



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 55-2026

EARL GREY PLAYGROUND REDEVELOPMENT

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 Earl Grey Playground Redevelopment

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00pm Winnipeg time, February 5, 2026.

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

B3. SITE INVESTIGATION

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

B3.2 The Proponent is responsible for inspecting the Site, the nature of the Work to be done and all conditions that might affect their Proposal or their performance of the Work, and shall assume all risk for conditions existing or arising in the course of the Work which have been or could have been determined through such inspection.

B3.3 The Proponent is responsible for determining:

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

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D5.1.

B4.2 If the Proponent finds errors, discrepancies or omissions in the proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Contract Administrator of the error, discrepancy or omission 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 Request for Proposal will be provided by the Contract Administrator to all Proponents 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 Request for Proposal will be provided by the Contract Administrator only to the Proponent who made the enquiry.

B4.5 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the Contract Administrator. Failure to restrict correspondence and contact to the Contract Administrator may result in the rejection of the Proponents Proposal Submission.

B4.6 The Proponent 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.

B4.7 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 Proponent by the City or acquired by a Proponent 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 Proponent before receipt hereof; or
- (b) becomes publicly known other than through the Proponent; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Request for Proposal 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 Request for Proposal, 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 Proponent is responsible for ensuring that they have received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B6.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D5.

B7. SUBSTITUTES

B7.1 The Work is based on the Plant, Materials and methods specified in the Request for Proposal.

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 Proponent shall ensure that any and all requests for approval of a substitute:

- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
- (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
- (c) identify any anticipated cost or time savings that may be associated with the substitute;
- (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
- (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.

B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in their sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.

B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Proponent 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 Proponents. The Proponent requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons they wish to inform.

B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Proponent 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 Proponent bidding that approved alternative may base their Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B21.

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. PROPOSAL SUBMISSION

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

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

B8.2 The Proposal should also consist of the following components:

- (a) Design Drawings in accordance with B11;
- (b) Component Description, in accordance with B12.

B8.3 Further to B8.1, all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.

B8.4 Further to B8.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.

B8.5 Proposal format, including number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their proposed solution.

B8.6 The Proposal shall be submitted electronically through MERX at www.merx.com.

B8.6.1 Proposals will **only** be accepted electronically through MERX.

B8.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B21.1(a).

B8.8 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B9. PROPOSAL (SECTION A)

B9.1 The Proponent 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 Proponent is a sole proprietor carrying on business in their own name, their name shall be inserted;
- (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
- (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
- (d) if the Proponent is carrying on business under a name other than their own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B9.2.1 If a Proposal 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 Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.

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

- (a) if the Proponent is a sole proprietor carrying on business in their own name, it shall be signed by the Proponent;
- (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Proponent is a corporation, it shall be signed by their duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
- (d) if the Proponent is carrying on business under a name other than their own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B9.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

B9.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B10. PRICES

B10.1 The Proponent shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

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

B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Proposals.

B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DESIGN DRAWINGS

B11.1 The Proponent should submit drawings that illustrate the proposed design, including if the price bid is subject to the colours of the proposed design and play equipment, such as plan, perspective, manufacturer's footing specifications and any other submissions to illustrate the design intent. Included in this should be a plan showing the proposed play equipment and associated safety zones within the proposed play area and site, drawn to scale. Additional drawings may be requested prior to award for more detailed information.

B12. COMPONENT DESCRIPTIONS

B12.1 The Proponent should submit component description and/or graphic or catalogue reference outlining specifications of play equipment components.

B13. DISCLOSURE

B13.1 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.

B13.2 The Persons are:

(a) Prairie Rubber Paving was consulted with regard to rubber surfacing options and budgeting.

B14. CONFLICT OF INTEREST AND GOOD FAITH

B14.1 Further to C3.3, Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B14.2 Conflict of Interest means any situation or circumstance where a Proponent or Key Personnel 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 Proposals or award of the Contract; or
- (ii) compromise, impair or be incompatible with the effective performance of a Proponent's obligations under the Contract.

(e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of their participation in the RFP process or the Project; or

(f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other proponents and that could or would be seen to give that Proponent an unfair competitive advantage.

B14.3 In connection with their Proposal, each entity identified in B14.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP 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.

B14.4 Without limiting B14.3, the City may, in their sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in their sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in their sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

B14.5 Without limiting B14.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in their sole discretion:

- (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of their Key Personnel;
- (b) require the removal or replacement of any Key Personnel proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in their sole discretion, determines cannot be avoided or mitigated;
- (c) disqualify a Proponent or Key Personnel proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B14.4 to avoid or mitigate a Conflict of Interest; and
- (d) disqualify a Proponent if the Proponent, or one of their Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.

B14.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in their sole discretion.

B15. QUALIFICATION

B15.1 The Proponent 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, or if the

Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; 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.

B15.2 The Proponent and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B15.3 The Proponent and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
- (d) have a valid Canadian Certified Playground Inspector.
- (e) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B15.5 and C6.19).

B15.4 Further to B15.3(c), should the Total Bid Price exceed \$100,000.00, the Proponent shall within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Proponent /Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) in the form of:
 - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFEY™ 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 WORKSAFEY™ COR™ Program; or
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. A list of acceptable reviewers and the review template are available at <http://www.winnipeg.ca/matmgt/Safety/default.stm>.

B15.5 Further to B15.3(e), the Proponent acknowledges that they and all Subcontractors have obtained training required by the Accessibility for Manitobans Act (AMA) available at <https://accessibilitymb.ca/resources-events-and-training/online-training.html> for anyone that may have any interaction with the public on behalf of the City of Winnipeg.

B15.6 The Proponent 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 Proponent and of any proposed Subcontractor.

B15.7 The Proponent shall provide, on the request of the Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Work.

B16. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

B16.1 Proposals will not be opened publicly.

B16.2 After award of Contract, the Contract amount and the name of the successful Proponent and their address will be available on the MERX website at www.merx.com.

B16.3 The Proponent is advised any information contained in any Proposal Submission 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).

B16.3.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Proposal Submission identified by the Proponent as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B16.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of their submission upon written request to the Contract Administrator.

B17. IRREVOCABLE OFFER

B17.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B17.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Work until a Contract for the Work the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B18. WITHDRAWAL OF OFFERS

B18.1 A Proponent may withdraw their Proposal without penalty prior to the Submission Deadline.

B19. INTERVIEWS

B19.1 The Contract Administrator may, in their sole discretion, interview Proponents during the evaluation process.

B20. NEGOTIATIONS

B20.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.

B20.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.

B20.3 If, in the course of negotiations pursuant to B20.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B21. EVALUATION OF PROPOSALS

B21.1 Award of the Contract shall be based on the following evaluation criteria:

- (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: (pass/fail)
- (b) qualifications of the Proponent and the Subconsultants, if any, pursuant to B15: (pass/fail)
- (c) Total Bid Price; 10%
- (d) Design Drawings/Component Descriptions 90%

B21.2 Further to B21.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.

B21.3 Further to B21.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in their Proposal or in other information required to be submitted, that it is qualified.

B21.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B21.1(a) and B21.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.

B21.5 Further to B21.1(c) the Award Authority may reject a Proposal as being non-responsive if it exceeds the funds available as shown in D2.3.

B21.6 Further to B21.1(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.

B21.6.1 Further to B21.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B21.7 Further to B21.1(c), the Award Authority may reject a Bid as being non-responsive if it exceeds the budget as shown in D2.3.

B21.7.1 The Total Bid Price shall be evaluated with a weighing of 10 points out of a total of 100 possible points. As such, the lowest Proponent shall receive the full 10 points, and the second lowest Proponent and subsequent Proponents shall be pro-rated accordingly.

B21.8 Further to B21.1(d) Design Drawings/Component Descriptions shall be evaluated with a weighting of 90 points out of a total of 100 possible points as per B11 and B12.

B21.8.1 The Design shall be evaluated on the following criteria:

- (a) compliance with CSA Standards (pass/fail);
- (b) play value (maximum 39 points):
 - (i) 7 points – Gross Motor Play Experience(s) (Climbing, balancing, etc.);
 - (ii) 4 points – Nature Themed Play Equipment;**
 - (iii) 5 points – Motion Component(s);
 - (iv) 8 points - Provides opportunities for appropriate social / interpersonal interaction and co-operative play;
 - (v) 6 points – Imaginative/ Cognitive Play Component(s), including fine motor skills;
 - (vi) 5 points – Sliding Component(s) for 5-12 year old's and 2-5 year old's;
 - (vii) 4 points - Variety of play Components.
- (c) Designed for inclusive play using Universal Design principles – Accessible Play Area only (maximum 15 points);

- (i) Complies with section 2.3.5 of the 2015 City of Winnipeg Accessibility Design Standard (https://winnipeg.ca/ppd/Documents/Planning/UniversalDesign/Access_Design_Standards.pdf) (pass/fail);
- (ii) 4 points – Provision of tactile and auditory play experiences;
- (iii) 7 points – Layout of the play area for integration of wheelchair accessible components to promote inclusive play;
- (iv) 4 points – Layout of the play area for persons with visual impairment.

- (d) Layout/circulation (maximum 23 points):
 - (i) 5 points – Flow and relationship between play area activities;
 - (ii) 5 points - Layout/orientation of components on Site and in relation to seating areas;
 - (iii) 5 points - Orientation to provide good visibility to play area from adjacent road
 - (iv) 5 points – Efficient use of space within and between elements;
 - (v) 3 points - Slide orientation – north or east.
- (e) Durability (maximum 10 points):
 - (i) Use of durable/tamper-resistant materials, low maintenance finishes and connector systems and ease of repair/replacement of the products used with the playground area.
- (f) Drawing and Design Submission Clarity (maximum 3 points):
 - (i) 1 point – Drawing Submission including complete Site Plan, clearly showing the location of all play equipment, play edging, pathways and seating areas;
 - (ii) 2 points – Clarity of drawings, supportive imagery and literature that serve to effectively communicate the intent of the play structures design and function.

B21.9 Where references are requested, the reference checks to confirm information provided may not be restricted to only those submitted by the Proponent, and may include organizations representing Persons, known to have done business with the Proponent.

B22. AWARD OF CONTRACT

B22.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.

B22.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be qualified, and the Proposals are determined to be responsive.

B22.2.1 Without limiting the generality of B22.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with their own forces;
- (d) only one Proposal 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.

B22.3 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.

B22.3.1 Following the award of Contract, a Proponent will be provided with information related to the evaluation of their Proposal upon written request to the Contract Administrator.

B22.4 Further to Paragraph 7 of Form A: Bid/Proposal and C4, the City may issue an award letter to the successful Proponent in lieu of execution of Contract Documents

B22.4.1 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 award letter notwithstanding that they are not necessarily attached to or accompany said award letter.

B22.5 If funding for the Work is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, Proponents are advised that the terms of C24 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.

B22.6 Following the award of contract, a Proponent will be provided with information related to the evaluation of their Proposal upon written request to the Contract Administrator.

B22.7 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Proponent will be paid for all Services rendered up to time of termination.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

C0.1 The *General Conditions for Construction* (Revision 2025-11-01) are applicable to the Work of the Contract.

C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Purchasing Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm .

C0.2 A reference in the Request for Proposal 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 new play equipment, site furniture, pathways rubber surfacing and trees.

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

- (a) Removals;
- (b) Excavation and site grading;
- (c) Timber edging and timber retaining walls;
- (d) Play equipment;
- (e) Nature play elements;
- (f) Rubber safety surfacing and drainage system;
- (g) Asphalt pathway;
- (h) Site furniture;
- (i) Wood and chain link fencing;
- (j) Trees;
- (k) Soil and mulch.

D2.3 The funds available for this Contract are **\$420,000**.

D3. SITE INVESTIGATION DUE DILIGENCE AND RISK

D3.1 Notwithstanding C3.1, the Contractor acknowledges that the site investigation reports and other site information included in this Request for Proposal have been provided to it and may be relied upon by the Contractor to the extent that the Contractor uses Good Industry Practice in interpreting such report(s) and site information and carries out the Work in accordance with Good Industry Practice based upon such report(s) and the information contained in them and such other site information. In the event that a site condition related to:

- (a) the location of any utility which can be determined from the records or other information available at the offices of any public authority or person, including a municipal corporation and any board or commission thereof, having jurisdiction or control over the utility;
- (b) the Site conditions, including but not limited to subsurface hazardous materials or other concealed physical conditions;
- (c) the location, nature, quality or quantity of the materials to be removed or to be employed in the performance of the Work;
- (d) the nature, quality or quantity of the Plant needed to perform the Work;
- (e) all matters concerning access to the Site, power supplies, location of existing services, utilities or materials necessary for the completion of the Work; and
- (f) all other matters which could in any way affect the performance of the Work;

that could not have been “properly inferable”, “readily apparent” and readily discoverable” using Good Industry Practice by the Contractor, results in additional Work which is a direct result of

this newly discovered site condition, such additional Work will be considered by the City under Changes in Work.

D4. DEFINITIONS

D4.1 When used in this Request for Proposal:

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

D5. CONTRACT ADMINISTRATOR

D5.1 The Contract Administrator is:

Melanie Andrushko
Landscape Designer

Telephone No. 204 583-2006
Email address: mandrushko@winnipeg.ca

D5.2 At the pre-commencement meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D6. CONTRACTOR'S SUPERVISOR

D6.1 Further to C6, the Contractor shall employ and keep on the Work, at all times during the performance of the Work, a competent supervisor and assistants, if necessary, acceptable to the Contract Administrator. The supervisor shall represent the Contractor on the Site. The supervisor shall not be replaced without the prior consent of the Contract Administrator unless the supervisor proves to be unsatisfactory to the Contractor and ceases to be in their employ.

D6.2 Before commencement of Work, the Contractor shall identify their designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D6.2.1 Further to C5, Contract Administrator may give instructions or orders to the Contractor's supervisor and such instructions or orders shall be deemed to have been given to the Contractor.

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.

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, Purchasing Division website at
<http://www.winnipeg.ca/matmgt/safety/default.stm> .

D8.3 Notwithstanding B15.4 at any time during the term of the Contract, the City may, at their sole discretion and acting reasonably, require an updated COR Certificate or Annual Letter of good Standing. A Contractor, who fails to provide a satisfactory COR Certificate or Annual Letter of good Standing, will not be permitted to continue to perform any Work.

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, contractual liability, unlicensed motor vehicle liability (contractor's equipment), non-owned automobile liability and products and completed operations endorsement to remain in place at all times during the performance of the Work and throughout the Warranty period;
- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) all risks installation floater, carrying adequate limits to covers 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 All policies shall be taken out with insurers licensed to carry on business in the Province of Manitoba.

D9.4 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, referencing the Request for Proposal number and/or the Scope of Work D2 and Specifications PART E - to be performed, in a form satisfactory to the City Solicitor, 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, as applicable.

D9.5 The Contractor shall provide:

- (a) The certificate of insurance, in a form satisfactory to the Supervisor of Insurance, to:

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

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

D9.6 The Contractor shall not cancel, materially alter, or cause the policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Supervisor of Insurance.

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 amount of fifty percent (50%) of the Contract Price; and
- (b) labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in an amount equal to fifty percent (50%) of the Contract Price.
- (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 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 Bonds are available at:

- (a) Performance Bond <https://www.winnipeg.ca//media/4928/>
 - (i) Performance Bond – Schedule A - Form of Notice
<https://www.winnipeg.ca/media/4831/>
 - (ii) Performance Bond – Schedule B – Surety's Acknowledgement
<https://www.winnipeg.ca/media/4832/>
 - (iii) Performance Bond – Schedule C – Surety's Position
<https://www.winnipeg.ca/media/4833/>
- (b) Labour & Material Payment Bond <https://www.winnipeg.ca//media/4930/>
 - (i) L&M Bond – Schedule A – Notice of Claim
<https://www.winnipeg.ca/media/4834/>
 - (ii) L&M Bond – Schedule B – Acknowledgement of a Notice
<https://www.winnipeg.ca/media/4835/>
 - (iii) L&M Bond – Schedule C – Surety's Position
<https://www.winnipeg.ca/media/4836/>
- (c) Irrevocable Standby Letter of Credit <https://www.winnipeg.ca//media/4931/>

D10.1.2 Where the contract security is a performance bond, it may be submitted in hard copy or digital format. If submitted in digital format the contract security must meet the following criteria:

- (a) the version submitted by the Contractor must have valid digital signatures and seals;
- (b) the version submitted by the Contractor must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
- (c) the version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
- (d) the verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
- (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding D10.1.2(b).

D10.1.3 Digital bonds failing the verification process will not be considered to be valid and may be determined to be an event of default in accordance with C18.1. If a digital bond fails the verification process, the Contractor may provide a replacement bond (in hard copy or digital format) within seven (7) Calendar Days of the City's request or within such greater period of time as the City in their discretion, exercised reasonably, allows.

D10.1.4 Digital bonds passing the verification process will be treated as original and authentic.

D10.1.5 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 Contract Administrator identified in D5 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.

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.

D12. DETAILED WORK SCHEDULE

D12.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site.

D12.2 Detailed Work Schedule shall consist of the following dates:

- (a) Start date;
- (b) Excavation for play area and path;
- (c) Rough Grading;
- (d) Installation of sub-surface drainage;
- (e) Installation of play edging;
- (f) Installation of play equipment;
- (g) Installation of safety surfacing;
- (h) Installation of path and seating areas;
- (i) Installation of site furniture;
- (j) Installation of trees;
- (k) Installation of soil and sod; and
- (l) Expected completion.

D12.3 Other milestone dates appropriate to this project should also be included to make the Contract Administrator aware of them.

SCHEDULE OF WORK

D13. COMMENCEMENT

D13.1 The Contractor shall not commence any Work until they are in receipt of a notice of award from the City 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;
- (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;
- (vii) the detailed work schedule specified in D12; and
- (viii) the direct deposit application form specified in C12.20.

(b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D13.3 The Contractor shall order play equipment within seven (7) Working Days of receipt of the award letter.

D13.4 **The Contractor shall not commence the Work on the Site before July 2, 2026.**

D14. SUBSTANTIAL PERFORMANCE

D14.1 **The Contractor shall achieve Substantial Performance by August 28, 2026.**

D14.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D14.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D15. TOTAL PERFORMANCE

D15.1 **The Contractor shall achieve Total Performance by September 4, 2026.**

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 Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City five hundred dollars (\$500) per Working Day for each and every Working Day following the day fixed herein for Substantial 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 Substantial 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. SCHEDULED MAINTENANCE

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

- Trees as specified in E22.

D17.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D18. JOB MEETINGS

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

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

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

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

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

D20.1 Further to B15.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at their sole discretion and acting reasonably, require updated proof of compliance, as set out in B15.4.

D21. SAFETY

D21.1 Further to C6, the Contractor shall be solely responsible for safety at the Site and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.

D21.2 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.

D21.3 The Contractor shall do whatever is necessary to ensure that:

- no person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
- the health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of their performance;
- adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;

- (d) adequate sanitation measures are taken and facilities provided with respect to the Work;
- (e) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work or Plant;
- (f) fire hazards in or about the Work are eliminated.

D22. SITE CLEANING

D22.1 The Contractor shall maintain the Site and the Work in a tidy condition and free from the accumulation of waste and debris, other than that caused by the City or by other contractors.

D22.1.1 As the Work progresses, the Contractor shall remove any Plant and Material not required for the performance of the remaining Work. He shall also remove waste and debris other than that caused by the City or other Contractors, and leave the Site and the Work clean and suitable for occupancy by the City unless otherwise specified.

D22.1.2 Total Performance shall not be considered to have been achieved until the Contractor has cleaned up the Site and has removed all Plant, surplus Material, waste and debris, other than that left by the City or other contractors.

D23. INSPECTION

D23.1 Before beginning or resuming operations upon any portion of the Work, the Contractor shall notify the Contract Administrator so as to enable him to arrange for inspection. If the Contractor fails to notify the Contract Administrator, the Contractor shall, if and when required by the Contract Administrator, forthwith take down or expose and redo that portion of the Work required to facilitate inspection. The cost of such taking down or exposure, and redoing, if any, shall be borne by the Contractor.

D23.2 If and when required by the Contract Administrator, the Contractor shall take down or expose forthwith any portion of the Work where the Contract Administrator determines that the Work is not in accordance with the Contract. The cost of such taking down or exposure, and redoing, if any, shall fall upon the City if the taking down or exposure indicates that the portion exposed was properly performed, but if otherwise the cost shall be borne by the Contractor.

D24. DEFICIENCIES

D24.1 Further to C11, the Contract Administrator may order the Contractor to alter or improve their methods, to increase or improve their Plant, to furnish additional or more suitable Material, or to employ additional or more qualified labour if, at any time, the Contract Administrator determines that:

- (a) the Work is not being, or will likely not be, performed satisfactorily; or
- (b) progress is not being, or will likely not be, maintained in accordance with the work schedule.

PAYMENT

D25. PAYMENT

D25.1 Further to C12, the City shall make payments to the Contractor by direct deposit to the Contractor's banking institution, and by no other means. Payments will not be made until the Contractor has made satisfactory direct deposit arrangements with the City. Direct deposit application forms are at https://winnipeg.ca/finance/files/Direct_Deposit_Form.pdf.

D26. PAYMENT SCHEDULE

D26.1 Further to C12, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

WARRANTY

D27. WARRANTY

D27.1 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.

D27.1.1 For the purpose of contract security, the warranty period shall be one (1) year.

D27.2 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.

D27.2.1 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.

INDEMNITY

D28. INDEMNITY

D28.1 Indemnity shall be as stated in C17.

FORM J: SUBCONTRACTOR LIST

(See D11)

EARL GREY PLAYGROUND REDEVELOPMENT

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, Purchasing Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>

E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.

E1.2.3 Further to C2.4(d), Specifications included in the Request for Proposal shall govern over *The City of Winnipeg Standard Construction Specifications*.

E1.3 Proponents 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:

Specification No.	Specification Title
CW-1110	General Instructions
CW-1130	Site Requirements
CW-2030	Excavation Bedding and Backfill
CW-2160	Concrete Underground Structures and Works
CW-3110	Sub-Grade, Sub-Base and Base Course Construction
CW-3120	Installation of Sub Drains
CW-3130	Supply and Installation of Geotextile Fabrics
CW-3135	Supply and Installation of Geogrid
CW-3170	Earthwork and Grading
CW-3410	Asphaltic Concrete Pavement Works
CW-3550	Chain Link and Drift Control Fence

Drawing No.	Drawing Name/Title
E.3-G1	Existing Conditions & Removals
E.3-G2	Materials Plan
E.3-G3	Grading Plan
E.3-G4	Layout Plan
E.3-G5	Timber Edging Layout Plan
E.3-G6	Details
E.3-G7	Details
E.3-G8	Details
E.3-G9	Details
	CAD File of Site Layout
SCD-121D	Tache Backless Bench Composite with Arms
SCD-121E	Tache Bench Composite with Arms
SCD-122A	Tache Style Accessible Metal Frame Picnic Table
SCD-517	Standard Detail for Tree Planting
SCD-648	Park Pathway Asphalt

SCD-650	Engineered Wood Fibre Safety Surfacing Drainage Diagram
SCD-651	Single Timber Edging with Cap
SCD-651A	Double Timber Edging with Cap
SCD-656	Accessible Playground Ramp
SCD-659	Multi-flow Drainage
SCD-661	Perforated Pipe w/Filter Cloth Drainage System

E2. HAZARDOUS MATERIALS

E2.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

E3. EXISTING SERVICES AND UTILITIES

E3.1 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

E4. ACCESS TO SITE

E4.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at their own expense and approved by the Contract Administrator.

E4.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and they shall be responsible for all damage resulting from their Work on private property.

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

E5.1 Further to C6.13, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.

E5.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.

E5.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.

E5.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.

E5.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.

E5.6 The Contractor and Sub-contractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of their encountering of suspected hazardous material during their course of Work.

E6. DAMAGE TO EXISTING STRUCTURES, TREES AND PROPERTY

E6.1 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.

E6.2 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.

E6.3 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 their designate.

E6.4 No separate measurement or payment will be made for the protection of trees.

E7. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

E7.1 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 they are working near them. Any damage caused by the negligence of the Contractor or their Sub-Contractors to the adjacent Works or properties, shall be promptly repaired by him at their own expense, to the satisfaction of the Contract Administrator.

E7.2 Ambulance/ Emergency vehicle access must be maintained at all times.

E8. PROTECTION OF THE SURVEY INFRASTRUCTURE

E8.1 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.

E8.2 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.

E8.3 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 their agent and all associated costs shall be paid for by the Contractor.

E8.4 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.

E9. SITE ENCLOSURES

E9.1 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.

E9.2 Site enclosures shall be considered incidental to the Contract Work.

SITE DEVELOPMENT

E10. REMOVALS

E10.1 This Specification shall cover the removal of existing wooden shade structure, play equipment, safety surfacing, timber edging, site furniture (including removal and storage of bike rack), chain link fencing, and tree removal, as identified by the Contract Administrator.

E10.2 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 herein specified.

E10.3 Voids from concrete footings shall be filled and sufficiently compacted with clean fill. Any concrete footings that cannot be removed in their entirety shall be cut down 300mm below subgrade and voids filled with compacted clean fill.

E10.4 Construction methods

E10.4.1 Remove existing wooden shade structure, play equipment, safety surfacing, timber edging, site furniture, and chain link fencing as identified by the Contract Administrator.

(a) At the discretion of the Contract Administrator, some or all of the removed play equipment components may be salvaged by the City of Winnipeg.

E10.4.2 The Contractor shall remove trees designated for removal to min. 600mm below proposed grade with use of a stump grinder. The Contractor shall load and haul all waste materials from the site and dispose of these materials at dumps located by the Contractor and approved by the Contract Administrator

E10.4.3 Voids and depressions left from removals shall be filled and sufficiently compacted with clean fill. Any concrete footings that cannot be removed in their entirety shall be cut down 300 mm below subgrade and void filled with compacted clean fill.

E10.4.4 Tree wells left from tree removals shall be filled and sufficiently compacted with clean fill.

E10.4.5 The Contractor shall load and haul all waste materials from the site and dispose of these materials at dumps located by the Contractor and approved by the Contract Administrator.

E10.5 Method of Measurement

E10.5.1 Method of Measurement shall be as follows:

- (a) Removals shall be measured on a lump sum basis for:
 - (i) "Remove & Legally Dispose of Existing Play Equipment (Shade Structure, 2 x Play Structures and Equipment, Bucket Seat Swings, Timber Edging, Site Furniture and Tree Removal)" on Form B: Prices.
- (b) Removals shall be measured on a linear metre basis for:
 - (i) "Remove & Legally Dispose of Existing Chain Link Fencing" on Form B: Prices.
- (c) No separate measurement shall be made for filling voids, depressions or footing holes with fill material as this work is incidental herein.
- (d) No separate measurement shall be made for tree wells with fill material as this work is incidental herein.

E10.6 Basis of Payment

E10.6.1 Basis of Payment shall be as follows:

- (a) Removals will be paid for at the Contract Unit Prices on 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 separate payment shall be made for filling voids, depressions or footing holes with fill material as this work is incidental herein.
- (c) No separate measurement shall be made for tree wells with fill material as this work is incidental herein.

E11. ASPHALT REMOVAL

E11.1 This Specification shall cover the removal of a portion of existing asphalt and base material as identified in the drawings and confirmed by the Contract Administrator on site.

E11.2 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 herein specified.

(a) Asphalt removal shall consist of:

- (i) Full removal of asphalt and base material to a minimum depth as specified on the Drawings.

E11.3 Construction methods

E11.3.1 Remove a portion of existing asphalt and base material.

E11.3.2 Where asphalt to be removed meets existing asphalt to remain, asphalt shall be sawcut.

E11.3.3 The Contractor shall load and haul all waste materials from the site and dispose of these materials at dumps located by the Contractor and approved by the Contract Administrator.

E11.4 Method of Measurement

E11.4.1 Method of Measurement shall be as follows:

- (a) No separate measurement shall be made for asphalt removal as this work is incidental to E13.

E11.5 Basis of Payment

E11.5.1 Basis of Payment shall be as follows:

- (a) No separate payment shall be made for asphalt removal as this work is incidental to E13.

E12. EXCAVATION AND GRADING

E12.1 General Description

E12.1.1 This Specification shall amend and supplement CW 3110 and CW 3170. It shall cover the excavation and legal disposal of existing safety surfacing, asphalt pathways and earthen material.

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

E12.1.2 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:
 - ◆ Existing safety surfacing to be excavated to 200 mm depth (min) inside proposed play area, with a variance of \pm 50 mm throughout;
 - ◆ Existing safety surfacing and earthen material to a sufficient depth to allow for required depth of rubber safety surfacing and manufacturer's specified drainage system inside proposed play areas;
 - ◆ Existing safety surfacing and earthen material to be excavated to 200 mm depth (min) outside proposed play areas;
 - ◆ Existing safety surfacing and earthen material to be excavated to approx. 600 mm tree depth (min) outside proposed play areas, unless otherwise noted;
 - ◆ New Asphalt Pavement excavation as per SCD-648;
 - ◆ New play area to be excavated to a sufficient depth to allow for required depth of rubber safety surfacing and manufacturer's specified drainage system;
 - ◆ All extraneous materials are to be removed from the Site and disposed of in a safe and legal manner.

E12.1.3 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.

E12.2 Construction Methods

E12.2.1 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.

E12.2.2 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.

E12.2.3 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.

E12.3 Method of Measurement and Basis of Payment

E12.3.1 Method of Measurement shall be as follows:

- (a) Excavation and Grading shall be measured on a square metre basis for:
 - (i) "Excavate & Legally Dispose Earthen Material and Existing Safety Surface Inside Proposed Play Areas" on Form B: Prices.
- (b) Excavation and Grading shall be measured on a cubic metre basis for:
 - (i) "Excavate & Legally Dispose of Existing Safety Surfacing and Earthen Material Outside Proposed Play Area and Pathways to Min. 200 mm Depth, unless otherwise Noted";

- (ii) "Excavate & Legally Dispose of Existing Safety Surfacing and Earthen Material Inside Proposed Play Area to Allow for 200mm Depth Compacted Engineered Wood Fibre and Manufacturer's Specified Drainage System";
- (iii) Excavate & Legally Dispose of Existing Safety Surfacing and Earthen Material Outside Proposed Play Area to Approx. 600 mm Tree Depth, Unless Otherwise Noted"; on Form B: Prices.
- (c) No separate measurement shall be made for excavation for the following items as these items are incidental to the Work herein:
 - (i) Asphalt pathways and seating areas;
 - (ii) Timber retaining wall and timber edging;
 - (iii) Import of clean fill to achieve rough grading grades and earthwork and site grading grades.
- (d) No separate measurement shall be made for Finish Grading as this item is incidental to the Work herein.
- (e) 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.

E12.3.2 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 will be made for excavation for the following items as these items are incidental to the Work therein:
 - (i) Asphalt pavement and seating areas;
 - (ii) Timber edging;
 - (iii) Import of clean fill to achieve rough grading grades and earthwork and site grading grades; and
 - (iv) Finish grading.
- (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.

E13. ASPHALT PAVEMENT

E13.1 General Description

E13.1.1 This Specification shall supplement CW 3110, CW 3130, and 3410 and shall cover the supply and installation of asphalt pavement.

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.

E13.1.3 The use of recycled concrete as a base material will not be permitted.

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 the Drawings, E10, CW 3110, and as per SCD-648, as indicated on the Drawings.

(b) Excavation shall be understood to include all removal of existing insitu material necessary to achieve finished grade and as indicated on Drawings and as per E10.

(c) The Contractor shall survey and stake out the proposed asphalt 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 done in accordance with E10 and as outlined in CW 3310.

(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 legally 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 performed as outlined in 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 Reinforcing Geotextile (Combigrid)

E13.5.1 Reinforcing geotextile **for indicated areas on the Drawings** shall be Combigrid 30/30 Q1 151 GRK 4C, which is a non-woven geotextile/geogrid combination or approved substitute in accordance with B7.

(a) Contact for Combigrid:

Brock White.

879 Keewatin Street Winnipeg, Manitoba

Ph: (204) 694-3600 or 1 (888) 786-6426

(b) Technical Data:

(i) Raw Material: Polypropylene/PP

(ii) Nominal Tensile Strength (longitudinal/transverse): $\geq 30 / \geq 30$ kN/m

(iii) Tensile Strength at 2% Elongation (long./trans.): 12 / 12 KN/m

- (iv) Elongation at Nominal Tensile Strength (long./trans.): $\leq 8 / \leq 8 \%$
- (v) Extensional Stiffness at 1% Strain (long./trans.): 600 kN/m / 600 kN/m
- (vi) Cyclic Modulus at 0.5% Strain: $\geq 1.150 \text{ kN/m}$
- (vii) Torsional Rigidity: $\geq 14.7 \text{ kg-cm/deg}$
- (viii) Construction related strain: 0 %

E13.5.2 Construction Methods

- (a) Combigrid shall be placed after sub-grade excavation and compaction have taken place. It shall be installed as per manufacturer's specifications.

E13.6 Geotextile Fabric

E13.6.1 Description

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

E13.6.2 Materials

- (a) The separation/ reinforcement geotextile fabric shall conform to the Products Approved as listed in City of Winnipeg Specification for Approved Products for Surface Works.

(i) [Approved_Product_Surface_Works.pdf \(winnipeg.ca\)](Approved_Product_Surface_Works.pdf (winnipeg.ca))

E13.6.3 Construction Methods

- (a) Separation/ Reinforcement geotextile fabric shall be installed as outlined in of CW 3110.

E13.7 Crushed Limestone Sub-base Course Material

E13.7.1 Description

- (a) Crushed limestone sub-base material shall be supplied and installed in accordance with CW 3110.

E13.7.2 Materials

- (a) Sub Base: 50 mm (2") down crushed limestone as per SCD-648.

E13.7.3 Construction Methods

- (a) Crushed limestone sub-base material shall be supplied and installed as outlined in CW 3110.
- (b) All limestone sub-base material shall be placed and compacted as specified to a finished thickness as shown on the Drawings.

E13.8 Crushed Limestone Base Course Material

E13.8.1 Description

- (a) Crushed limestone base material shall be supplied and installed in accordance with CW 3110.

E13.8.2 Materials

- (a) Base course material shall be 20 mm (3/4") down crushed limestone.

E13.8.3 Construction Methods

- (a) Crushed limestone base material shall be supplied and installed as outlined in Section 3.4 of CW 3110.
- (b) All limestone base course material shall be placed and compacted as specified to finished thickness as shown on the drawings.

E13.9 Asphaltic Pavement

E13.9.1 Description

(a) Asphaltic concrete shall be supplied and installed in accordance with CW 3410.

E13.9.2 Materials

(a) Asphaltic concrete shall be Type 1A as specified and to a thickness as specified on SCD-648 as indicated on the Drawings.

E13.9.3 Construction Methods

(a) Asphaltic concrete shall be supplied and installed in accordance with the lines, grades and thickness shown on the Drawings and per CW 3410. Asphalt shall be placed in one lift.

E13.10 Crack Sealing

(a) As a Warranty Requirement, the Contractor shall route, clean, and seal any and all cracks which may appear during the one-year warranty period, per CW 3250.

(b) No additional payment will be made for crack sealing as this item is considered a warranty issue and covered under G.C.13 Warranty.

E13.11 Quality Control for Hard Surfaced Areas

(a) Further to CW 3110 and CW 3410, and to E13.2.1 of this Specification, the Contract Administrator may obtain a qualified independent testing lab to conduct tests on materials to determine the acceptability of the sub-grade, sub-base, base course and asphaltic concrete as placed by the Contractor in accordance with the requirements of this Specification.

(b) The Contractor shall not proceed with each granular fill placement or asphalt installation until test results have been reviewed and approval to proceed is granted by the Contract Administrator.

(c) The Contract Administrator will conduct a survey of the operation to verify installation of specified layer thickness.

(d) Non-conformity with the specified test requirements or compacted layer thickness will constitute sufficient grounds for rejection of the Work.

E13.12 Method of Measurement and Basis of Payment

E13.12.1 Method of measurement shall be as follows:

(a) Asphalt pavement shall be measured on a square metre basis for:

(i) "Supply & Install Asphalt Pavement with Geotextile Fabric"; and

(ii) "Supply & Install Asphalt Pavement with Geogrid Reinforcement" on Form B: Prices.

(iii) **No additional measurement will be made for excavation for Asphalt Pavement as this item is incidental to the Warranty of the Work herein.**

(b) No measurement will be made for material testing as this item is incidental to the Work herein.

(c) No separate measurement will be made for Crack Sealing as this item is incidental to the Warranty of the Work herein.

E13.12.2 Basis of Payment shall be as follows:

(a) Asphalt 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 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 will be made for excavation for Asphalt Pavement as this item is incidental to the Warranty of the Work herein.**
- (c) No additional payment will be made for Crack Sealing as this item is incidental to the Warranty of the Work herein.

E14. TIMBER EDGING AND RETAINING WALLS

E14.1 General Description

E14.1.1 This Specification shall cover the supply and installation of timber edging and walls to contain safety surfacing as per the Drawings.

E14.1.2 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.

E14.2 Materials

E14.2.1 Limestone Base Course

- (a) 19 mm (3/4") down limestone, per CW 3110.
- (b) Recycled concrete will not be accepted.

E14.2.2 Timbers

- (a) All wood for the timber courses shall be pressure treated spruce, pine or fir, No. 2 or better, no wane, bark, checking or splitting permitted. Wood shall be smooth and free of rough areas.
- (b) Size: All timbers to be 140 x 140 mm with a minimum length of 1200 mm.

E14.2.3 Rebar

- (a) Size: 19 mm Ø x 1000 mm.

E14.2.4 Composite Cap

- (a) Per SCD-651A.
- (b) Size: 32 mm x 140 mm boards with a minimum length of 1200 mm.

E14.2.5 Preservative

- (a) Above Ground: Clear type suitable for outdoor applications above ground.
- (b) Below Ground: Type suitable for outdoor applications below ground.

E14.2.6 Spikes

- (a) Size: 12 mm Ø x 250 mm

E14.2.7 Fasteners

- (a) Screws per SCD-651A.
- (b) Designed for fastening composites to ACQ treated wood and sized to suit.

E14.2.8 Drainage pipe

- (a) "Goldline" 100 mm dia. (4") high-density polyethylene (HDPE) perforated drainage pipe, complete with fittings and polyester sock.

(i) Goldline®

♦ Manufacturer: Prinsco Water Management Solutions

Website: <https://www.prinsco.com/prinsco-markets/products/goldline-stormwater/>

Ph: 1-800-992-1725

- ◆ Specifications: <https://www.prinsco.com/wp-content/uploads/2017/09/Goldline-HD-Prinsco-Single-Wall-Specification.pdf>
- (ii) Or approved substitute as per B7.
- ◆ Substitutions must the requirements of the American Association of State Highway and Transportation Officials (AASHTO) M252 and AASHTO M294.

E14.2.9 Rodent screen

(a) Rodent screen made of 7.6 mm (0.3") by 7.6 mm (0.3") square opening size, 1.6 mm (0.063") gauge, stainless steel or galvanized, welded wire mesh shall be installed in each outlet lateral line. When using galvanized welded wire mesh, the rodent screen shall be galvanized after it has been formed to the shape and dimensions shown on the plans or specified by the Contract Administrator.

E14.3 Construction Methods

E14.3.1 All Work to be located and installed in accordance with the Drawings.

- (a) Contractor shall confirm proposed timber edging locations with Contract Administrator prior to construction.
- (b) Contractor shall verify underground utility locations prior to construction and report any discrepancies to the Contract Administrator immediately.
- (c) Granular base course shall compacted to a minimum of ninety five percent (95%) of Standard Proctor Density and as per Drawings.
- (d) Build work square, plumb, and accurate to required size, height, length, and depth, with joints closely fitted and properly secured.
- (e) All wood cuts shall be sanded to remove any burrs.
- (f) Use timbers of the longest possible length to minimize joints, min. length is 1200mm.
- (g) Treat in field, cuts and damages to surface of treated material with an appropriate, clear preservative. Ensure that damaged areas such as abrasions spike and screw holes are thoroughly saturated with field treatment solution.
 - (i) 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.
 - (ii) Re-treat surfaces exposed by cutting, trimming, or boring with liberal brush application of preservative before installation.

E14.3.2 Timber base course shall be pinned with minimum of two (2) 19 mm Ø x 500 mm rebar at maximum 1200 mm O.C.

E14.3.3 Successive timber tiers above timber base course shall be securely spiked with a minimum of two (2) 12 mm Ø x 250 mm spikes at maximum 1200 O.C.

E14.3.4 All timbers shall be cut neatly for a proper fit with no spaces or gaps between. Finished elevations shall ensure that all timbers are smooth, level, set plumb and spaced uniformly.

E14.3.5 Joints to be butt joints. Joints in straight runs are to be lapped over timber by a minimum of 600 mm.

E14.3.6 Pre-drill caps and screw down using structural screws rated for composite to ACQ fastening and sized to suit. Screws to extend into timber base min. 50 mm and be countersunk into cap. Install two parallel screws every 600 mm O.C. along length and at ends.

- (a) Min. length of composite cap to be 1200 mm. Install longest lengths possible.
- (b) Cap joints to be butt joints. Joints to be lapped with timber course below.

E14.3.7 Installation of retaining wall drainage system:

- (a) Fittings for the drainage system will be installed in accordance with the Manufacturer's recommendations and written specifications.
 - (i) The fittings used with the drainage system shall be of a snap together design. In no case shall any drainage product be joined without the use of the manufacturer's connector designed specifically for the purpose.
- (b) Installation of Goldline (HDPE) perforated drainage pipe:
 - (i) Subdrain is not to proceed until after the excavation/grading has been approved by the Contract Administrator.
 - (ii) The layout of the subdrain is to be marked on Site and approved by the Contract Administrator prior to trenching.
 - (iii) Layout of subdrain to be coordinated with layout of play equipment so as to prevent damage to subdrain during equipment installation.
 - (iv) Install as per the Drawings or as per CW-3120, CW-3130, and SCD-661.
 - (v) **Subdrain is to tie into playground subsurface drainage pipe within the play area.**

E14.3.8 Sod shall be repaired as required around edging and in accordance with the Drawings, CW 3540, and CW 3510.

E14.4 Method of Measurement and Basis of Payment

E14.4.1 Method of Measurement shall be as follows:

- (a) Timber Edging will be measured on a linear metre basis for:
 - (i) "Supply & Install 1-Tier Timber Edging with Cap";
 - (ii) "Supply & Install 2-Tier Timber Edging with Cap";
 - (iii) "Supply & Install 3-Tier Timber Wall with Cap";
 - (iv) "Supply & Install 4-Tier Timber Wall with Cap";
 - (v) "Supply & Install 5-Tier Timber Wall with Cap"; and
 - (vi) "Supply & Install 6-Tier Timber Wall with Cap" on Form B: Prices.

E14.4.2 Basis of Payment shall be as follows:

- (a) Timber Edging and Walls 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.

E15. PROTECTIVE SURFACING – ENGINEERED WOOD FIBRE

E15.1 General Description

E15.1.1 This Specification shall cover the supply and install of engineered wood fibre safety surfacing, including drainage layer.

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 General Instructions

E15.2.1 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.
- (ii) IPEMA Third Party Certification for impact attenuation may be required at the discretion of the Contract Administrator.

E15.3 Materials

E15.3.1 Wood Fibre product shall be either:

- (a) Zeager Woodcarpet System 1
 - (i) Woodcarpet
 - ◆ Manufacturer: Zeager Bros. Inc.
 - (ii) 4000 East Harrisburg Pike
 - (iii) Middletown, PA 17057, USA
 - (iv) Ph: (1-888) 346-8524 or (717) 944-7481
 - (v) Fax (717) 944-7681
 - (vi) Email: sales@zeager.com
 - (vii) Specifications:
 - ◆ <https://www.zeager.com/products/recreation/woodcarpet-system-1/>
- (b) FibarSystem 200
 - (i) FibarSystem
 - ◆ The Fibar Group LLC
 - (ii) 80 Business Park Drive, Suite 300
 - (iii) Armonk, NY 10504-1705, USA
 - (iv) Ph: (800) 342-2721
 - (v) Fax: (914) 273-8659
 - (vi) Email: info@FibarPlaygrounds.com
 - (vii) Specifications:
 - ◆ <http://www.fibar.com/playgrounds/specs200.htm>
- (c) Or approved substitute.
 - (i) If substitute to Zeager Woodcarpet or Fibar FibarSystem 200 is proposed, it must meet the following conditions:
 - ◆ Materials must be IPEMA certified Engineered Wood Fiber;
 - ◆ Material must consist of random-sized, clean, engineered hardwood chips. Standard wood chips or bark mulch are not acceptable;
 - ◆ Materials must meet or exceed ASTM F1292 standards for impact attenuation;
 - ◆ Materials must be certified by the CSA and approved for playground use;
 - ◆ Materials must comply with ASTM F1951 for accessibility under the Canadians with Disabilities Act; and
 - ◆ Materials must be covered by \$10,000,000.00 product liability insurance as well as provide a minimum 10-year warranty against loss of resiliency.
- (d) Wood Fibre surfacing shall include wood fibre, filter cloth, granular drainage layer and mats under swings and ends of slides.
- (e) Mats are to be installed directly on top of the geotextile fabric and secured in place with two (2) duckbill anchors per mat.

E15.4 Construction Methods

E15.4.1 Wood Fibre shall be installed within the play areas, as defined by the play edging to a **minimum depth of 200 mm** (after compaction). In the case where proposed play

equipment includes a maximum fall height greater than 2400 mm (8-0''), depth of material to directly correspond to maximum fall height of play equipment in accordance with manufacturer's specifications.

- E15.4.2 The installation of the Wood Fibre shall be done immediately after the play equipment has been installed.
- E15.4.3 Installation of entire system, including fibre, filter cloth and mats under swings and slide ends shall be done according manufacturer's instructions. Adequate drainage within play equipment area must be ensured as per same.
- E15.4.4 Adequate drainage within play equipment area must be ensured and in accordance with manufacturer's written instructions and specifications.
- E15.4.5 Filter fabric must be cut and fit around playground equipment footings and overlap seams by 300 mm.
- E15.4.6 Installation shall be done by equipment sized to suit the Work being done and the Wood Fibre 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 Wood Fibre.

E15.5 Method of Measurement and Basis of Payment

- E15.5.1 Method of Measurement shall be as follows:
 - (a) Protective Surfacing will be measured on a square metre basis for:
 - (i) "Supply & Install 200 mm Depth Engineered Wood Fibre Safety Surfacing c/w Subsurface Drainage" on Form B: Prices.
 - (b) No measurement will be made for subsurface drainage within the play area as this item is incidental to the Work herein.
 - (c) No measurement will be made for the additional depth of safety surfacing required, as this item is incidental to the Work herein.
- E15.5.2 Basis of Payment shall be as follows:
 - (a) Protective 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 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 payment will be made for subsurface drainage within the play area as this item is incidental to the Work herein.

E16. PROTECTIVE SURFACING - RUBBER

- E16.1 This section shall cover the construction of a resilient rubber safety surfacing within the Play Areas. This section shall include furnishing all labour, materials, equipment, and services required to install base and porous granular EPDM surfacing.
- E16.2 Standards
 - (a) All products in accordance with ASTM F_1292 and CAC/CSA Z-614 for GMAX and HIC testing.
 - (b) Hardness: ASTM D-2444 94% recovery
 - (c) Water Absorption: ASTM D-530 +6.5%
 - (d) Ultraviolet Resistance: ASTM D-3137
 - (e) Fungal and Bacterial Resistance: no growth
 - (f) Spread of Flame Resistance: ANSI/UL 790 (ULC=S107) Class A

- (g) Accelerated: weathering no change after 2000 hours
- (h) Freeze/thaw: no change after 30 days at minus 50 in a 24-hour period

E16.3 Qualifications

E16.3.1 The authorized rubber installer must have a minimum of 5 years experience in the rubber surfacing industry.

E16.4 Materials

E16.4.1 Compacted granular base layer shall be supplied in accordance with CW 3110 and as per Drawings and manufacturers instructions.

E16.4.2 Non-woven Geotextile Fabric as per CW 3130 shall conform to the Products Approved as listed in City of Winnipeg Specification for Approved Products for Surface Works.

E16.4.3 Rubber surfacing

- (i) Top course material shall be pure vulcanized virgin EPDM rubber chips ranging in size from 0.5 to 1.5 mm minimum dimension to 1 to 4 mm maximum dimension. EPDM shall be of the highest quality and UV stable.
- (ii) Impact course material shall be SBR (Styrene butadiene rubber) low density rubber base and appropriate binder.
- (iii) Contractor to provide a colour sample and obtain approval from CA prior to ordering. Subsurface layers may be the specified colour or black provided that a top surface layer with a minimum thickness of 1 cm is the specified colour.
- (b) Binder shall be resin (Aromatic or aliphatic binders, isocyanate) as appropriate to the material being bound. Binder shall be 100% urethane and contain no TDI and not labeled toxic. Accelerators may be used with aliphatic binders.
- (c) Primer shall be Aromatic solvent free primer.
- (d) Finish product shall be porous and composed of 50% Large and 50% small granules of EPDM rubber.
- (e) Finish surface to withstand 600 psi tensile stress, be non-slip when wet or dry, fungus and bacterial resistant, and chemical resistance so that there is no effect from oil, lye, hydrochloric acid, animal fat, grease, acetone, toluidine, alcohol, blood, chlorine, urine, detergents or insect spray.
- (f) Colour of finished surface to be:
 - (i) **1 Mix of 50% black, 25% Aromatic blue, and 25% Aromatic green.**

E16.5 Acceptable Products

E16.5.1 Stargum EPDM granules vulcanized with sulphur or equal approved in accordance with B7, Rubber FX playground system as supplied by Prairie Safety Surfacing or approved equal in accordance with B7.

- (a) Supplier & Installer: Prairie Rubber Paving 1450 Dublin Avenue Winnipeg, MB R3H 0E4 Ph: (877) 413-4248

E16.6 Maintenance Kits

E16.6.1 Contractor shall supply the City with a 25 kg. bag of rubber crumb for each colour or colour mix used on the site.

E16.6.2 Contractor shall supply a 25 kg container of the Aromatic Binder used in the install as part of a maintenance kit.

E16.7 Execution

E16.7.1 All sub-surfaces will be inspected and accepted by the contract administrator and installer prior to application. Any discrepancies shall be rectified prior to the installer proceeding with installation.

E16.7.2 Confirm acceptability of substrate prior to installation.

E16.7.3 Poured in place rubber safety surfacing depth shall be installed within the play areas to a to achieve:

- (a) A minimum fall height of 3048 mm (10-0") for equipment with a specified fall height of 3048 mm (10-0") or lower; and
- (b) For equipment with a specified fall height greater than 3048 mm (10'-0"), fall heights shall meet current CAN/CSA Z1614, Consumer product safety commission (CPSC), and ASTM 1292-99.
- (c) System thickness for fall heights must comply with CSA, Consumer product safety commission (CPSC) and ASTM 1292-99 standards for playground surfacing. The surface must be installed at a thickness that will provide a Gmax less than 150 and a HIC less than 800 when the installation has been tested with a Triax2015 instrument between 10 and 25 days after installation is complete. The determined drop height for these tests will be derived from the top of all structures including railings, barriers, slides and climbers. For swings the drop height will be the top of the suspending bar.
- (d) Consumer product safety commission (CPSC) and ASTM 1292-99 fall height requirements based on total system thickness of impact course and wear course are as follows:

FALL HEIGHT	SYSTEM THICKNESS
1210 mm (4')	38 mm (1.5")
1829 mm (6')	64 mm (2.5")
2438 mm (8')	83 mm (3.5")
3048 mm (10')	114 mm (4.5")
3657 mm (12')	140 mm (5.5")
4267 mm (14')	165 (6.5")

- (e) Poured in place rubber safety surfacing shall be dual density, resilient impact attenuating safety surfacing system that is mixed, troweled and compacted on Site to form a resilient seamless surface. Surface system shall consist of an impact layer and a wear layer consisting of recycled tire crumb, chips, or thread, blended with a polyurethane binder throughout the entire depth of surfacing.
- (f) The crumb rubber/resin base layer shall be mixed to manufacturer's specifications.
- (g) Do not install when overnight temperature will fall below 5°C or as per manufacturers minimums.
- (h) The selected EPDM topcoat granules should be coated with aromatic resin in a non-porous container at a resin ratio of 80% rubber to 20% urethane resin by weight. Topcoat shall be not less than 6mm or more than 12mm in depth. It is recommended that the mixing of the topcoat be carried out with an electric vertical shaft mortar mixer to ensure consistency and assuring complete coverage of each granule.
- (i) The resin should be applied to the rubber, once the rubber is initially working within the mixer. The above must be mixed for approximately 1-3 minutes.
- (j) Installer shall wear protective clothing including gloves and shall change protective clothing regularly during the installation.
- (k) Should resin or solvent come into contact with the skin this must be immediately washed off with suitable detergents and water.

- (l) When troweling the product the Contractor shall use protective knee boards or knee pads.
- (m) Contractor shall have all Material Safety Data Sheets (MSDS) on site during installation.
- (n) Contractor shall erect barricades prior to installation and maintain them in place for a period of 24 to 48 hours after installation.
- (o) Contractor shall maintain a continuous watch on the site following the install until the material has cured.
- (p) Upon completion of the work the Contractor shall remove all tools, equipment, unused materials, and debris from the site, and broom clean the entire area.
- (q) Provide written verification from the recycled rubber product supplier to confirm that the surface meets CSA fall height standards.

E16.8 Method of Measurement and Basis of Payment

E16.8.1 Method of Measurement shall be as follows:

- (a) Protective Surfacing will be measured on a square metre basis for:
 - (i) "Supply & Install Rubber Surfacing 5-12 Years";
 - (ii) "Supply & Install Rubber Surfacing 2-5 Years" on Form B: Prices.
- (b) No measurement will be made for subsurface drainage within the play area as this item is incidental to the Work herein.

E16.8.2 Basis of Payment shall be as follows:

- (a) Protective 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 Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials including all geotextile, base course, binding agents and primers, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E17. SUB-SURFACE DRAINAGE OF PROTECTIVE SURFACING AREAS

E17.1 General Description

E17.1.1 This Specification shall cover the supply and installation of a prefabricated geocomposite drain system or a perforated HDPE drainage pipe drain system to drain protective surfacing areas, complete with connection to an existing catch basin.

E17.1.2 Proposed subsurface drainage plan is subject to approval by the City of Winnipeg Parks Department and the Contractor Administrator.

E17.1.3 Work to be executed as per CW-2130, CW-3120, CW-3130, SD-245 SCD-650, SCD-659, SCD-661, and as shown on the Drawings.

E17.1.4 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 Materials

E17.2.1 Drainage pipe may be either:

- (a) "Goldline" 100 mm dia. (4") high-density polyethylene (HDPE) perforated drainage pipe, complete with fittings and polyester sock.
 - (i) Goldline®
 - ◆ Manufacturer: Prinsco Water Management Solutions

- ◆ Website: <https://www.prinsco.com/prinsco-markets/products/goldline-stormwater/>
- ◆ Ph: 1-800-992-1725
- ◆ Specifications: <https://www.prinsco.com/wp-content/uploads/2017/09/Goldline-HD-Prinsco-Single-Wall-Specification.pdf>

(ii) Or approved substitute as per B7.

- ◆ Substitutions must the requirements of the American Association of State Highway and Transportation Officials (AASHTO) M252 and AASHTO M294.

(b) 150 mm (6") "Multi-Flow" drainage system, complete with fittings.

(i) Multi-Flow

- ◆ Manufacturer: Varicore Technologies
- ◆ Website: <http://www.Multi-Flow.com>
- ◆ Ph: 1-800-979-8007
- ◆ Email: service@varicore.com
- ◆ Multi-Flow Technical Properties Specifications: http://www.Multi-Flow.com/Menu/tech_props.html
- ◆ Model Specifications for Subsurface Drainage Section 2.1.1: http://www.Multi-Flow.com/PDF_Documents/Model_Specs/Model_NaturalTurf_Spec.pdf

(ii) Or approved substitute as per B7.

- ◆ Geotextile cover substitutions must meet requirements of ASTM D-3776, ASTM D-4632, ASTM D-751, ASTM D-3786, ASTM D-4533, ASTM D-4491, ASTM D-4751, ASTM D-4595 and ASTM G-21
- ◆ Drainage core substitutions must meet requirements of ASTM D-1777, ASTM D-4716 and ASTM D-1621

(c) Drainage pipe under areas subject to vehicular traffic must employ Multi-Flow drainage system.

E17.2.2 Fittings

(a) The fittings used with the edge drain shall be of a snap together design. In no case shall any drainage product be joined without the use of the manufacturer's connector designed specifically for the purpose. Cleanouts will be provided as indicated on the Drawings.

E17.2.3 Pipe

(a) Pipe for drain outlet laterals shall be 75 mm (3") high-density polyethylene (HDPE) pipe meeting the requirements of AASHTO M252.

(b) A rodent screen made of 7.6 mm (0.3") by 7.6 mm (0.3") square opening size, 1.6 mm (0.063") gauge, stainless steel or galvanized, welded wire mesh shall be installed in each outlet lateral line. When using galvanized welded wire mesh, the rodent screen shall be galvanized after it has been formed to the shape and dimensions shown on the plans or specified by the Contract Administrator.

E17.2.4 Backfill for Trenches

(a) Backfill for trenches utilizing HDPE perforated drainage pipe as per CW-3120, CW-3130 and SCD-661.

(b) Backfill for trenches utilizing Multi-Flow as per SCD-659.

E17.3 Construction Methods

E17.3.1 Installation of Goldline (HDPE) perforated drainage pipe

- (a) Subdrain is not to proceed until after the excavation/grading has been approved by the Contract Administrator.
- (b) The layout of the subdrain is to be marked on Site and approved by the Contract Administrator prior to trenching.
- (c) Layout of subdrain to be coordinated with layout of play equipment so as to prevent damage to subdrain during equipment installation.
- (d) Install as per the Drawings or as per CW-3120, CW-3130, and SCD-661.

E17.3.2 Installation of Multi-Flow drainage system

- (a) Multi-Flow installation is not to proceed until after the excavation/grading has been approved by the Contract Administrator.
- (b) The layout of the subdrain is to be marked on Site and approved by the Contract Administrator prior to trenching.
- (c) Install as per Manufacturer's written specifications.

E17.3.3 Subdrains within play areas are to be laid on the prepared surface to facilitate cross movement of water. Subdrains shall be installed below geotextile and in conformance with details provided.

- (a) Play areas are to be graded to drain towards subdrain. If using Engineered Wood Fibre, subdrain is to be used in conjunction with specified wood fibre drainage layer to bring excess water out of the play area as per SCD-650.

E17.3.4 Fittings for the drain will be installed in accordance with the Manufacturer's recommendations and written specifications.

E17.3.5 Any damaged edge drain or outlet lateral will be replaced or repaired by splicing in an undamaged section of drain at the Contractor's expense. The repair must be in accordance with the manufacturer's specification and to the satisfaction of the Contract Administrator.

E17.3.6 Contractor is to protect subdrain from excessive weight during the duration of construction and to repair and make good any pipe collapsed prior to acceptance.

E17.3.7 The Contractor shall be responsible for restoration of any surfaces damaged during the Work under this section.

E17.3.8 The top of the trench is to be finished as shown on the Drawings.

E17.3.9 The Multi-Flow drain system is to be connected to a solid pipe in accordance with manufacturer's recommendations and the pipe is then connected to the existing catch basin.

E17.3.10 Connection to catch basin

- (a) Connection to existing catch basin as per Section 3.15 of CW 2130.

E17.3.11 Trenches are to be inspected by the Contract Administrator prior to backfilling.

E17.4 Method of Measurement and Basis of Payment

E17.4.1 Method of Measurement shall be as follows:

- (a) Subsurface drainage will be measured on a lineal metre basis for:
 - (i) "Supply and Install subsurface drainage tied into existing catch basin" on Form B: Prices.
- (b) No measurement will be made for subsurface drainage within the play areas as this item is incidental to the Work herein.
- (c) No separate measurement shall be made for connection to the retaining wall drainage pipe as this item is incidental to the Work herein.

(d) No separate measurement shall be made for connection to the catch basin as this item is incidental to the Work herein.

E17.4.2 Basis of Payment shall be as follows:

(a) Protective 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 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 payment will be made for subsurface drainage within the play areas as this item is incidental to the Work herein.

(c) No separate payment shall be made for connection to the catch basin as this item is incidental to the Work herein.

E18. NATURAL PLAY ELEMENTS

E18.1 General Description

E18.1.1 This Specification shall cover the **supply and installation** of natural play elements 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 of a type approved by the Contract Administrator, and subject to inspection and testing by the Contract Administrator.

E18.2.2 All natural play elements shall be as per the Drawings.

E18.2.3 Ordering

(a) To order City of Winnipeg natural play elements email: BBabynchuk@winnipeg.ca, DSinclair@winnipeg.ca or CHemsworth@winnipeg.ca

E18.2.4 City of Winnipeg Natural Play Elements:

(a) Log Steppers x 4

(i) Product:

- ◆ 1.8m height oak log.
- ◆ **Cost \$250.00 each plus taxes.**

(ii) Finish:

- ◆ Logs to be debarked and skinned to remove all irregularities such as branch stubs.

(iii) Mounting: In-ground

(b) Play Log x 1

Product:

- ◆ Size varies as per the Drawings and log availability. Confirm size with Contract Administrator prior to ordering.
- ◆ Includes supply of 2x 150mm x 150mm "X" metal posts per log
- ◆ **Cost \$1,500.00 each plus taxes.**

Finish:

- ◆ Logs to be debarked and skinned to remove all irregularities such as branch stubs.

(c) Limestone Boulder x 3

(i) Product:

- ◆ Limestone boulders to be rectangular in shape and sized as per the Drawings.
- ◆ Top of boulder to be suitable for seating as approved by the Contract Administrator.

E18.2.5 Foundations

(a) CIP Concrete Foundations as per E24.

(b) Granular base shall be either 20mm diameter crushed limestone and shall be supplied and installed in accordance with CW 3110 and as per the Drawings.

(c) Granular backfill shall be 6mm diameter crushed limestone and shall be supplied and installed in accordance with CW 3110 and as per the Drawings.

E18.3 Construction Methods

E18.3.1 All Work is to be located and installed in accordance with the Drawings, and associated SCDs and/or Manufacturer's written instructions and specifications.

(a) All natural play elements 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 natural play elements with Contract Administrator prior to installation.

(b) All natural play elements are to be carefully handled so that no parts will be cracked, broken or otherwise damaged. Hammering is prohibited.

(c) Damaged natural play elements will not be accepted.

E18.3.2 CIP Concrete Foundations

(a) CIP Concrete foundations as per as per E24.

E18.3.3 Granular Base

(a) All limestone base material shall be placed and compacted as specified to finished thickness as shown on the Drawings.

E18.3.4 Granular Backfill

(a) All limestone backfill material shall be placed and compacted in 150mm lifts to depth as shown on the Drawings.

E18.4 Method of Measurement and Basis of Payment

E18.4.1 Method of Measurement shall be as follows:

(a) Supply and installation of Natural Play Elements will be measured at the Contract Unit Price per unit for:

- (i) "Supply & Install Log Steppers";
- (ii) "Supply & Install Play Log"; and
- (iii) "Supply & Install Fieldstone Boulders" on Form B: Prices.

(b) 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.

(c) No separate measurement shall be made for the CIP concrete foundations, granular base courses or granular backfill as these items are incidental to the Work herein.

E18.4.2 Basis of Payment shall be as follows:

(a) Natural Play Elements 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.

- (b) No separate payment shall be made for the CIP concrete foundations, granular base courses or granular backfill as these items are incidental to the Work herein.

E19. WOOD MULCH

E19.1 General Description

E19.1.1 This specification shall cover the supply and installation of wood mulch.

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.

E19.2 General Instructions

E19.2.1 Submittals

(a) Samples

- (i) Prior to installation, submit to the Contract Administrator a 500 g sample of wood mulch.

E19.3 Materials

E19.3.1 Wood Mulch

- (a) Unless otherwise indicated on the drawings, mulch shall be a natural clean bark or wood chip free of leaves, branches and other extraneous matter, consisting of chips not less than 15 mm nor larger than 75 mm in size and not more than 20 mm thick, or approved substitute.

E19.3.2 Geotextile Fabric

- (a) Geotextile Fabric shall be as per CW 3130.
- (b) The separation/reinforcement geotextile fabric shall conform to the Products Approved as listed in City of Winnipeg Specification for Approved Products for Surface Works:
 - (i) https://www.winnipeg.ca/finance/findata/matmgt/std_const_spec/current/Docs/Approved_Products_Surface_Works.pdf

E19.4 Construction Methods

E19.4.1 Preparation

- (a) Remove all sod, earthen materials, small plant material and root systems within the designated areas to a minimum depth of 75mm or as identified by the Contract Administrator. Trees and tree roots to remain are to be protected.
- (b) Any loose earth material left from the clearing shall be removed from Site.
- (c) Area to be leveled with topsoil as required.
- (d) Geotextile Fabric shall be installed as outlined in CW 3110.

E19.4.2 Wood Mulch

- (a) Commence installation of wood mulch after installation of leveling topsoil has been approved by the Contract Administrator.
- (b) Install mulch to a **compacted depth of 100 mm** or as indicated on the Drawings.
- (c) No mulch shall be placed within 10 cm of tree trunks.

E19.5 Method of Measurement and Basis of Payment

E19.5.1 Method of Measurement shall be as follows:

- (a) Wood Mulch will be measured on a per square metre basis for:
 - (i) "Supply & Install Wood Mulch Groundcover" on Form B: Prices.
- (b) No measurement will be made for removal of sod, earthen materials, small plant material and root systems as this item is incidental to the Work herein.

E19.5.2 Basis of Payment shall be as follows:

- (a) Wood 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 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 measurement will be made for removal of sod, earthen materials, small plant material and root systems as this item is incidental to the Work herein.

E20. FENCING

E20.1 Description

E20.1.1 This specification shall cover the supply and installation of timber and chain link fencing with 1219 mm (4') high chain link and timber fencing with P.T Posts and pedestrian access gate, as shown on the Drawings and specified herein.

E20.1.2 The work to be done by the Contractor, under this specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all things necessary for and incidental to the satisfactory performance and completion of all Work as specified herein.

E20.2 Materials

E20.2.1 Construction materials shall be:

- (a) Pressure Treated Timbers and Dimension Lumber: To CSA 080, ACQ-C treatment, Brown colour, No. 2 or better Pine. All wood to be free of defects, any warped, checked or bent materials will be rejected.
- (b) Hardware
 - (i) Suitable for exterior work and acceptable for ACQ treated lumber. All hardware to be hot dipped galvanized, size and type to suit application and as per Drawings.
 - (ii) Pedestrian Access Gate hardware
 - (iii) Galvanized Chain Link: 6 mm.
- (c) Preservative
 - (i) Pressure treated brown timber: Brown colour suitable for outdoor applications above ground and matching pressure treated timbers.
 - (ii) Type suitable for outdoor applications below ground.
- (d) Chain Link Fabric:
 - (i) Chain link fabric as specified in CW3550 and on Drawings
 - (ii) Fencing height shall be 1.219 m (48")
 - (iii) Mesh fabric shall not be excessively rough, or have blisters, sal ammoniac spots, bruises or flaking.
 - (iv) Chain link fabric shall have a minimum tensile strength of 415 MPa.
- (e) Fill materials as per CW1130 and CW2030:
 - (i) All fill to be free of boulders, rocks or concrete larger than 50 mm in size, wood, vegetation, ice, snow, frozen material, or debris.

- (ii) Approved fill material:
 - ◆ Surplus excavated earthen material; or
 - ◆ Sand.
- (f) Limestone Granular Backfill
 - (i) 19 mm (3/4") down limestone per CW3110.
 - (ii) Recycled concrete will not be accepted.

E20.3 Construction Methods

- E20.3.1 All work is to be located and installed in accordance with the Drawings.
 - (a) The Contractor shall confirm proposed location of fencing and entry feature with Contract Administrator prior to fabrication.
 - (b) The Contractor shall verify underground utility locations prior to construction and report any discrepancies to the Contract Administrator immediately.
 - (c) Remove debris and correct ground undulations along fence line to obtain smooth uniform gradient between posts.
 - (d) Build work square, true and accurate to required size with joints closely fitted and properly secured.
 - (e) All wood cuts shall be sanded to remove any burrs.
 - (f) Use timbers of the longest possible length to minimize joints.
 - (g) Treat in field, cuts and damages to surface of treated material with an appropriate, clear preservative. Ensure that damaged areas such as abrasions nail and spike holes, are thoroughly saturated with field treatment solutions.
 - (i) Apply preservative by dipping, or by brush to completely saturate and maintain wet film on surface for minimum 3 minute soak into lumber.
 - (ii) Re-treat surfaces exposed by cutting, trimming or boring with liberal brush application of preservative before installation.
 - (iii) Treat material as follows:
 - ◆ Ends of all fence posts that have been cut.
 - ◆ Ends of all fence boards that have been cut.
 - ◆ Where possible orientate cut ends towards grade.
 - (h) Do all fastening neatly, evenly, and thoroughly. All fasteners shall be slightly countersunk so as not to protrude above the face of the wood surface.
 - (i) Tops of fence posts shall follow final site grades.
 - (j) Backfill post excavations with 6mm down limestone. Tamp material thoroughly.
 - (k) Contractor to backfill old bollard holes with compacted sand or excavated earthen material to 150 mm below finished grade. Fill balance of hold with topsoil as per CW3540 and sod per CW3510.

E20.4 Method of Measurement and Basis of Payment

- E20.4.1 Method of Measurement shall be as follows:
 - (a) The supply and installation of wood fencing shall be measured on a per linear metre basis for:
 - (i) "Supply and Install New Timber and Chain-Link Fencing with Pedestrian Gate", on Form B: Prices.
- E20.4.2 Basis of Payment shall be as follows:
 - (a) Timber fencing 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.

E21. SITE FURNISHINGS

E21.1 General Description

E21.1.1 This Specification shall cover the **supply and installation** of site furnishings 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.

E21.2.3 Ordering

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

E21.2.4 City of Winnipeg Site Furnishings:

(a) Tache Bench Composite with arms per SCD-121E x 2

(i) Product Numbers: 52501071GLV – **Cost \$1501.00 plus taxes**

(ii) Composite Slats: Cedar Tone Finish

(iii) Mounting: Surface Mount

(b) Tache Backless Bench Composite with arms per SCD-121D x 2

(i) Product Numbers: 52501115GLV – **Cost \$1066.00 plus taxes**

(ii) Composite Slats: Cedar Tone Finish

(iii) Mounting: Surface Mount

(c) Tache Style Wheelchair Metal Frame Picnic Table per SCD-122A x 1

(i) **Cost \$1804.00 plus taxes**

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.

(a) 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.

(b) All furnishings and fixtures to be carefully handled so that no parts will be bent, broken or otherwise damaged. Hammering is prohibited.

(c) Damaged Site Furnishings will not be accepted.

E21.4 Method of Measurement and Basis of Payment

E21.4.1 Method of Measurement shall be as follows:

- (a) Supply and installation of Site Furnishings will be measured at the Contract Unit Price per unit for:
 - (i) "Supply & Install Tache Bench with Arms";
 - (ii) "Supply & Install Backless Bench with Arms"; and
 - (iii) "Supply & Install Accessible Picnic Table" on Form B: Prices.
- (b) 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. TREE PLANTING

E22.1 This Specification shall cover the supply and installation of planting material and amend and supplement the following:

E22.2 City of Winnipeg Tree Planting and Maintenance Specification found at: [City of Winnipeg Tree Planting and Maintenance Specification](#)

E22.3 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, including, but not necessarily confined to the following:

E22.3.1 Supply and Installation of trees:

E22.3.2 Plant Species to be confirmed with Contract Administrator.

E22.3.3 Tree location to be determined by the Contract Administrator before construction.

E22.4 General Instructions

E22.4.1 Product Data

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

E22.5 Materials

E22.5.1 General

- (a) Plant materials, soil, water, trunk protection, and tree support 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 75mm 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 5 cm 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 Contact 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) Any tree that has come out of dormant stage and is too far advanced will not be accepted unless prior approval is obtained. Approval is required for any tree which has been held in cold storage.

E22.5.2 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 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 line with burlap. Tie basket to ball with heavy rope. Take care not to injure trunk of tree with wire basket ties or rope.

E22.5.3 Water

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

E22.5.4 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.

E22.5.5 Fertilizer

- (a) Fertilizer shall be a slow release in compliance with Section 5.2 of CW 3540.

E22.5.6 Planting Soil

- (a) The planting soil shall be topsoil that complies with Section 5.2 of CW 3540. Depths of topsoil vary. Refer to Existing Conditions and Removals Plan for planting bed locations and depths.
- (b) 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.
- (c) The Contract Administrator reserves the right to reject planting soil not conforming to the requirements of these Specifications.

E22.5.7 **Woodchip Mulch**

- (a) Woodchip Mulch to be placed within all proposed plant beds unless otherwise indicated.
- (b) Mulch is to be clean bark or wood chip mulch with chips not less than 15mm and no larger than 75mm in size and not more than 20mm thick. Mulch is to be free of leaves, branches and other extraneous matter.

E22.5.8 **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 the 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 15 cm 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.

E22.5.9 **Shipment and Pre-Planting Care**

- (a) Coordinate shipping of trees and excavation of holes to ensure minimum time lapse between digging and planting.
- (b) Tie branches of trees securely, and protect trees against abrasion, exposure and extreme temperature change during transit. Avoid binding of trees with rope or wire which would damage bark, break branches or destroy natural shape of tree. Give full support to root ball of trees during lifting.
- (c) Cover tree 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.
- (d) Remove broken and damaged roots with sharp pruning shears. Make clean cuts, and cover cuts over 10mm diameter with a tree wound dressing.
- (e) Keep roots moist and protected from sun and wind. Heel-in trees which cannot be planted immediately in shaded areas and water well.

E22.6 **Construction Methods**

E22.6.1 Installation shall be as per SCD-517, and as per drawings.

E22.6.2 Planting shall be done during periods of suitable weather conditions and in accordance with locally accepted practice.

E22.6.3 Trees are to be planted within forty-eight (48) hours of excavation from the nursery.

E22.6.4 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.

E22.6.5 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.

E22.6.6 After inserting the tree and tamping the root system with topsoil in layer of 150mm, 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.

E22.6.7 Each tree is to have an earth saucer at its base having a diameter as large as the excavation with a 10cm lip formed at the perimeter of the saucer to retain water.

E22.6.8 All nursery stock shall be set plumb in the center of pits and at levels as shown on the planting details after settlement has taken place.

E22.6.9 Nursery stock shall be faced to give the best appearance or relationship to adjacent structure and to the approval of the Contract Administrator. Trees shall be placed equal to depth they were originally growing in nursery.

E22.6.10 After filling, top of root ball shall be level with surrounding grade. Soil should be firmly compacted.

E22.6.11 Woodchip Mulch to be carefully spread to a consistent depth over the entire plant bed.

E22.7 Fertilizing.

E22.7.1 Fertilize in accordance with CW 3540.

E22.8 Warranty

E22.8.1 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 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.

E22.8.2 End-of-Warranty inspection will be conducted by the Contract Administrator.

E22.8.3 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.

E22.9 Replacements

E22.9.1 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.

E22.9.2 Defective plants shall be replaced within three (3) Business Days of notification to the Contractor. The Contractor shall extend Maintenance and Warranty on replacement plant material for a period equal to the original Maintenance and Warranty Periods.

E22.9.3 The Contractor shall continue such replacement, Maintenance and Warranty until plant material is acceptable.

E22.10 Method of Measurement and Basis of Payment

E22.10.1 Method of Measurement shall be as follows:

E22.10.2 Trees Planting will be measured on a per unit basis for:

(a) "Supply & Install Trees c/w 2-Year Maintenance" on Form B: Prices

E22.10.3 No additional measurement will be made for planting soil volumes, as this item is incidental to the Work herein.

E22.11 Basis of Payment shall be as follows:

E22.11.1 Tree Planting will be paid for at the Contract unit price, which shall be payment in full including all costs for the trees, extended maintenance, and all other items incidental to the Work included in this Specification and as accepted by the Contract Administrator.

E22.11.2 No additional payment will be made for planting soil volumes, as this item is incidental to the Work herein.

PLAY EQUIPMENT

E23. PLAY EQUIPMENT

E23.1 General Description

E23.1.1 This Specification shall cover the supply and installation of play equipment in accordance with applicable Specification sections, the Drawings, and in compliance with the current CAN/CSA Z1614.

- (a) If Contractor states play equipment components are compliant with CSA Standards and they are found to be not compliant, liquidated damages may incur until equipment is deemed acceptable by the Contract Administrator and City of Winnipeg Parks Department.
- (b) **The method of installation for play structures shall be a ground surface metal stringer system, in which a series of metal stringers are welded to the posts of the Play Equipment, and thus the Play Equipment floats on top of the level granular surface, rather than being installed into poured in placed concrete footings. The metal stringer support system must be designed and approved by the playground equipment manufacturer. Prior to authorizing acceptance of anchoring method the Contractor will have to provide documents from the play equipment manufacturer that they have designed and approved the system of anchoring.**
- (c) **Independent play components shall be on CIP Concrete Foundations as per E24 and minimum 1m away from existing water line.**

E23.1.2 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.

E23.2 General Instructions

E23.2.1 Shop Drawings and Product Data

- (a) Shop Drawings to be submitted for all play equipment proposed and specified herein in accordance with CW 1110, this Specification, and as directed by the Contract Administrator.

E23.3 Play Area and Equipment

(a) Compliance:

- (i) Play equipment shall be installed in the play areas as shown on the Drawings.
- (ii) Play equipment shall be **nature-themed** and/or have a natural colour palette
- (iii) **Play equipment shall include one (1) accessible seesaw/teeter totter, preferably to accommodate up to four (4) seats.**
- (iv) City of Winnipeg Accessibility Design Standard (current edition):
 - ◆ Play area and equipment shall comply with the current edition of the City of Winnipeg Accessibility Design Standard.
- (v) CAN/CSA Z1614 (current version):
 - ◆ Play area, equipment, and equipment safety zones to fit within the proposed area and shall comply with the current version of CAN/CSA Z1614.

(b) Age Range

- (i) Play equipment designed for children in age range depicted on the Drawings.

(c) Play equipment shall provide the following play activities:

- (i) Sensory & Imaginative Play;
- (ii) Climbing;
- (iii) Balancing;
- (iv) Motion; and
- (v) Sliding.

(d) Transfer Station

- (i) **If a ramped structure is proposed, a minimum of one (1) transfer station must also be provided, in addition to ramp access.**

(e) Colour

- (i) If colour is a feature of posts, top caps and panels, the Contract Administrator shall have the ability to modify specified colours **if price bid is not subject to the colours**, from the proposed design after Contract Award.

(f) City of Winnipeg Park Sign on play panel

- (i) If City of Winnipeg Park Sign on a play panel is specified as a requirement on the Drawings:
 - ◆ Sign panel size: approximately 1000 mm (40") tall x 760 mm (30") wide, height as specified on Drawings.
 - ◆ Mounting: two posts.
 - ◆ Location: Independent from play structure & approved by Contract Administrator prior to construction.
 - ◆ Language: English or Bilingual (English and French).
 - ◆ Proof: to be approved by Contract Administrator prior to fabrication.
 - ◆ Colours: high contrast as per the current edition of the City of Winnipeg Accessibility Design Standard.
 - ◆ Electronic file of 311 City Services logo to be provided by Contract Administrator

(g) **Unacceptable** play components are as follows:

- (i) Wooden structures;
- (ii) Tube (enclosed) slides and enclosed crawl tubes;
- (iii) Play panels with many small moving parts **and/or glass marbles**;
- (iv) Talk Tubes;
- (v) Barrel rollers;
- (vi) Dish swings;
- (vii) Bubble windows;
- (viii) Large number of plastic components;
- (ix) Climbing net structures with unsegmented rope; and
- (x) Battery operated play equipment or components.

(h) Components which are generally not accepted and require Contract Administrator approval are as follows:

- (i) Cable riders;
- (ii) Sand diggers,
- (iii) Merry-go-rounds; and

- (iv) Tire swings.

E23.4 Play structures

E23.4.1 Materials

(a) Posts / Caps

- (i) All posts shall be a minimum 127 mm (5") O.D. round or 100 mm (4") square tubing for a post and deck structure.
- (ii) 89 mm (3.5") O.D. round or 73 mm (3") square tubing will be permitted in circumstances where a multi-deck structure has decks of varied heights which are all under 1220 mm (4'-0"), or for structures with 2 decks or less.
- (iii) All posts shall be fabricated from either aluminum 3 mm (0.125") 11 ga min. wall thickness or galvanized steel 3 mm (0.120") 11 ga min. wall thickness tubing. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating. The bottom end of the posts is to be sealed with a moisture barrier.
- (iv) In the case of a deckless structure, a minimum size of 60 mm (2 3/8") O.D. round posts fabricated out of steel or aluminum are acceptable.
- (v) Top caps shall be made of steel construction and shall be factory installed and secured in place with tamper proof, self-sealing rivets. Plastic top caps will be accepted if made of solid construction (hollow caps not accepted).
- (vi) If painted colour is a feature of posts and top caps, it shall be a baked-on polyester powder coating. The powder coating finish shall meet or exceed ASTM standards for hardness, adhesion, impact and salt spray resistance.

(b) Decks and ramps

- (i) All decks and ramps shall be manufactured from vinyl-coated perforated steel or a steel core composite. Deck heights may vary to a maximum height of 1830 mm (6'-0").
- (ii) Must provide a secure connection to wall and pathway at beginning of elevated accessible entry ramp. See Drawings for reference.
- (iii) **All ramps with slope 5% or greater shall provide a handrail as per the current City of Winnipeg Accessibility Design Standard: Section 1.1.5.**
 - ◆ https://winnipeg.ca/finance/findata/matmqt/documents//2018/388-2018/388-2018_Appendix_A.pdf

(c) Clamping System

- (i) All deck, rail and play component clamping systems shall be fabricated from zinc plated, galvanized steel, stainless steel or aluminum. Tamper proof, corrosion resistant fasteners shall be used to retain clamping systems.

(d) Handrails, Safety Rails and Handloops (if applicable)

- (i) All handrails, safety rails and handloops shall be fabricated using a minimum of 24 mm (15/16") O.D. with 3 mm (0.120") 11 ga min. wall thickness steel tubing. After all fabrication activities have occurred including end cuts, drill holes, bends and weld joints, all components shall be hot dipped galvanized.
- (ii) Smooth all cut edges and weld joints prior to hot dip galvanizing and ensure that all tubing is free from burrs, cracks, defects and other imperfections.

- (iii) A section of handrail must be installed that extends from the edge of the elevated ramp entry at the top of the retaining wall to the first play structure post as per the drawings.
- (e) Hardware
 - (i) All fasteners shall be socketed and tamper proof in design and requiring special tools.
 - (ii) Hardware shall either be carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.
 - (iii) All necessary hardware and tools shall be provided.
- (f) Poly Components
 - (i) Poly components such as slides and hoods shall be fabricated from U.V. stabilized rotationally moulded linear low-density polyethylene.
 - (ii) Poly components such as play panels shall be fabricated from compression moulded solid colour, U.V. stabilized, high-density polyethylene.
- (g) Slides (if applicable)
 - (i) A minimum of one stainless steel slide is required, north or east orientation is preferred.
- (h) Kick plates and hand loops
 - (i) Each play structure shall have kick plates and hand loops as required to meet the current version of the Canadian Standards Association (CSA) Standards.
- (i) Climbing Net Structures
 - (i) Climbing Net Structures must be comprised of separate rope segments versus long stretches of rope clamped with connectors, for ease of maintenance.
- (j) **Ground Surface Metal Stinger System**
 - (i) **The metal stringer support system must be designed and approved by the playground equipment manufacturer. Prior to authorizing acceptance of anchoring method, the Contractor will have to provide documents from the play equipment manufacturer that they have designed and approved the system of anchoring.**
- (k) Cast-In-Place (CIP) Concrete Foundations
 - (i) CIP Concrete Foundations shall be as per E24.

E23.4.2 Construction Methods

- (a) Play equipment shall be installed as per Manufacturer's written specifications, in accordance with the most recent version of Canadian Standards Association Standards, and as per the Drawings.
- (b) All posts and other vertical items shall be plumb and true to vertical, if so designed.
- (c) All decks shall be level, if so designed.
- (d) Functionally linked items such as stepping pods, logs, balance beams, etc should be placed at minimum 150mm to a maximum of 300mm for Children less than 5 years of age and between 300mm to a maximum of 450mm for children 5- 12 years old.
- (e) CIP Concrete Foundations construction shall be per E24.
- (f) **One play equipment installer (minimum) must be a valid certified Canadian Certified Playground Inspector and on site for the duration of assembly and installation of play equipment.**

E23.5 Independent Component Play Equipment

E23.5.1 Materials

- (a) All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all parts and materials.
- (b) There shall be a minimum (or no) amount of hollow plastic components. Solid plastic is acceptable.
- (c) There shall be a minimum number of solid elements which limit visibility through the Site.
- (d) Decks and ramps
 - (i) All decks and ramps shall be manufactured from vinyl-coated perforated steel or a steel core composite. Deck heights may vary to a maximum height of 1830 mm (6'-0").
 - (ii) Must provide a secure connection to wall and pathway at beginning of elevated accessible entry ramp. See Drawings for reference.
 - (iii) **All ramps with slope 5% or greater shall provide a handrail as per the current City of Winnipeg Accessibility Design Standard: Section 1.1.5.**
 - ◆ https://winnipeg.ca/finance/findata/matmgt/documents//2018/388-2018//388-2018_Appendix_A.pdf
- (e) Hardware
 - (i) All fasteners shall be socketed and tamper proof in design and requiring special tools.
 - (ii) Hardware shall either be carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.
 - (iii) All necessary hardware and tools shall be provided.
- (f) Finishes
 - (i) Finishes shall meet or exceed ASTM standards for hardness, adhesion, impact and salt spray resistance. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating.
- (g) Slides
 - (i) If an independent slide is proposed, stainless steel is preferred. If other slides are proposed on the Site one may be plastic. North or east orientation preferred. If independent slide over 1220 mm (4'-0") high is proposed, support posts shall be minimum 127 mm (5") O.D.
 - (ii) Tube (enclosed) slides and plastic spiral slides will not be accepted.
- (h) CIP Concrete Foundations
 - (i) Shall be as per E24.

E23.5.2 Construction Methods

- (a) Independent component play equipment shall be installed as per Manufacturer's written specifications, in accordance with the most recent version of Canadian Standards Association Standards, and as per the Drawings.
- (b) All posts and other vertical items shall be plumb and true to vertical, if so designed.
- (c) All decks shall be level, if so designed.
- (d) Independent items that are functionally linked such as stepping pods, logs, balance beams, etc should be placed at minimum 150mm to a maximum of 300mm for Children less than 5 years of age and between 300mm to a maximum of 450mm for children 5- 12 yrs old.

- (e) CIP Concrete Foundation construction shall be per E24.
- (f) **One independent component play equipment installer (minimum) must be a valid certified Canadian Certified Playground Inspector and on site for the duration of assembly and installation of independent components play equipment.**

E23.6 Method of Measurement and Basis of Payment

E23.6.1 Method of Measurement shall be as follows:

- (a) Play Equipment shall be measured on a lump sum basis for:
 - (i) "Supply and Install 5-12 Play Equipment" and
 - (ii) "Supply and Install 2-5 Play Equipment" on Form B: Prices.
- (b) No separate measurement will be made for CIP Concrete Foundations as this item is incidental to the Work herein.

E23.6.2 Basis of Payment shall be as follows:

- (a) Play Equipment 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 will be made for CIP Concrete Foundations as this item is incidental to the Work herein.

E24. CAST-IN-PLACE CONCRETE FOUNDATIONS

E24.1 General Description

- E24.1.1 This Specification shall supplement CW 2160 and cover the supply and installation of cast-in-place concrete foundations for individual component Play Equipment.
- E24.1.2 All underground cast-in-place concrete foundations for individual component Play Equipment to be set in concrete footings or piles per CW 2160 to ensure stability and prevent frost heaving.
- E24.1.3 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.

E24.2 General Instructions

E24.2.1 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.

E24.3 Materials

E24.3.1 All materials as per CW 2160.

- (a) Concrete
 - (i) Maximum Size of aggregate: 20 mm, nominal;
 - (ii) Compression Strength: 28 day compressive strength of 30 Mpa;
 - (iii) Slump/Flow: 80 +/- 20mm;
 - (iv) Sulphate resistant, Type 50 Cement; and
 - (v) Maximum water/cement ratio: 0.49.
 - (vi) Air Content: 4-7%

E24.4 Construction Methods

E24.4.1 Construction Methods as per CW 2160.

- (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.

E24.5 Playground Equipment Footing

- (a) **Holes for concrete footing for play equipment must be inspected and approved by the Contract Administrator prior to installation of concrete. Contractor to provide min. two (2) Business Days' notice for inspection.**
- (b) **All concrete footings for play equipment shall be in accordance with Manufacturer's specifications.**
- (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 there should be a minimum of 50mm (2") concrete at any point around the post.**
- (d) **The full depth of the Manufacturer's specified footing must be below subgrade. If required for specified embedment of post in the footing, footing shall extend in sonotube through the granular drainage layer. Footing must not extend into the wood fibre safety surface or rubber surfacing.**

E24.6 Cold Weather Concreting

- (a) Cold weather concreting shall be as per Section 3.9 of 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.

E24.7 Method of Measurement and Basis of Payment

E24.7.1 Method of Measurement shall be as follows:

- (a) No separate measurement for Cast-in-Place Concrete Foundations shall be made for Play Equipment as Foundations are incidental to the Works therein.

E24.7.2 Basis of Payment shall be as follows:

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

E25. MAINTENANCE KITS

E25.1 General Description

E25.1.1 This specification shall cover the supply of maintenance kits for Play Equipment.

E25.1.2 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.

E25.2 Materials

E25.2.1 All play equipment and swings shall include the supply of maintenance kits.

E25.2.2 Maintenance kits shall include maintenance manuals, complete manufacturer's parts lists, touch-up paint, PVC repair paint, 10% extra of each bolt, washer and any other hardware utilized on the play equipment, and all special tools necessary for assembly and maintenance.

E25.3 Delivery of maintenance kits

E25.3.1 Maintenance kits shall be delivered two (2) Working Days prior to achieving Total Performance.

(a) Deliver to:

Attn: Marc Laurin and/or Derrick Downey
Parks and Open Space Division, Public Works
960 Thomas Avenue, Winnipeg, MB
Ph: Marc Laurin: 204-479-5489
Ph: Derrick Downey: 204-391-2860

(b) Contractor to forward Contract Administrator a copy of the Transmittal prior to achieving Total Performance.

E25.4 Method of Measurement and Basis of Payment

E25.4.1 Method of Measurement shall be as follows:

(a) No separate measurement for maintenance kits or delivery shall be made for Play Equipment or Swing Sets as maintenance kits is incidental to the Works herein.

E25.5 Basis of Payment shall be as follows:

E25.5.1 No additional payment for maintenance kits or delivery shall be made for Swing Sets as maintenance kits is incidental to the Works herein.