4 The Contractor shall properly account for the Work provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.
- D24.8.5 The Contractor represents and warrants that no current or former public servant or public office holder, to whom the Value and Ethics Code for the Public Sector, the Policy on Conflict of Interest and Post Employment, or the Conflict of Interest Act applies, shall derive direct benefit from this Contract, including any employment, payments, or gifts, unless the provision or receipt of such benefits is in compliance with such codes and the legislation.
- D24.8.6 The Contractor represents and warrants that no member of the House of Commons or of the Senate of Canada or of the Legislative Assembly of Manitoba is a shareholder, director or officer of the Contractor or of a Subcontractor, and that no such member is entitled to any benefits arising from this Contract or from a contract with the Contractor or a Subcontractor concerning the Work.

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____.)

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

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

TENDER NO. 180-2021

THE OAKS FOREST SEATING AREA AND PLAY SPOT

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

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

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

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

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

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

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

FORM H2: LABOUR AND MATERIAL PAYMENT BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Principal"), and

his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), for the use and benefit of claimants as hereinbelow defined, in the amount of

_____ dollars (\$_____)

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

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

TENDER NO. 180-2021

THE OAKS FOREST SEATING AREA AND PLAY SPOT

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

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

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

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

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

IN TESTIMONY WHEREOF, the Principal has hereunto set its hand affixed its seal, and the Surety has caused these presents to be sealed and with its corporate seal duly attested by the authorized signature of its signing authority this

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

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

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

(Date)

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

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

Except where they may conflict with the terms and conditions contained in this Letter of Credit, the International Standby Practices 1998 shall apply to this Letter of Credit. This Letter of Credit shall also be governed by and construed in accordance with the laws of the Province of Manitoba and of Canada as applicable therein, except to the extent that such laws are inconsistent with the International Standby Practices 1998. This Letter of Credit is subject to the exclusive jurisdiction of the courts in the Province of Manitoba and all courts competent to hear appeals therefrom.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the 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>Drawing No.</u>	<u>Drawing Name/Title</u>
O.20-A1-R0	Existing Conditions & Removals
O.20-A2-R0	Materials Plan
O.20-A3-R0	Layout Origin Plan
O.20-A4-R0	Plaza & Planting Bed Layout
O.20-A5-R0	Site Furnishings & Sidewalk Layout Plans
O.20-A6-R0	Natural Elements Layout Plan
O.20-A7-R0	Berm Layout Plan
O.20-A8-R0	Grading Schematic
O.20-A9-R0	CIP Concrete Details & Plaza Section
O.20-A10-R0	Natural Element Details
O.20-A11-R0	Timber Bridge Details
O.20-A12-R0	Planting Plan
SCD-119-R4	Waste Receptacle Side Opening Metal Slat Type
SCD-153-R3	English Park sign w/ Address
SCD-501-R1	Preparation of Planting Area
SCD-517-R0	Standard Tree Detail for Tree Planting
SCD-646-R1	Parkway Path Crushed Limestone

E2. EXISTING SERVICES AND UTILITIES

- E2.1 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. ACCESS TO SITE

- E3.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his/her own expense and approved by the Contract Administrator.

E3.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he/she shall be responsible for all damage resulting from his/her Work on private property.

E4. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

E4.1 Further to C6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.

E4.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.

E4.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.

E4.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.

E4.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.

E4.6 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 Labour Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

E5. DAMAGE TO EXISTING STRUCTURES, TREES AND PROPERTY

E5.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, 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.

E5.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area:

- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2 metres of trees.
- (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2400 wood planks, or suitable protection as approved by the Contract Administrator.
- (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
- (d) Operation of equipment within the 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.

E5.3 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.

E5.4 No separate measurement or payment will be made for the protection of trees.

E6. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

E6.1 Further to CW 1130, the Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while he/she is working near them. Any damage caused by the negligence of the Contractor or his/her Sub-Contractors to the adjacent Works or properties, shall be promptly repaired by him at his/her own expense, to the satisfaction of the Contract Administrator.

E6.2 Ambulance/ Emergency vehicle access must be maintained at all times.

E7. PROTECTION OF THE SURVEY INFRASTRUCTURE

E7.1 Notwithstanding clause 4 "Persons and municipalities to protect Outline Monuments"; under [The Surveys Act](#), of Manitoba, the Contractor shall be responsible to protect the Survey Infrastructure from damage as a result of the Work.

E7.2 Further to C6.26 (g), at least 72 hours prior to the commencement of the On-Site Work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 204-918-1360 (8:00 am to 4:00 pm Monday to Friday, excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.

E7.3 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours' notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments. Survey monuments and geodetic control monuments at or adjacent to the Site, not in the line of the proposed construction that are damaged or disturbed by the Contractor shall be replaced or relocated by the City or its agent and all associated costs shall be paid for by the Contractor.

E7.4 An approximate estimate of the cost to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contractors shall ensure their landscaping and other subcontractors are aware of this clearance procedure and the potential restoration costs. Where possible, amounts owed to the City in accordance with the above will be deducted from payments to be made by the City to the Contractor.

E8. SITE ENCLOSURES

E8.1 Temporary Site enclosures, as determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.

E8.2 Site enclosures shall be considered incidental to the Contract Work.

E9. EXCAVATION, EARTHWORK AND GRADING

E9.1 General Description

E9.1.1 This Specification shall amend and supplement CW 3110 and CW 3170. It shall cover the excavation and legal disposal of existing earthen materials, earthwork and site grading.

(a) If required by the Contract Administrator, layout and grades shall be established by a professional land surveyor.

E9.1.2 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.

(a) Work shall include but not be limited to the following:

(i) Excavate, add clean fill if necessary, and grade to the limits shown on Drawings to the depths necessary to achieve finish grade for

- ◆ CIP concrete header;
- ◆ CIP concrete curb;
- ◆ CIP concrete pavement (sidewalk and pads);
- ◆ Granular pavement & pad;
- ◆ Planting bed;
- ◆ Natural Elements;
- ◆ Scarify grade as per Drawings prior to berm construction & tree plantings; and
- ◆ Sod repair.

(ii) Contractor shall excavate no greater than a ± 25 mm variance throughout.

(iii) All extraneous materials are to be removed from the Site and disposed of in a safe and legal manner.

E9.1.3 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.

E9.2 Construction Methods

E9.2.1 Excavation

- (a) Stockpile suitable, approved material on Site for reuse (clean topsoil, clean earth 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 of on Site at a location designated by the Contract Administrator.
- (c) Contractor must coordinate with the Contract Administrator to ensure all removals have occurred.
- (d) Excavate to the limits shown and as necessary to achieve finish 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 (asphalt, concrete, stone chip and limestone paving), and 90% Standard Proctor Density in all other areas disturbed under this Contract unless otherwise indicated. Lifts shall not exceed a compacted thickness of 150 mm.
- (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.

E9.2.2 Grading

- (a) Site grading shall be as 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 as 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 300 mm, the Contractor shall scarify the existing ground to a minimum depth of 50 mm prior to placement of any fill.
- (g) In areas where new grades are greater than 75 mm than existing grades, 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.

E9.2.3 Finish Grading

- (a) Following earthmoving, rough grading and compaction, the Work areas shall be finish graded to provide a maximum deviation of 50 mm 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 50 mm.
- (b) When grading for an athletic field or swale, the grading work must be undertaken using earthmoving equipment that is guided by laser or GPS controlled data. Visual grade stakes shall also be installed to supplement the electronic data, unless otherwise agreed to by Contract Administrator.
- (c) All surplus fill material shall be removed and legally disposed off-site.
- (d) Do not disturb adjacent items designated to remain in place.

E9.3 Method of Measurement and Basis of Payment

E9.3.1 Method of Measurement shall be as follows:

- (a) Excavation, Earthwork, and Grading shall be measured on a square meter for:
 - (i) "Rough grading" on Form B: Prices
- (b) Excavation, Earthwork, and Grading shall be measured on a cubic metre basis for:
 - (i) "Berm earthwork, grading & compaction from salvaged excavation material (approx. qty is pre-compaction)" on Form B: Prices
- (c) No separate measurement shall be made for:
 - (i) Import of clean fill to achieve rough grading and earthwork.
 - (ii) Excavation and grading of CIP concrete work, granular pavement, planting beds, scarification, or sod repair as these item is incidental to the Work herein.
- (d) If required by the Contract Administrator, no separate measurement will be made for retaining services relating to survey of layout and establishing grades as these items are incidental to the Work herein.

E9.3.2 Basis of Payment shall be as follows:

- (a) Excavation and Grading will be paid for at the Contract Unit Prices on the Form B: Prices. The amount to be paid for shall be the total number of units, measured as specified herein, which price shall be for full payment 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.
- (b) No additional payment shall be made for:
 - (i) Import of clean fill to achieve rough grading and earthwork.

- (ii) Excavation and grading of CIP concrete work, granular pavement, planting beds, scarification, or sod repair as these item is incidental to the Work herein.
- (c) If required by the Contract Administrator, no additional payment will be made for retaining services relating to survey of layout and establishing grades as these items are incidental to the Work herein.

E10. CAST-IN-PLACE CONCRETE FOUNDATIONS

E10.1 General Description

E10.1.1 This Specification shall supplement CW 2160 and cover the supply and installation of cast-in-place concrete foundations for Site Furnishings, as per the Drawings.

- (a) All underground cast-in-place concrete foundations for Site Furnishings are to be set in concrete f piles per CW 2160 to ensure stability and prevent frost heaving.

E10.1.2 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.

E10.2 General Instructions

E10.2.1 Quality Control

- (a) Testing and Approval of Materials
 - (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.

E10.3 Materials

- (a) Concrete Design Mix per CW 2160, Section 2.16, Table CW2160.1, Type A.

E10.4 Construction Methods

E10.4.1 Construction Methods as per CW 2160 and as indicated on the Drawings.

- (a) If concrete testing is required, do not place concrete until material testing is performed and reviewed by Contract Administrator.
- (b) All concrete foundations for site furnishings as per the Drawings.
- (c) All posts and supports shall be centred in the concrete footing such that there is a complete collar of concrete around each post and support. Where posts are not perfectly centred, a minimum of 50 mm (2") concrete cover is required at any point around the post.

E10.4.2 Cold Weather Concreting

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

E10.5 Method of Measurement and Basis of Payment

E10.5.1 Method of Measurement shall be as follows:

- (a) No separate measurement for Cast-in-Place Concrete Foundations shall be made for Site Furnishings as this work is incidental to the Works therein.

E10.5.2 Basis of Payment shall be as follows:

- (a) No additional payment for Cast-in-Place Concrete Foundations shall be made for Site Furnishings as this work are incidental to the Works therein.

E11. **CAST-IN-PLACE CONCRETE HEADER, CURBS, AND SUPPORTS**

E11.1 General Description

E11.1.1 This Specification shall amend and supplement CW 3310 and SCD-643 and shall cover the supply and installation of poured in place concrete headers, curbs, and timber bridge supports as per the Drawings.

E11.1.2 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.

E11.2 General Instructions

E11.2.1 Quality Control

- (a) Testing and Approval of Materials
 - (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.

E11.3 Materials

E11.3.1 Concrete

- (a) Concrete shall be Type 1 per CW 3310 and shall adhere to the dimensions on the Drawings.

E11.3.2 Granular Base Course

- (a) Granular base shall be per CW 3110 and the Drawings.
- (b) Recycled concrete will not be accepted.

E11.3.3 Reinforcing steel shall be per CW 3310 and the Drawings.

E11.3.4 Formwork per CW 3310.

E11.4 Construction Methods

E11.4.1 Layout is to be established on Site, after excavation and grading operations are reviewed by Contract Administrator prior to formwork being completed.

E11.4.2 Granular base, formwork and reinforcing steel are to be reviewed on Site by the Contract Administrator prior to pouring of concrete.

- (a) Granular base course construction methods per CW 3110.
- (b) Formwork and reinforcing steel construction methods per CW 3310.

E11.4.3 Concrete construction methods per CW 3310.

- (a) Concrete is to be trowel finish.
- (b) All exposed edges are to be chamfered as per the Drawings.
 - (i) Front, top, and back of curb are to be finished.
- (c) Concrete headers and curb shall have saw cut control joints at 1.5 m intervals.

E11.4.4 Cold Weather Concreting

- (a) Cold weather concreting shall be as per CW 3310 and CSA A23.1.
 - (i) All material and equipment needed for adequate protection and curing shall be on hand and ready to use before concrete placement is started.

- (ii) Adequate protection of concrete shall be provided that will maintain the concrete temperature at a minimum of 10° C for the duration of the required curing period as defined by CW 3310 and CSA A23.1.
- (iii) Before concrete is placed all ice, snow, and frost shall be removed from formwork and all surfaces against which concrete will be placed.
 - ◆ Temperatures of adjacent surfaces shall be raised to and maintained at 5° C minimum, prior to and during concreting.
 - ◆ Calcium chloride or other de-icing salts shall not be used as a de-icing agent in the forms.
- (iv) Heating equipment and enclosures shall be per CW 3310 and CSA A23.1.

E11.5 Method of Measurement and Basis of Payment

E11.5.1 Method of Measurement shall be as follows:

- (a) Cast-in-Place Concrete Header, Curbs and Supports shall be measured on a linear metre basis for:
 - (i) "150 mm CIP conc. header" on Form B: Prices.
 - (ii) "200 mm CIP conc. curb" on Form B: Prices.
- (b) No separate measurement shall be made for Concrete Supports, as this work is incidental to E14.

E11.6 Basis of Payment Shall be as follows:

- E11.6.1 Cast-in-Place Concrete Headers and Curbs will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on the Bid Form. This price shall be full payment 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.
 - (a) No additional payment shall be made for Concrete Supports, as this work is incidental to E14.

E12. CAST-IN-PLACE CONCRETE PAVEMENT

E12.1 General Description

E12.1.1 This Specification shall supplement CW 3310, CW 3325 and shall cover the supply and installation of concrete pads and sidewalk.

E12.1.2 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.

E12.2 General Instructions

E12.2.1 Quality Control

- (a) Testing and Approval of Materials
 - (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.

E12.3 Materials

E12.3.1 100 mm (4") non-reinforced Concrete Pavement materials per CW 3325, the Drawings, and all other pertinent City of Winnipeg Standard Construction Specifications and the Drawings.

- (a) The use of recycled concrete as a base material will not be permitted.

E12.4 Construction Methods

E12.4.1 100 mm (4") non-reinforced Concrete Pavement construction methods per CW 3325, the Drawings, and all other pertinent City of Winnipeg Standard Construction Specification.

E12.4.2 Cold Weather Concreting

- (a) Cold weather concreting shall be as per CW 3310 and CSA A23.1.
 - (i) All material and equipment needed for adequate protection and curing shall be on hand and ready to use before concrete placement is started.
 - (ii) Adequate protection of concrete shall be provided that will maintain the concrete temperature at a minimum of 10° C for the duration of the required curing period as defined by CW 3310 and CSA A23.1.
 - (iii) Before concrete is placed all ice, snow, and frost shall be removed from formwork and all surfaces against which concrete will be placed.
 - ◆ Temperatures of adjacent surfaces shall be raised to and maintained at 5° C minimum, prior to and during concreting.
 - ◆ Calcium chloride or other de-icing salts shall not be used as a de-icing agent in the forms.
 - (iv) Heating equipment and enclosures shall be per CW 3310 and CSA A23.1.

E12.5 Method of Measurement and Basis of Payment

E12.5.1 Cast-in Place Concrete Pavement will be measured on a square metre basis for:

- (a) "100 mm CIP conc. pad"; and
- (b) "100 mm CIP conc. sidewalk & curb cut" on the Bid Form.
- (c) No separate measurement shall be made for Cold Weather Precautions, including hoarding and heating, as this item is incidental to the Work herein.

E12.5.2 Basis of Payment shall be as follows:

- (a) Cast-in Place Concrete Pavement will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on the Bid Form. This price shall be full payment 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.
- (b) No additional shall be made for Cold Weather Precautions, including hoarding and heating, as this item is incidental to the Work herein.

E13. COMPACTED GRANULAR PAVEMENT

E13.1 General Description

E13.1.1 This Specification shall amend and supplement CW 3110 and SCD-646 and shall cover the supply and installation of compacted granular pavement and compacted granular pad, as per the Drawings.

E13.1.2 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.

E13.2 General Instructions

E13.2.1 Quality Control

- (a) Testing and Approval of Materials
 - (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.

E13.2.2 Submittals

- (a) Samples

- (i) Material samples may be required, at the discretion of the Contract Administrator, for materials supplied under this Specification.

E13.3 Excavation

E13.3.1 Description

- (a) This Specification shall be done in accordance with E9, CW 3110, and SCD-646 as indicated on the Drawings.
- (b) Excavation shall be understood to include all removal of existing inset material necessary to achieve finished grade and as indicated on the Drawings and in accordance with E9.
- (c) The Contractor shall survey and stake out the proposed granular pavement prior to the start of construction as shown on the construction drawings. Layout shall be checked and confirmed with Contract Administrator prior to construction.

E13.3.2 Construction Methods

- (a) Excavation shall be performed as per E9 and in accordance with CW 3110.
- (b) In locations where existing trees root systems intersect with the pavement area, excavation shall be done carefully so as not to damage or sever any roots of the trees.
- (c) If any pavement exists at the limits of the designated area of removal, these shall be saw cut for the full depth of the pavement prior to the demolition and removal operations. All costs in connection with saw cutting are incidental and shall be included in the unit price bid for excavation.
- (d) All excavated material shall be removed, hauled and disposed of off-site to the satisfaction of the Contract Administrator.

E13.4 Sub-Grade Compaction

E13.4.1 Description

- (a) Sub grade compaction shall be done in accordance with CW 3110.

E13.4.2 Construction Methods

- (a) Sub-grade compaction shall be in accordance with CW 3110.
- (b) Sub-grade shall be free of any fibrous organics, softened and disturbed soil. The prepared sub-grade shall be proof rolled with a heavy sheep's foot roller (minimum 25 passes) and inspected by the Contract Administrator to detect for any soft spots prior to the placement of overlying granular fills.

E13.5 Geotextile Fabric

E13.5.1 Description

- (a) Geotextile Fabric shall be in accordance with CW 3130.

E13.5.2 Materials

- (a) Geotextile materials shall be in accordance with CW 3130.
 - (i) The separation/ reinforcement geotextile fabric shall conform to the Products Approved as listed in the current City of Winnipeg Specification for Approved Products for Surface Works.

◆ <https://winnipeg.ca/matmgt/spec/>

E13.5.3 Construction Methods

- (a) Separation/reinforcement geotextile fabric shall per CW 3110.

E13.6 Crushed Limestone Materials

E13.6.1 Description

- (a) Crushed limestone base material shall be supplied and installed in accordance with CW 3110, the Drawings, and this specification.

E13.6.2 Materials

- (a) Base course shall be Granular C as per current CW 3110, the Drawings, and this Specification.
- (i) Notwithstanding current CW 3110 Section 1.2 Clause 1.2.7, Granular A, Granular B, and recycled aggregates or materials will not be accepted for Compacted Granular Pathways.
- (b) Topping Material shall be per the Drawings and this Specification.
- (i) Recycled aggregates or materials will not be accepted for Compacted Granular Pathways.

Table 1.0 Base Course & Topping Material Grading Requirements

CANADIAN METRIC SIEVE SIZE	Percent of Total Dry Weight Passing Each Sieve		
	6 mm (1.4") Topping Material	20 mm (3/4") Base Course	50 mm (2") Base Course
50 000	--	--	100%
25 000	--	--	--
20 000	--	100%	--
10 000	100%	--	--
5 000	65% - 100%	40% - 70%	25% - 60%
2 500	40% - 75%	25% - 60%	--
1 250	35% - 65%	--	--
630	19% - 36%	--	--
315	14% - 28%	8% - 25%	--
160	12% - 24%	--	--
80	10% - 25%	6% - 17%	4% - 15%

E13.7 Construction Methods

- E13.7.1 All limestone material shall be placed and compacted as specified to finished thickness as shown on the Drawings.

- E13.7.2 Base Course and Capping Course shall be compacted to a minimum of one hundred percent (100%) of Standard Proctor Density.

E13.8 Quality Control

E13.8.1 Materials and Work

- (a) Materials and Work may be subject to Quality Control Testing and Approval of Materials per the General Instructions Section of the Contract.

E13.9 Method of Measurement and Basis of Payment

- E13.9.1 Compacted Granular pavement shall be measured on a square metre basis for:

- (a) "Granular pavement" on Form B: Prices.

- E13.9.2 Basis of Payment shall be as follows:

- (a) Compacted Granular Pavement will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for excavation, subgrade compaction, supply

and installation of base course and top course, 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.

E14. TIMBER BRIDGE

E14.1 Description

E14.1.1 This Specification shall cover the supply and installation of a timber bridge, as shown on the Drawings.

E14.1.2 The Work to be done by the Contractor under this specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to satisfactory performance and completion of all Work as shown on the drawings as specified herein.

E14.2 General Instructions

E14.2.1 Quality Control

(a) Testing and Approval of Materials

- (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.

E14.2.2 Submittals

(a) Samples

- (i) Material samples may be required, at the discretion of the Contract Administrator, for materials supplied under this Specification.

E14.3 Materials

E14.3.1 Compacted granular pad per E13 and the Drawings.

E14.3.2 Cast-in-place concrete bridge supports shall be per E11 and the Drawings.

E14.3.3 Pressure treated timber bridge members

(a) Pressure Treated (ACQ) Timbers and Dimensional Lumber

- (i) As per the Drawings and to CSA 080, ACQ-C treatment, No. 2 or better Pine. All wood to be free of defects, any warped, checked or bent materials will be rejected. Colour: Brown.
- (ii) Preservative to be suitable for pressure treated (ACQ) brown timber in above ground outdoor applications.
- ◆ Colour: Brown to match pressure treated (ACQ) timbers

E14.3.4 Composite timber bridge members

(a) To be TREX material, as per the Drawings.

- (i) Colour: brown to match pressure treated (ACQ) timbers.
- (ii) Confirm colour with Contract Administer prior to construction.

E14.3.5 Hardware

(a) For fastening pressure treated (ACQ) timbers to pressure treated (ACQ) timbers

- (i) Hardware to be suitable for exterior work and acceptable for ACQ treated lumber.
- (ii) All hardware to be hot dipped galvanized, size and type to suit application, unless otherwise noted on Drawings.

(b) For fastening pressure treated (ACQ) timbers to composite timbers

- (i) Hardware screws to be rated for composite to ACQ fastening and sized to suit.

(c) Other hardware

- (i) All other hardware to be hot dipped galvanized, size and type to suit application, unless otherwise noted on Drawings.

E14.4 Construction Methods

E14.4.1 Layout is to be established on Site, after excavation and grading operations and reviewed by Contract Administrator prior to construction.

E14.4.2 Compacted granular pad per E13 and the Drawings.

E14.4.3 Cast-in-place concrete bridge supports shall be per E11 and the Drawings.

E14.4.4 Timber Bridge

- (a) All work to be located and installed in accordance with the Drawings.
 - (i) Contractor shall confirm layout with Contract Administrator prior to construction.
 - (ii) Contractor shall verify underground utility locations prior to construction and report any discrepancies to the Contract Administrator immediately.
 - (iii) Build work level, plumb, square, true, and accurate to required size, height, length, and depth, with joints closely fitted and properly secured.
 - (iv) All wood cuts shall be sanded to remove any burrs.
 - (v) Use timbers of the longest possible length to minimize joints.
 - (vi) Treat in field, cuts and damages to surface of pressure treated timbers.
 - ◆ Ensure damaged areas such as abrasions nail and spike holes, are thoroughly saturated with field treatment solution.
 - ◆ Apply preservative by dipping, or by brush, to completely saturate and maintain wet film on surface for a minimum of three (3) minutes to soak into lumber.
 - ◆ Re-treat surfaces exposed by cutting, trimming, or boring with liberal brush application of preservative before installation.
 - (vii) Where possible orientate cut ends towards grade.
- (b) Predrill all screw holds.
- (c) Do all fastening neatly, evenly, and thoroughly.

E14.5 Method of Measurement and Basis of Payment

E14.5.1 Method of Measurement shall be as follows:

- (a) Timber Bridge will be measured on a lump sum basis for:
 - (i) "Timber bridge c/w compacted granular pad" on Form B: Prices
- (b) No separate measurement will be made for CIP concrete supports, granular pad, or geotextile, as this work is incidental to the Work herein.

E14.5.2 Basis of Payment Shall be as follows:

- (a) Timber Bridge will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment 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.
- (b) No additional measurement will be made for CIP concrete supports, compacted granular pad, or geotextile, as this work is incidental to the Work herein.

E15. OAK LOGS

E15.1 General Description

E15.1.1 This Specification shall cover the supply and installation of oak log stepping posts and a on oak log balance beam, as per the Drawings.

E15.1.2 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.

E15.2 Materials

E15.2.1 All materials supplied under this specification shall be subject to approval by the Contract Administrator prior to installation, and subject to inspection and testing by the Contract Administrator.

E15.2.2 Logs

- (a) Logs to be solid oak and free from checks, warps, and cracks.
- (b) Logs to be debranched, debarked, and skinned/turned to remove irregularities such as branch stubs
- (c) Logs to be sanded as per the Drawings.
- (d) Sizes
 - (i) Log Balance Beam: approx. 450 mm – 500 mm diameter by \pm 2.4 m length.
 - (ii) Log Stepping Posts: min. 300 mm – max. 450 mm diameter by \pm 1.52 m lengths.
- (e) Supplier:
 - (i) Firewood Manitoba Farms
Contact: Clint Pinder
Stony Mountain, MB
Ph: 204-453-7788
Em: clint@firewoodmanitoba.ca
Website: www.firewoodmanitoba.ca
 - (ii) Or approved substitute per B7.

E15.2.3 Geotextile fabric as per CW 3130.

E15.2.4 Granular backfill

- (a) As per Drawings.

E15.3 Construction Methods

E15.3.1 Oak Log balance beam and stepping posts

- (a) Layout as per the Drawings.
- (b) Contractor to ensure:
 - (i) Logs are free of jagged protrusions.
 - (ii) Tops of posts and beam are level and true
 - (iii) Logs are immobile post installation.

E15.3.2 Log stepping posts:

- (a) Layout as per the Drawings.
- (b) Contractor to ensure
 - (i) There are no spaces for entrapment between stepping posts (spaces must be smaller than 100 mm (4") or larger than 250mm (10")).
 - (ii) Logs are installed true and plumb.
 - (iii) Logs are buried a minimum of 1100mm (44") buried.
 - (iv) Heights of logs above settled sand grade shall vary between min. 250 mm and 400 mm.
 - (v) Backfill stepping post excavations with 6mm down limestone. Tamp material thoroughly as per the Drawings.

E15.3.3 Granular backfill

- (a) As per Drawings.

E15.4 Method of Measurement and Basis of Payment

E15.4.1 Method of Measurement shall be as follows:

- (a) Oak Logs shall be measured on a per unit basis for
 - (i) "Oak log balance beam"; and
 - (ii) "Oak log stepping posts" on Form B: Prices.
- (b) No separate measurement shall be made for the supply and installation of base course material or geotextile as these items are incidental to the Work herein.

E15.4.2 Basis of Payment shall be as follows:

- (a) Oak Logs will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment 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.
- (b) No additional payment shall be made for the supply and installation of base course material or geotextile as these items are incidental to the Work herein.

E16. GRANITE BOULDERS

E16.1 Description

E16.1.1 This Specification shall cover the supply and installation of a granite boulders, as shown on the Drawings.

E16.1.2 The Work to be done by the Contractor under this specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to satisfactory performance and completion of all Work as shown on the drawings as specified herein.

E16.2 Materials

E16.2.1 All materials supplied under this specification shall be subject to approval by the Contract Administrator, and subject to inspection and testing by the Contract Administrator.

E16.2.2 Supplier

- (a) Mariash Quarry
279 Vincent Rd, Stony Mountain, MB R0C 3A0
Ph:204-344-5115
Em: boulder@mts.net
Website: <https://www.mariashquarry.com/>

- (b) Or approved substitute per B7.

E16.2.3 Granite boulder approximate sizes:

- (a) Four boulders in sand play area:
 - (i) 1.0 m length x 650 mm width x 600 - 750 mm ht.
- (b) Three boulders in planting bed area:
 - (i) 750 mm length x 550 mm wide x 600 mm ht.
 - (ii) 600 mm length x 380 wide x 600 mm ht.
 - (iii) 500 mm length x 300 mm wide x 600 mm ht.
- (c) Store boulders in a protected location immediately upon arrival on site.
- (d) Granite boulder to be clean and free of dirt, etc.

- E16.2.4 Geotextile fabric shall be per CW 3130.
- E16.2.5 Granular base course
- (a) Base course shall be as per E13 and the Drawings.
- E16.3 Construction Methods
- E16.3.1 Compact sub-grade.
- E16.3.2 Excavate area, install granular pad & geotextile as per the Drawings.
- E16.3.3 Set boulder at correct elevation in sand play area and planting bed.
- E16.3.4 Excavate and backfill with compacted granular base around boulders. Tamp down in 50 mm lifts and compact to 95% SPD.
- E16.3.5 Supply and install boulder as per Drawings.
- (a) Orient flat face of boulder to the top.
 - (i) Lift and move boulder with straps or chains without causing damage to the boulder or site and to allow for adjustment of position in field.
 - (ii) Do not drag boulder across site.
- E16.4 Method of Measurement and Basis of Payment
- E16.4.1 Method of Measurement shall be as follows:
- (a) Granite Boulders shall be measured on a per unit basis for
 - (i) "Granite boulders" on Form B: Prices.
 - (b) No separate measurement shall be made for the supply and installation of base course material or geotextile as these items are incidental to the Work herein.
- E16.4.2 Basis of Payment shall be as follows:
- (a) Granite Boulders will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment 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.
 - (b) No additional payment shall be made for the supply and installation of base course material or geotextile as these items are incidental to the Work herein.
- E17. PROTECTIVE SAND SURFACING**
- E17.1 General Description
- E17.1.1 This Specification shall cover the supply and install sand safety surfacing as per the Drawings.
- E17.1.2 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.
- E17.2 General Instructions
- E17.2.1 Quality Control
- (a) Testing and Approval of Materials
 - (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.
- E17.3 Materials
- E17.3.1 Sand Safety Surfacing

- (a) The sand shall be a natural, washed sand of rounded particles, free of fines, clay, silt, stones, or other debris
- (b) Sand shall meet the following gradation specifications:

Sieve Size	Percent Passing
9.5 mm	100
6.7 mm	100
4.75 mm	99.9
2.36 mm	97-100
1.18 mm	70-90
600 um	25-60
300 um	5-25
150 um	0-3
75 um	0-1

- (c) Sand may be inspected and tested at any time. Rejected sand shall be removed from the site by the Contractor at the Contractor's expense within 48 hours. Rejected sand not removed within 48 hours may be removed by others at the Contractor's expense.

E17.4 Geotextile Fabric

E17.4.1 Geotextile fabric materials shall be in accordance with CW 3130.

E17.5 Construction Methods

E17.5.1 Geotextile fabric shall be installed in accordance with CW 3130 and the Drawings.

E17.5.2 Sand safety surface shall be installed within the play areas, as defined by the timber or concrete edging to a **minimum depth of 355 mm** (after compaction).

E17.5.3 The installation of the sand safety surface shall be done immediately after the natural play elements have been installed.

E17.5.4 Subgrade shall be compacted as per the Drawings prior to the installation of geotextile and sand

- (a) The subgrade shall have all ruts filled and levelled and loose fill levelled and/or removed.

E17.5.5 Sand shall be spread evenly over the entire surface as designated on the Drawings, yielding an even, level surface.

E17.5.6 Sand shall be placed in such a manner as to avoid contamination by other materials.

E17.5.7 Depth of sand shall be a minimum 355 mm (14") as measured at any point within the perimeter after surface has been left smooth, uniform, firm against deep foot printing, and with a fine loose texture or at a compaction of 85% SPD.

E17.5.8 Installation shall be done by equipment sized to suit the Work being done and the sand shall be spread by hand as necessary in the immediate vicinity of the play equipment so as not to damage same. The play equipment shall be swept clean to the satisfaction of the Contract Administrator after installation of the sand.

E17.6 Method of Measurement and Basis of Payment

E17.6.1 Method of Measurement shall be as follows:

- (a) Protective Sand Surfacing will be measured on a cubic metre basis for:
 - (i) "Play sand" on Form B: Prices.

E17.6.2 Basis of Payment shall be as follows:

- (a) Sand safety surfacing will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on the Bid Form. This price shall be full payment 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.

E18. LIMESTONE BLOCKS

E18.1 General Description

- E18.1.1 This Specification shall cover the supply and installation of four (4) limestone blocks as per the Drawings.
- E18.1.2 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.

E18.2 Materials

- E18.2.1 All materials supplied under this specification shall be subject to approval by the Contract Administrator, and subject to inspection and testing by the Contract Administrator.

E18.2.2 Suppliers

- (a) Mariash Quarry
279 Vincent Rd, Stony Mountain, MB
Ph: 204-344-5115
Em: boulder@mts.net
Website: <https://www.mariashquarry.com/>
- (b) Gillis Quarries Ltd.
Quarry Address: 203 Gillis Street N., Garson, MB
279 Vincent Rd, Stony Mountain, MB R0C 3A0
M: 204-268-2934
Ph: 1-866-973-2988
Website: <https://www.tyndallstone.com/>
- (c) Or approved substitute per B7.

E18.2.3 Limestone Blocks approximate size:

- (a) 780 mm length x 500 mm width x 600 ht.
- (b) Store in a protected location immediately upon arrival on site.
- (c) Limestone blocks to be clean and free of dirt, etc.

E18.2.4 Geotextile fabric shall be per CW 3130.

E18.2.5 Granular base course

- (a) Base course shall be as per E13 and the Drawings.

E18.3 Construction Methods

- E18.3.1 Compact sub-grade.
- E18.3.2 Excavate area, install granular pad & geotextile as per the Drawings.
- E18.3.3 Set limestone blocks at correct elevation.
- E18.3.4 Excavate and backfill with compacted granular base around blocks. Tamp down in 50 mm lifts and compact to 95% SPD.
- E18.3.5 Supply and install blocks as per Drawings.

- (a) Orient flat & smooth face of block to the top.
 - (i) Lift and move block with straps or chains without causing damage to the block or site and to allow for adjustment of position in field.
 - (ii) Do not drag block across site.

E18.4 Method of Measurement and Basis of Payment

E18.4.1 Method of Measurement shall be as follows:

- (a) Limestone Blocks shall be measured on a per unit basis for
 - (i) "Limestone blocks" on Form B: Prices.
- (b) No separate measurement shall be made for the supply and installation of base course material or geotextile as these items are incidental to the Work herein.

E18.4.2 Basis of Payment shall be as follows:

- (a) Limestone Blocks will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment 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.
- (b) No additional payment shall be made for the supply and installation of base course material or geotextile as these items are incidental to the Work herein.

E19. PLANTING BEDS AND WOODCHIP MULCH

E19.1 General Description

E19.1.1 This Specification shall cover the supply and installation of planting beds and woodchip mulch as per the Drawings.

E19.1.2 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, including, but not limited to the following:

- (a) Supply and installation of planting soil; and
- (b) Supply and Installation of woodchip mulch.

E19.2 General Instructions

E19.2.1 Quality Control

- (a) Testing and Approval of Materials
 - (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.
- (b) Samples
 - (i) Samples
 - ◆ Submit any requested samples for final approval two (2) weeks prior to installation as directed by Contract Administrator.

E19.3 Materials

E19.3.1 General

- (a) Soil and water shall be as per the City of Winnipeg Tree Planting and Maintenance Specification unless otherwise set forth in this Specification.
 - (i) <https://www.winnipeg.ca/publicworks/parksOpenSpace/UrbanForestry/PDF/TreePlantingandMaintenanceSpecification.pdf>

E19.3.2 Planting soil mix

- (a) The planting soil mix shall be:
 - (i) Friable, well mixed, and screened combination of:
 - ◆ 1/3 clay-loam textured dark topsoil;
 - ◆ 1/3 sand-loam textured topsoil; and
 - ◆ 1/3 well-rotted manure/compost
- (b) Planting soil mix salinity rating shall be 2.5 mm HOS/CM or less on a saturated plate basis with pH range between 6.0 – 8.0.3.
- (c) At the discretion of the Contract Administrator, planting soil may be subject to tests for nitrate, phosphate, potassium, sulphate, pH, E.C. (salinity), and volume of organic matter, by a testing laboratory designated by the Contract Administrator.
- (d) The Contract Administrator reserves the right to reject planting soil not conforming to the requirements of these Specifications.

E19.3.3 Woodchip Mulch

- (a) Organic Mulch
 - (i) Unless otherwise indicated, mulch is to be clean bark or wood chip mulch with chips not less than 15 mm not larger than 75 mm in size and not more than 20 mm thick. Mulch is to be free of leaves, branches, invasive and noxious seeds and reproductive parts, soil, stones, salts or other harmful chemicals, or other extraneous matter that would prohibit the healthy development of plant material.

E19.4 Construction Methods

E19.4.1 Layout of planting beds shall be as per Drawings and confirmed on site by Contract Administrator before excavation occurs.

E19.4.2 Layout of woodchip mulch over scarified grade shall be as per Drawings and confirmed on site by Contract Administrator before excavation occurs.

E19.4.3 Excavation and grading shall be as per E9

E19.4.4 Backfilling of planting soil mix

- (a) Upon excavation of the planting bed, the excavation shall be backfilled with planting soil mix mixture to a depth to permit adequate installation and stabilization of the plant material.
- (b) Protect bottom of excavations against freezing.
- (c) Remove water, which enters excavations prior to planting. Ensure source of water is not ground water and if so notify Contract Administrator.
- (d) After filling, excavation of top of bed shall be level with surrounding grade. Soil should be firmly compacted.

E19.4.5 Woodchip Mulch

- (a) Woodchip Mulch to be carefully spread to an even and consistent depth within and over the entire planting areas as indicated on the Drawings.
- (b) Do not mulch if the soil surface is saturated, unless approved by Contract Administrator
- (c) Mulch shall not be placed within 100 mm of the base of the trunk of trees.
- (d) Mulch shall not be placed within 50 mm of the base of shrubs.
- (e) Mulch shall not be placed within 50 mm of the stem of non-dormant perennials and grasses.

E19.4.6 Planting shall be as per E20.

E19.5 Method of Measurement and Basis of Payment

E19.5.1 Method of Measurement shall be as follows:

- (a) Planting Beds shall be measured on a per square metre basis for:
 - (i) "Planting bed c/w woodchip mulch"; and
 - (ii) "100 mm woodchip mulch (scarify 100 mm exist. earth)" on the Bid Form.

E19.5.2 Basis of Payment shall be as follows:

- (a) Planting Beds and Woodchip Mulch will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on the Bid Form. This price shall be full payment 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. PLANTING

E20.1 General Description

E20.1.1 This Specification shall cover the supply and installation of tree, shrub, and perennial planting material and amend and supplement the following:

- (a) City of Winnipeg Tree Planting and Maintenance Specification found at:
http://www.winnipeg.ca/publicworks/parksOpenSpace/UrbanForestry/PDF/Tree_Planting_and_Maintenance_Specification.pdf
- (b) City of Winnipeg Boulevard Tree Planting Associated with Development Agreements found at
https://www.winnipeg.ca/publicworks/parksOpenSpace/UrbanForestry/Tree_Planting_Dev_Agree.stm

E20.1.2 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, including, but not necessarily confined to the following:

- (a) Supply and Installation of trees;
- (b) Supply and Installation of shrubs; and
- (c) Supply and Installation of perennials grasses.

E20.2 General Instructions

E20.2.1 Product Data

- (a) Product data may be required for the material supplied under this Specification and as and as directed by the Contract Administrator.

E20.2.2 Plant Species list and required sizes shall be as per the Drawings.

- (a) Requests for substitutions must be approved in writing by the Contract Administrator prior to construction.

E20.3 Materials

E20.3.1 General

- (a) Plant materials, soil, water, trunk protection, and tree supports shall be as per the City of Winnipeg Tree Planting and Maintenance Specification unless otherwise set forth in this Specification.
- (b) All nursery stock supplied shall be Canadian prairie nursery grown, of the species and sizes indicated on the drawings. Quality shall be in accordance with the latest "Guide Specification for Nursery Stock of the Canadian Nursery Trades Association".
- (c) Plants larger than specified may be used if approved by the Contract Administrator. The use of such plants shall not increase the Contract price.
- (d) Trees are to have been root pruned regularly, but not later than one growing season prior to arrival on Site. The Contractor may be required to furnish documentation to

the client on their root-pruning program. Trees in excess of 75 mm caliper are to have been half root pruned during each of two successive growing seasons, the latter at least, one growing season prior to arrival on Site.

- (e) All parts of the trees, especially the lower branches, are to be moist and show live, green cambium tissue when cut.
- (f) Trees are to have only one, sturdy, reasonably straight and vertical trunk, and a well-balanced crown with fully developed leader.
- (g) Trees are to be free of disease, insect infestation, rodent damage, sun scald, frost cracks, abrasions, unhealed scars, scars exceeding 5cm in diameter, major forks or crooks in the trunk, broken branches, or angled leaders. Trees having the above defects will not be accepted by the Contract Administrator.
- (h) Trees having a leader which has developed at a sharp angle to the trunk as a result of pruning or trunk damage will not be accepted.
- (i) Trees exhibiting suppressed, weakly developed branches due to competition from other closely spaced trees in the nursery will not be accepted. Trees exhibiting dead branches will not be accepted.
- (j) Any tree that has come out of dormant stage and is too far advanced will not be accepted unless prior approval obtained. Approval is required for any tree which has been held in cold storage.

E20.3.2 Root Balls and Baskets

- (a) Root Ball Burlap shall be 150g Hessian burlap, biodegradable.
- (b) Wire Baskets shall be horticultural accepted product designed to carry the weight and to contain a burlap-covered root ball. Minimum diameter basket size is to conform to the same minimum diameter of the tree root ball for the respective minimum tree caliper sizes
- (c) Balled and burlapped trees in excess of a 3m height must have been dug with large firm ball. Roots in root balls must be comprised of 75% fibrous and feeder root systems. Secure root balls with burlap, heavy twine and rope. For trees 75mm or more in caliper, wrap ball in double layer of burlap and drum lace with minimum 10mm diameter rope. Protect root balls against sudden changes in temperature and exposure to heavy rainfall.
- (d) Tree spade dug trees are to be dug with mechanized digging equipment with hydraulic spade. Lift root ball from hole, place in wire basket designed for purpose and lined with burlap. Tie basket to ball with heavy rope. Take care not to injure trunk of tree with wire basket ties or rope.

E20.3.3 Water

- (a) The Contractor shall provide water in accordance with the City of Winnipeg Tree Planting and Maintenance Specification

E20.3.4 Trunk Protection, Stakes and Guy Wires

- (a) The Contractor shall provide tree protection in accordance with the City of Winnipeg Tree Planting and Maintenance Specification

E20.3.5 Fertilizer shall be a slow release in compliance with CW 3540.

E20.3.6 Planting soil mix shall be per E19.

E20.3.7 Woodchip mulch per E19.

E20.3.8 Plant Quantity and Size

- (a) Trees, shrubs, perennials, grasses and ground covers are to be supplied and planted at the quantities and caliper listed on the Planting Lists which are shown on the drawings. Any variations to species, size or caliper of specified plants will require a request for approval from the Contract Administrator.

- (b) Any changes in planting locations will be determined on-site by the Contract Administrator.
- (c) Trees are to be measured when the branches are in their normal position. Height dimensions specified are to refer to the main body of the tree and not from branch tip to root base. Where trees have been measured by caliper or diameter, reference is to be made to the diameter of the trunk measured 15cm above the ground as the tree stands in the nursery prior to lifting. Caliper of tree shall be appropriately designed on a permanently fixed tag on one of the branches.

E20.4 Shipment and Pre-Planting Care

- E20.4.1 Coordinate shipping of vegetation and excavation of holes to ensure minimum time lapse between digging and planting.
- E20.4.2 Tie branches securely, and protect against abrasion, exposure and extreme temperature change during transit. Avoid binding with rope or wire which would damage bark, break branches or destroy natural shape of plant. Give full support to root ball during lifting.
- E20.4.3 Cover foliage with tarpaulin, and protect bare roots by means of dampened straw, peat moss, saw dust or other acceptable material to prevent loss of moisture during transit and storage.
- E20.4.4 Remove broken and damaged roots with sharp pruning shears. Make clean cuts, and cover cuts over 10 mm diameter with a tree wound dressing.
- E20.4.5 Keep roots moist and protected from sun and wind.
- E20.4.6 Heel-in trees which cannot be planted immediately in shaded areas and water well.

E20.5 Construction Methods

- E20.5.1 Installation shall be as per Drawings
 - (a) Installation of planting beds shall be as per E19;
 - (b) Installation of shrubs and perennial grasses per SCD-501;
 - (c) Installation of trees per SCD-517.
- E20.5.2 Planting shall be done during periods of suitable weather conditions and in accordance with locally accepted practice.
- E20.5.3 Trees are to be planted within forty-eight (48) hours of excavation from the nursery.
- E20.5.4 No tree pit is to be left open at the end of the Contractor's Work Day. Planting program is to be planned to ensure that all approved trees delivered to the Site at designated planting locations are installed and thoroughly watered the same day as delivery.
- E20.5.5 With balled and burlapped root balls and root balls in wire baskets, burlap shall be loosened and cut away from the top 1/3 without disturbing root ball. Wire shall be cut away and removed from the top 1/3 of the root ball. Burlap or rope shall not be pulled from under root ball. Non-biodegradable wrapping shall be removed.
- E20.5.6 After inserting the tree and tamping the root system with topsoil in layer of 150 mm, water shall be poured in until the pit is thoroughly soaked. Filling of the hole shall then be completed and the fill-in soil shall be packed firmly around the roots, leaving a concave surface for convenient watering. After filling, the planting shall be watered at frequent intervals.
- E20.5.7 Each tree is to have an earth saucer at its base having a diameter as large as the excavation with a 10 cm lip formed at the perimeter of the saucer to retain water.
- E20.5.8 All nursery stock shall be set plumb in the centre of pits and at levels as shown on the Drawings after settlement has taken place.
- E20.5.9 Nursery stock shall be faced to give the best appearance or relationship to adjacent structure and to the approval of the Contract Administrator.

(a) Trees shall be placed equal to depth they were originally growing in nursery.

E20.5.10 After filling, top of root ball shall be level with surrounding grade. Soil should be firmly compacted.

E20.5.11 Installation of woodchip mulch shall be as per E19

E20.5.12 Fertilize in accordance with CW 3540.

E20.6 Warranty

E20.6.1 The Contractor shall, at his/her expense, warrant the Work against any and all defects or deficiencies resulting from insect infestation, disease and mechanical damage due to improper handling, installation or maintenance, for a period of **two (2) years for trees and one (1) year for shrubs and perennials grasses from the date of the Total Performance**. Nursery stock damaged by vandalism or reasons beyond the control of the Contractor shall be replaced by the client.

E20.6.2 End-of-Warranty inspection will be conducted by the Contract Administrator.

E20.6.3 The Contract Administrator reserves the right to request material replacement or extend the Contractor's Maintenance responsibilities for an additional one (1) year if, at the end of the Warranty Period, leaf development and growth are not sufficient to ensure future survival of the plant material.

E20.7 Replacements

E20.7.1 During the Maintenance Period, the Contractor shall remove from Site any plant material that has died or failed to grow satisfactorily as determined by the Contract Administrator and replace as per Specifications within a maximum ten (10) day period from notification.

E20.7.2 Defective plants shall be replaced within three (3) days of notification to the Contractor.

E20.7.3 The Contractor shall extend Maintenance and Warranty on replacement plant material for a period equal to the original Maintenance and Warranty Periods.

E20.7.4 The Contractor shall continue such replacement, Maintenance and Warranty until plant material is acceptable.

E20.8 Method of Measurement and Basis of Payment

E20.8.1 Method of Measurement shall be as follows:

- (a) Planting will be measured on a per unit basis for:
- (i) "Burr Oak";
 - (ii) "Trembling Aspen";
 - (iii) "Little Rebel Dogwood"; and
 - (iv) "Karl Foerster Reed Grass" on Form B: Prices.

E20.8.2 Basis of Payment shall be as follows:

- (a) Planting will be paid for at the Contract unit price, which shall be payment in full including all costs for the trees, shrubs, perennials, extended maintenance, and all other items incidental to the Work included in this Specification and as accepted by the Contract Administrator.

E21. SITE FURNISHINGS

E21.1 General Description

E21.1.1 This Specification shall cover the **pick-up** and installation of site furnishings and the **supply** and installation of benches as per the Drawings.

E21.1.2 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.

E21.2 Materials

E21.2.1 All materials supplied under this specification shall be of a type approved by the Contract Administrator, and subject to inspection and testing by the Contract Administrator.

E21.2.2 All site furnishings shall be as per the Drawings, or approved substitutions in accordance with B7.

E21.2.3 Ordering

- (a) To order City of Winnipeg supplied site furnishings email: pwd-cps-orderdesk@winnipeg.ca

E21.2.4 City of Winnipeg supplied Site Furnishings:

- (a) English Park Sign with Address Double Sided per SCD-153

- (i) Product Number: 52501103
- (ii) Park Sign wording:
 - ◆ Park Name: The Oaks Forest
 - ◆ Park Address: 85 Oak Forest Cres.

- (b) Waste Receptacle Side Opening Metal Slat Type per SCD-119

- (i) Product Numbers:
 - ◆ Metal Slat Waste Receptacle: 52501063GLV
 - ◆ Wire Basket: 52501058GLV
- (ii) Finish: Galvanized
- (iii) Mounting: In-ground

E21.2.5 Other site furnishings:

- (a) Bench

- (i) Manufacturer: Vista Site Furnishings
- (ii) Product name: Huron Bench HV6-AL
- (iii) Colour: Black
- (iv) Mounting: Surface Mount
- (v) Supplier: Colcat Industries
 - Contact: Murray Lord
 - Ph: 204-979-7972
 - Email: murray.colcat@mymts.net
- (vi) Specifications: <https://www.vistafurnishings.com/assets/2018-2019-vista-furnishings-catalog.pdf>

- (b) Or approved substitution in accordance with B7.

E21.2.6 Foundations

- (a) CIP Concrete Foundations as per E10.

E21.3 Construction Methods

E21.3.1 All Work is to be located and installed in accordance with the Drawings, and associated SCDs and/or Manufacturer's written instructions and specifications, using approved non-rusting, tamper resistant fasteners to ensure solid, durable, finished work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work.

- E21.3.2 All furnishings and fixtures 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.
- E21.3.3 All furnishings and fixtures to be carefully handled so that no parts will be bent, broken or otherwise damaged. Hammering is prohibited.
- (a) Damaged Site Furnishings will not be accepted.
- E21.3.4 CIP Concrete Foundations per as per E10.
- E21.4 Method of Measurement and Basis of Payment
- E21.4.1 Method of Measurement shall be as follows:
- (a) **Pick-up** and installation of Site Furnishings will be will be paid for at the Contract Unit Price per unit for:
- (i) "Pick up & install waste receptacle"; and
- (ii) "Pick up & install park sign" on Form B: Prices.
- (b) **Supply** and installation of Site Furnishings will be will be paid for at the Contract Unit Price per unit for:
- (i) "Supply & install bench" on Form B: Prices.
- (c) Price shall be payment in full for supplying all materials and for performing all operations herein described and all other items incidental to the work included in this Specification.
- E21.4.2 Basis of Payment shall be as follows:
- (a) Site Furnishings will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. The price shall be full payment 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.

E22. TOPSOIL AND SODDING

- E22.1 General Description
- E22.1.1 This Specification shall amend and supplement CW 3510, CW 3520, and CW 3540 and cover the supply and installation of topsoil and sod.
- E22.1.2 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.
- E22.2 General Instructions
- E22.2.1 Quality Control
- (a) Testing and Approval of Materials
- (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.
- E22.3 Materials
- E22.3.1 Topsoil shall be as per CW 3540.
- (a) **The Contractor shall install the following compacted topsoil depths:**
- (i) **Mineral sod:**
- ◆ **On Berms: 100 mm (min.)**
 - ◆ **Other: 75 mm (min.)**
- E22.3.2 Mineral sod shall be as per CW 3510.

E22.4 Construction Methods

E22.4.1 Layout

- (a) The Contractor shall install soil and sod and/or seed layout as shown on the Drawings.
- (b) Contractor to mark sodded areas for Contract Administrator review, prior to commencing work.
 - (i) Work done beyond limits approved by the Contract Administrator is done so at the Contract's own risk and expense.

E22.4.2 Installation

- (a) Per CW 3510, CW 3520, and CW 3540.
- (b) Where new sod will meet existing, employ a vertical shearing operation along outside edges of the excavation to create a clean, sharp, and definite line for the new sod to abut flush to.
- (c) Low Spots and/or Ruts
 - (i) The Contractor shall install topsoil and seed in areas where ruts and low spots presently exist. This shall be identified on Site by the Contract Administrator.

E22.4.3 Site restoration

- (a) Contractor is responsible for repairing existing sod damaged by construction in areas including but not limited to mineral sod repair adjacent to new paving and site restoration.
 - (i) Restoration shall be achieved using topsoil and sod unless otherwise directed by the Contract Administrator.

E22.5 Maintenance Period

E22.5.1 Thirty (30) day maintenance period on sod and seed will commence at Total Performance and acceptance.

- (a) Contractor to supply & install high visibility stakes and/or flags marking the extents of new sod for the duration of the maintenance period.
- (b) Contractor to remove & legally dispose of high visibility stakes and/or flags after sod is accepted by Contract Administer.

E22.5.2 Termination of Maintenance Period

- (a) Termination of maintenance period for sod per CW 3510.

E22.6 Method of Measurement and Basis of Payment

E22.6.1 Method of Measurement shall be as follows:

- (a) Topsoil and Sodding will be measured on a per square metre basis for:
 - (i) "Soil and sod" on Form B: Prices.
- (b) No separate measurement will be made for repair of existing sod damaged by construction as this Work is incidental to the Work herein.
- (c) No separate measurement will be made for soil and sod and/or seed installed beyond the limits approved by the Contract Administrator.
- (d) No separate measurement will be made for the supply, installation, removal, and disposal of high visibility stakes and/or flags.

E22.6.2 Basis of Payment shall be as follows:

- (a) Topsoil and Sodding will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment 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.

- (b) No additional measurement will be made for repair of existing sod damaged by construction as this Work is incidental to the Work herein.
- (c) No additional measurement will be made for soil and sod and/or seed installed beyond the limits approved by the Contract Administrator.
- (d) No additional measurement will be made for the supply, installation, removal, and disposal of high visibility stakes and/or flags.