



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 569-2014

BRUCE PARK & STRATHMILLAN LODGE PARK PLAYGROUND UPGRADES

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 BRUCE PARK & STRATHMILLAN LODGE PARK PLAYGROUND UPGRADES

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, July 29, 2014.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

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

B3.2 The Bidder is advised that topography of the Bruce Park site is sloping moderately.

B4. ENQUIRIES

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

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

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

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

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

B5. CONFIDENTIALITY

B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Bidder before receipt hereof; or
- (b) becomes publicly known other than through the Bidder; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

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

B7. SUBSTITUTES

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

- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B17.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B7.10 Notwithstanding B7.2 to B7.9, and in accordance with B8.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B17.1(a).

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) Design Drawings as per B12, and;
 - (d) Component Descriptions as per B13.
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B8.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B8.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B8.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B8.6 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B17.1(a).

B8.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204 949-1178.

B8.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.

B8.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B9. BID

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

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

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

B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.

B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B9.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

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

B9.4.2 All signatures shall be original.

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

B10. PRICES

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

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

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

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

B11. QUALIFICATION

B11.1 The Bidder shall:

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

B11.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B11.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B11.4 Further to B11.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractors has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

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

B11.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B11.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B12. DESIGN DRAWINGS

- B12.1 The Bidder shall submit drawings that illustrate the proposed design and play equipment, such as plan, perspective and any other submissions to illustrate the design intent. **Included in this shall 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.

B13. COMPONENT DESCRIPTIONS

- B13.1 The Bidder shall submit component description and / or graphic or catalogue reference outlining specifications of play equipment components.

B14. OPENING OF BIDS AND RELEASE OF INFORMATION

- B14.1 Bids will not be opened publicly.
- B14.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B14.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B14.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B15. IRREVOCABLE BID

- B15.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B15.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B16. WITHDRAWAL OF BIDS

- B16.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B16.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B16.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B16.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and

- (c) if the notice has been given by any one of the persons specified in B16.1.3(b), declare the Bid withdrawn.

B16.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B15.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B17. EVALUATION OF BIDS

B17.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity or acceptable deviation there from (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
- (c) Bid Price;
- (d) economic analysis of any approved alternative pursuant to B7.

B17.2 Further to B17.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

B17.3 Further to B17.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.

B17.4 Further to B17.1(c), the Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B17.4.1 Further to B17.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B17.4.2 Further to B17.1(c), the award authority may reject a Bid as being non-responsive if it exceeds the budget as shown on Form B: Prices.

B17.4.3 The Bid Price shall be evaluated with a weighting of 10 points out of a total of 100 possible points. As such, the lowest Bidder shall receive the full 10 points, and the second lowest Bidder and subsequent Bidders shall be pro-rated accordingly.

B17.5 Further to B16.1(d) Design Drawings/Component Descriptions shall be evaluated with a weighting of 90 points out of a total of 100 possible points as per B12 and B13.

- (a) Evaluation of Playground areas will be weighted with 70% of overall points based on the submission for Bruce Park and 30% of the overall points based on the submission for Strathmillan Lodge Park.

B17.5.1 The Design shall be evaluated on the following criteria:

- (a) compliance with CSA Standards (pass/fail);
- (b) play value (maximum 44 points):
 - (i) 8 points – Gross Motor Play Experience(s) (Climbing, overhead components, balancing, etc.);
 - (ii) 8 points – Imaginative/ Cognitive Play Component(s), including fine motor skills;
 - (iii) 8 points – Provides opportunities for appropriate social / interpersonal interaction and co-operative play;
 - (iv) 8 points – Motion Component(s);

- (v) 7 points – Sliding Component(s) for both 2-5 year old and 5-12 year old for Bruce Park and for Strathmillan Lodge Park 1-2 slide for 2-5 year old.;
- (vi) 5 points – Variety of play Components.
- (c) Designed for inclusive play using Universal Design principals – Accessible Play Area only (maximum 14 points):
 - (i) Complies with section 2.3.5 of the 2010 City of Winnipeg Accessibility Design Standards (www.winnipeg.ca/ppd/Universal_Design.stm) (pass/fail);
 - (ii) 6 points – Layout of the play area for integration of the wheelchair accessible components to promote inclusive play;
 - (iii) 6 points – Provision of tactile and auditory play experiences.
 - (iv) 2 points – Layout of the play area for persons with visual impairment.
- (d) Layout / Circulation (maximum 22 points)
 - (i) 6 points – Flow and relationship between play area activities;
 - (ii) 6 points – Layout / orientation of components on Site and in relation to park entrances and seating areas;
 - (iii) 4 points – Orientation to provide good visibility to play area from adjacent roads;
 - (iv) 3-points – minimal amount of hollow plastic components to minimize vandalism.
 - (v) 3 points – slide orientation – metal must face north or east, plastic should face 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.

B17.6 Further to B17.5.1, if Contractor states play equipment components are compliant with CSA Standards which are not, liquidated damages shall be charged as per D16 should this result in additional design and/or meeting time on the part of the Contract Administrator.

B18. AWARD OF CONTRACT

B18.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B18.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B18.2.1 Without limiting the generality of B18.2, the City will have no obligation to award a Contract where:

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

B18.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the most advantageous offer, in accordance with B17.

B18.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

- B18.4 Notwithstanding C4, the City may issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.

- B18.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 The major components of the Work to be done under the contract shall consist of:

- (a) Excavation and disposal of earth for play area;
- (b) Excavation and disposal of existing sand safety surfacing;
- (c) Excavation and disposal of existing asphalt;
- (d) Removals of existing site amenities;
- (e) Supply and installation of play equipment and swing sets;
- (f) Supply and installation of timber edging and engineered wood fibre safety surfacing;
- (g) Supply and installation of reinforced concrete sidewalk;
- (h) Supply and installation of concrete curb edging and engineered wood fibre safety surfacing;
- (i) Supply and installation of concrete curb edging and sand safety surfacing;
- (j) Supply and installation of granular pathway and seating areas;
- (k) Pick up and installation of site furniture and sand box;
- (l) Supply and installation of signage;
- (m) Supply and installation of new asphalt.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is ft3 Architecture Landscape Interior Design, represented by:

Ryan Epp
Landscape Architectural Intern
Telephone No. 204-885-9323
Email: epp@ft3.ca

D3.2 At the pre-construction meeting, Ryan Epp will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D3.3 Bids Submissions must be submitted to the address in B8.5.

D4. CONTRACTOR'S SUPERVISOR

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

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

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

- D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:
- The City of Winnipeg
Chief Financial Officer
Facsimile No.: 204 949-1174
- D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:
- The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

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

D8. SAFE WORK PLAN

- D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

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

D9. INSURANCE

D9.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) all risks installation floater, carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.

D9.2 Deductibles shall be borne by the Contractor.

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

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

D10. PERFORMANCE SECURITY

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

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

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

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

D11. SUBCONTRACTOR LIST

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

D12. DETAILED WORK SCHEDULE

D12.1 The Contractor shall provide the Contract Administrator with a detailed work schedule 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.

D12.2 The detailed work schedule shall consist of the following items for both Bruce Park & Strathmillan Lodge Park:

- a) Start date;
- b) Site excavation completion;
- c) Installation of play equipment & swing set;
- d) Installation of timber/concrete curb edging;
- e) Installation of safety surface and drainage;
- f) Installation of granular path;
- g) Installation of site furnishings;
- h) Installation of soil & sod;
- i) 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 he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.

D13.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D7;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10; and
 - (vi) the Subcontractor list specified in D11.
- (vii) The detailed work schedule specified in D12.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D13.3 **The Contractor shall order the play equipment and submit this information to the Contract Administrator within seven (7) Working Days of receipt of the Purchase Order.**

D13.4 The Contractor shall commence the Work on the Site within forty-two (42) Working Days of receipt of the Purchase Order.

D13.5 The Contractor shall not commence the Work on the Site for Bruce Park during wading pool season.

D14. SUBSTANTIAL PERFORMANCE

D14.1 The Contractor shall achieve Substantial Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D13.

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

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

D15. TOTAL PERFORMANCE

D15.1 The Contractor shall achieve Total Performance within thirty-five (35) consecutive Working Days of the commencement of the Work as specified in D13.

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

D15.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D16. LIQUIDATED DAMAGES

D16.1 If the Contractor fails to achieve 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:

(a) Soil and sod as specified in E17;

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 Job meetings will be held at the Site as determined by the Contract Administrator. 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 he/she deems it necessary.

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

D19.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

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

D20.1 Further to B11.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B11.4.

MEASUREMENT AND PAYMENT

D21. PAYMENT

D21.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D22. WARRANTY

D22.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

BID OPPORTUNITY NO. 569-2014

BRUCE PARK & STRATHMILLAN LODGE PARK PLAYGROUND UPGRADES

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

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

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

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

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

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

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

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

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 569-2014

BRUCE PARK & STRATHMILLAN LODGE PARK PLAYGROUND UPGRADES

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

(Name of Contractor)

(Address of Contractor)

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

_____ Canadian dollars.

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

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

Partial drawings are permitted.

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

(Address)

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

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

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

(Date)

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

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

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

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
B-L1.0	BRUCE PARK - EXISTING CONDITIONS AND REMOVALS
B-L2.0	BRUCE PARK - PROPOSED SITE PLAN
B-L3.0	BRUCE PARK – SITE LAYOUT PLAN
S-L1.0	STRATHMILLAN LODGE PARK - EXISTING CONDITIONS AND REMOVALS
S-L2.0	STRATHMILLAN LODGE PARK –PROPOSED SITE AND LAYOUT PLANS
S-L3.0	STRATHMILLAN LODGE PARK – SITE DETAILS
SCD-119	WASTE RECEPTACLE METAL SLAT TYPE
SCD-121A	TACHE BENCH COMPOSITE WITH ARMS
SCD-122A	TACHE STYLE WHEELCHAIR METAL FRAME PICNIC TABLE
SCD-153	ENGLISH PARK SIGN WITH ADDRESS
SCD-643	CONCRETE PLAY SURFACE EDGING DETAIL
SCD-645	PARK PATH - CRUSHED LIMESTONE
SCD-648	PARKWAY PATH 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-659	MULTI FLOW DRAINAGE
SCD-660	PAINTED WOODEN SANDBOX ON GRANULAR PAD
SD-228A	CONCRETE SIDEWALK
SD-243	SODDING DETAILS

E2. EXISTING SERVICES AND UTILITIES

- E2.1 No responsibility will be assumed by the City for the correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

E3. ACCESS TO SITE

- E3.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E3.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on private property.

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

- E4.1 Further to C6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E4.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- E4.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contractor Administrator.
- E4.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.
- E4.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- E4.6 The Contractor and Subcontractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

E5. DAMAGE TO EXISTING STRUCTURES, TREES AND PROPERTY

- E5.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the Site of the Work. For all damage incurred in the performance of the Work (either directly or indirectly), the Contractor shall either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to City of Winnipeg Contract Administrator, and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City from all claims made directly or indirectly against it in respect to any such damage.
- E5.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area:
- (a) The Contractor shall not stockpile materials and soils 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 drop line of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
- E5.3 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.

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

E6. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

E6.1 Further to CW 1130-R2, the Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to prove properties while he is working near them. Any damage caused by the negligence of the Contractor or his Subcontractors to the adjacent Works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract Administrator.

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

E7. PROTECTION OF THE SURVEY INFRASTRUCTURE

E7.1 Notwithstanding clause 4 "Protection of Survey Bars" of the Standard Provisions; Current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.

E7.2 Further to C:6.26(g), at least 72 hours prior to the commencement of the On-Site work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 918-1360 (8:00 am to 4:00 pm Monday to Friday excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.

E7.3 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.

E7.4 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 and all associated costs shall be paid for by the Contractor. An approximate estimate of the costs involved to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contactors must ensure their landscaping and other Subcontractors are aware of this clearance procedure and the potential restoration costs.

E7.5 Where possible, amounts owed to the City in accordance with the above will be deducted from any payments to be made by the City to the Contractor.

E8. SITE ENCLOSURES

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

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

SITE DEVELOPMENT

E9. REMOVALS & RELOCATIONS

E9.1 General Description

E9.1.1 This specification shall cover the removal of chain link fencing as necessary to allow construction access as shown on Drawing 1/S-L1.0. All extraneous materials are to be removed from the Site and disposed of in a safe and legal manner. This specification shall amend and supplement City of Winnipeg Standard Construction Specifications CW 3110

latest revision. The Work to be done by the Contractor under this specification shall include all labour, equipment and material necessary for and incidental to the satisfactory performance and completion of the Work herein specified.

E9.2 Materials

E9.2.1 Removals include the removal of items as indicated on the Drawings and as directed by the Contract Administrator. These items may be salvaged by the City, as per direction by the Contract Administrator. Do not disturb adjacent items designated to remain in place.

E9.3 Construction Methods

E9.3.1 Removals include the removal of all footing, backfilling holes with clean earth fill and compact to 98% SPD.

E9.3.2 The Contractor shall ensure that upon completion of the removal operations, the Site shall be left free of any hazardous depressions and in a neat condition.

E9.3.3 The Contractor shall dispose of all unsuitable and excess materials in accordance with City of Winnipeg specification. Disposal is incidental to the unit prices bid.

E9.4 Method of measurement and Basis of Payment

E9.4.1 Method of Measurement shall be as follows:

- (a) Bruce Park – No items are to be removed or relocated by the Contractor.
- (b) Strathmillan Lodge Park - Removal shall be measured on a lump sum basis for.
 - (i) “Remove portion of chain link fence for construction access” on form B: Prices.

E9.4.2 Basis of Payment shall be as follows:

- (a) Removals will be paid for at the Contract Unit Prices of Form B: Prices. The amount to be paid for shall be the total number of units, measures 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.

E10. EXCAVATION AND GRADING

E10.1 General Description

E10.1.1 This specification shall cover the excavation and legal disposal of earth, sod, asphalt (including asphalt base course material) and, sand safety surfacing from old play areas in order to accommodate for new topsoil and sod, asphalt and granular path, and safety surfacing for new play area. It shall amend and supplement CW 3110 and CW 3170 latest revisions. It shall also cover the provision of rough grading to ensure re-sodded areas at former asphalt pathways and play areas are installed at the appropriate levels, ensuring the newly sodded areas as well as new pathways will drain.

E10.1.2 The Contractor must ensure that the rough grading does not create tripping hazards and no areas of standing water remain. The mud grade of the play area must drain towards the subsurface drainable piping.

E10.1.3 All extraneous materials are to be removed from the Site and disposed of in a safe and legal manner. The Work to be done by the Contractor under this specification shall include all labour, equipment and material necessary for and incidental to the satisfactory performance and completion of the Work here in specified.

E10.1.4 Work shall include but not limited to the following:

- (a) Excavate, add clean fill if necessary, and rough grade excess soil to the limits shown on Drawings to the depths necessary to achieve finish grade for:
 - (i) New Granular Surfacing;
 - (ii) Sodded areas within location of former playground areas and pathways;

- (iii) New Play Area Protective Surfacing;
- (iv) New Concrete Sidewalk; and
- (v) New Asphalt Surfacing.

E10.1.5 Grading to include the removal of the sod layer, the movement of earth to the specified grades as indicated in the Drawings, the import of fill if require, and the legal disposal of excess fill if necessary.

E10.2 Construction Methods

E10.2.1 Excavation includes the removal of items (i.e., sand, earth and asphalt) 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.

E10.2.2 Do not disturb adjacent items designated to remain in place.

E10.2.3 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.

E10.2.4 Contractor must coordinate with the Contract Administrator to ensure all removals have occurred.

E10.2.5 Excavation should be coordinated with the installation of play equipment and safety surfacing so as not to leave an open excavation area subject to ponding water.

E10.2.6 Items such as grading or sodding may require additional clean fill, either used from excavated areas within the site or brought to the site. The cost of additional clean fill shall be incidental to the excavation and grading price of the item.

E10.2.7 The depth of excavation in the play area depends on the selected type of engineered wood fibre, however, the minimum depth should be 305mm.

E10.2.8 Excavating to the limits shown and as necessary to achieve finish grades as indicated on the Drawings:

- (a) New Granular Surface areas – 175mm depth, in accordance with SCD-645 and Drawings as per E13;
- (b) New Sod areas over former playground areas as per Drawings, and per E17;
- (c) New Safety Surfacing for new play area, in accordance with Drawings and as per E18;
- (d) New Asphalt Surfacing, in accordance with Drawings and as per E14, and;
- (e) New Concrete Surfacing, in accordance with Drawings and as per E15.

Method of Measurement and Basis of Payment

E10.2.9 Method of Measurement shall be as follows:

(a) Bruce Park

(i) Excavation shall be measured on a cubic metre basis for:

- ◆ “Excavate and legally dispose of existing sand safety surfacing (300mm depth);”
- ◆ “Excavate and legally dispose portion of existing asphalt pathway and granular base (approximately 275mm depth)” and;
- ◆ “Excavate and legally dispose of sod & earth for areas receiving asphalt, concrete and new swing sets” on Form B: Prices.

(b) Strathmillan Lodge Park

(i) Excavation shall be measured on a cubic metre basis for:

- ◆ “Excavate and legally dispose of existing sand safety surfacing at existing equipment locations (approx. 200mm depth);” and;

- ◆ “Excavate and legally dispose of sod & earth, for new play area safety surfacing” on Form B: Prices.
- (ii) No measurement will be made for the Excavation and Disposal of the new granular pathway as these items are incidental to E13.

E10.2.10 Basis of Payment shall be as follows:

- (a) Excavation and Grading will be paid for at the Contract Unit Prices of Form B: Prices. The amount to be paid for shall be the total number of units, measures 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 Payment will be made for the Excavation and Disposal for the new granular pathway, as these items are incidental to E13.

E11. SITE FURNITURE

E11.1 Description

E11.1.1 This specification shall cover the pick-up and installation of three (3) galvanized metal slat waste receptacles, one (1) double-sided park sign, two (2) single-sided park sign, one (1) accessible picnic table, four (4) benches, and one (1) painted wooden sand box as per E12.

E11.1.2 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work as shown on Drawings and specified herein.

E11.2 Materials

E11.2.1 All materials supplied under this specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.

E11.2.2 Site Furniture shall be

- (a) Waste Receptacle – Metal Slat Type, galvanized frame as per SCD-119, Product # 52501063GLV, or substitute approved in accordance with B6.
- (b) Park Sign – One (1) double-sided, as per SCD-153 and Drawing 1/S-L3.0, Product # 52501103 or substitute approved in accordance with B6, with the following park name and address: “Strathmillan Lodge Park”, “295 Strathmillan Rd.”.
- (c) Park Sign – Two (2) single-sided, as per SCD-153 and Drawing 1/S-L3.0, Product # 52501101 or substitute approved in accordance with B6, with the following park name and address:
 - (i) Sign 1: “Bruce Park”, “1966 Portage Ave.”.
 - (ii) Sign 2: “Strathmillan Lodge Park”.
- (d) Picnic Table: Tache Style Wheelchair Metal Frame Picnic Table, galvanized frame as per SCD-122A with wood slats and a cedar painted finish or substitute approved in accordance with B6.
- (e) Benches:
 - (i) Three (3) Tache Style Composite bench w/arm rests, 72” long, galvanized frame, cedar tone composite slats, with in-ground mounting, as per SCD-121A, Product # 52501085GLV
 - (ii) One (1) Tache Style Composite backless bench w/arm rests, 72” long, galvanized frame, cedar tone composite slats, with in-ground mounting, as per SCD-121A, Product # 52501086GLV

- ◆ Contact for Waste Receptacles, Benches, and Park Sign:
Aaron Lennon @ 204-986-5505
Supervisor of Central Repair/Manufacturing Facility

City of Winnipeg
Fleet Management Agency Division
Public Works Department
215 Tecumseh St.
Winnipeg, MB R3E 3S4
Email: ALennon@winnipeg.ca

- ◆ Contact for Picnic Table:
Brian Mayer @ 204-470-7747 or, Todd Hendry @ 204-420-4834
Centralized Park Services
City of Winnipeg
960 Thomas Avenue
Winnipeg MB R2H 2C1
Email: THendry@winnipeg.ca
Email: BMayer@winnipeg.ca

E11.3 Construction Methods

- (a) All work is to be located and installed in accordance with the Drawings and SCD-119, SCD-121A, SCD-122A and SCD-153, and following manufacturer's instructions, using approved non-rusting, vandal resistant fasteners to ensure solid, durable, finished work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work;
- (b) 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;
- (c) All furnishings and fixtures to be carefully handled so that no parts will be bent, broken or otherwise damaged. Hammering is prohibited.
- (d) Install as per manufacturer's instructions and the attached drawings.

E11.4 Method of Measurement and Basis of Payment

E11.4.1 Method of Measurement shall be as follows:

- (a) Bruce Park - Site Furniture will be measured each as a lump sum for the following items:
 - (i) "Pick up and Install bench c/w back and arm rests";
 - (ii) "Pick up and Install backless bench c/w arm rests";
 - (iii) "Pick up and Install waste receptacles" and;
 - (iv) "Pick up and Install single sided park sign", on Form B: Prices.
- (b) Strathmillan Lodge Park - Site Furniture will be measured each as a lump sum for the following items:
 - (i) "Pick up and Install bench";
 - (ii) "Pick up and Install waste receptacle";
 - (iii) "Pick up and Install accessible picnic table";
 - (iv) "Pick up and install double-sided park sign", and;
 - (v) "Pick up and install single-sided park sign", on Form B: Prices.

E11.4.2 Basis of Payment shall be as follows:

- (a) Site Furniture 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.

E12. PAINTED WOODEN SANDBOX

E12.1 Description

E12.1.1 This specification shall cover the **pick up and installation** of one (1) Painted Wooden Sandbox as well as the **supply and installation** of two (2) cubic metres of playsand. The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work as shown on the Drawings and specified herein.

E12.1.2 There will be no cost for the supply of the sandbox. Only the cost of pick-up, installing and supplying the sand.

E12.2 Materials

E12.2.1 All materials supplied under this specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.

E12.2.2 Colour of the sandbox to match colours on play equipment. Contract Administrator to determine colour scheme.

E12.2.3 Play sand shall be natural washed sand of rounded particles, free of fines, clay, silt, stones or other debris and shall meet the following criteria:

- (i) 100% passing 6.7 mm sieve;
- (ii) 99.5% passing 4.75 mm sieve;
- (iii) 97-100 % passing 2.36 mm sieve;
- (iv) 70-90 % passing 1.18 mm sieve;
- (v) 25-60% passing 600 um sieve;
- (vi) 5-25% passing 300 um sieve;
- (vii) 0-3 % passing 150 um sieve;
- (viii) 0-1% passing 75 um sieve.

E12.3 Products:

E12.3.1 Painted Wooden Sandbox shall be as supplied by City of Winnipeg.

Contact:
Brian Mayer @ 204-470-7747 or, Todd Hendry @ 204-420-4834
Centralized Park Services
City of Winnipeg
960 Thomas Ave.
Winnipeg MB R2H 2C1
Email: THendry@winnipeg.ca
Email: BMayer@winnipeg.ca

E12.4 Installation:

E12.4.1 Installation shall be as per City of Winnipeg standard detail SCD-660.

E12.5 Method of Measurement and Basis of Payment

E12.5.1 Method of Measurement shall be as follows:

- (a) Painted Wooden Sand Box shall be measured on a lump sum basis for the following items
 - (i) "Pick Up and Install painted wooden sandbox and Supply and Install play sand" on Form B: Prices.

E12.5.2 Basis of Payment shall be as follows:

- (a) Pick up of the painted wooden sandbox from the Thomas location and installation on-site shall be a lump sum charge.

- (b) These prices 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.

E13. GRANULAR SURFACING

E13.1 Description

- E13.1.1 This Specification shall amend and supplement the City of Winnipeg Standard Construction Specification CW 3110 latest revision. The Work to be done by the Contractor under this Specification shall cover all phases of supply and placement of crushed limestone surfacing materials necessary to install a Granular Path, Seating Areas, and granular pad for sand box as shown on Drawings and as per SCD-645 and SCD-660.

E13.2 Materials

- E13.2.1 The materials of the Granular Path and Seating areas should be as per Drawing SCD-645, "Park Path – Crushed Limestone" and SCD 660 "Painted Wooden Sandbox on Granular Pad."

E13.3 Construction Method

- E13.3.1 The Work included in the establishment of the Granular Path, Seating area and Granular Pad for Sandbox shall include:
- (a) The Contractor shall survey and stake out the proposed Parkway Path, Seating Area(s) and Granular Pad for Sandbox prior to the start of construction as shown on the construction drawings. Layout shall be checked and confirmed with Contract Administrator prior to construction.
 - (b) Excavation of Granular Path and Seating Area shall be as per E10.
 - (c) Subgrade to be compacted.
 - (d) All granular base course shall be placed and compacted to the finished thickness as specified on the drawings.
 - (e) Base Course and Top Coarse shall be compacted to a minimum of ninety five percent (95%) of Standard Proctor Density.

E13.4 Method of Measurement and Basis of Payment

- E13.4.1 Method of Measurement shall be as follows:

- (a) Bruce Park – N/A.
- (b) Strathmillan Lodge Park - Granular Path and Seating Area shall be measured on a square metre basis for: "Supply and Install compacted granular surfacing for pathway (1.8m wide), sandbox base and picnic table, bench base and landing at Lodge gate" on Form B: Prices.

- E13.4.2 Basis of Payment shall be as follows:

- (a) Granular Path and Seating Area shall be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for excavation, subgrade compaction, supply and installation of base course and top course, supply all labour, equipment and materials, and performing all operations herein described and all.

E14. ASPHALT PATH

E14.1 Description

- E14.1.1 The specification shall supplement City of Winnipeg specification CW 3410 and CW 3110 latest revisions.

- E14.1.2 The Work to be done by the Contractor under this Specification shall include the furnishings of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the follow:
- (a) Construction of Asphalt surface, supply and installation of base courses, and asphalt paving as shown on Drawing 1/B-L2.0 and SCD-648.
- E14.2 Material
- E14.2.1 Subbase as per CW 3110;
- E14.2.2 Geotextile as per CW 3130
- E14.2.3 Base course as per CW 3110;
- E14.2.4 Asphalt as per CW 3410;
- E14.3 Construction Methods
- E14.3.1 Excavating shall be as per E10.
- (a) If any pavement exists at the limits of the designated area of removal, that 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.
 - (b) All excavated material shall be removed, hauled and disposed of off-site to the satisfaction of the Contract Administrator.
- E14.3.2 Contractor shall construct a compacted gravel base for asphalt pavement to depths as shown on the Construction Drawings in accordance with City of Winnipeg Specification CW 3110 latest revision. Additional gravel shall be supplied and installed if necessary to attain proper Subgrade elevations.
- E14.3.3 Geotextile Fabric
- (a) Geotextile fabric to be installed in accordance with City of Winnipeg Specification CW 3130 latest revision and in accordance with SCD-648.
- E14.3.4 Asphalt Surface
- (a) Compacted asphaltic concrete surface shall be constructed in accordance with City of Winnipeg Specification CW 3410 latest revision, and the Construction Drawings.
- E14.3.5 Acceptance
- (a) Any Work not satisfactory as specified herein and as determined by the Construct Administrator shall be rectified by the Contractor. The process of inspection and correction shall continue until the Contract Administrator is satisfied that the Work is 100% complete and as per the construction drawings and specifications.
- E14.4 Method of Measurement and Basis of Payment
- E14.4.1 Method of Measurement shall be as follows:
- (a) Asphalt surface shall be measured on a square metre basis for:
 - (i) "Supply and Install new asphalt surface" on Form B: Prices.
- E14.4.2 Basis of Payment shall be as follows:
- (a) Asphalt surface shall be paid for at the Contact 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, subgrade compaction, supply and installation of base coarse and top coarse, 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. CONCRETE SIDEWALK

E15.1 Description

E15.1.1 This specification will cover supply and installation of all labour, materials, equipment and services necessary for the supply and installation of the concrete sidewalk c/w sub-base and base course for Bruce Park, as shown on the Drawings.

E15.2 Materials:

(a) As per the City of Winnipeg Standard Construction Specifications CW 3110, CW 3310, CW 3235 and CW3325 latest revisions.

E15.3 Construction Methods:

(a) As per the City of Winnipeg Standard Construction Specifications CW 3110, CW 3310, CW 3235, CW3325 latest revisions, and Drawing SD-228A.

E15.4 Method of Measurement and Basis of Payment

E15.4.1 Method of Measurement shall be as follows:

- (a) Bruce Park – Concrete sidewalk shall be measured on a square meter basis for:
 - (i) “Supply and Install concrete sidewalk” on Form B: Prices.
- (b) Strathmillan Lodge Park – N/A

E15.4.2 Basis of Payment shall be as follows:

- (a) Concrete sidewalk 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.

E16. CHAIN LINK FENCING

E16.1 Description

E16.1.1 This Specification shall amend and supplement the City of Winnipeg Specifications CW 3550. The Contractor shall replace chain link fences as indicated on Drawings. Contractor shall install one end post and two sign posts for the new park sign as shown on Drawings.

E16.2 Method of Measurement and Basis of Payment

E16.2.1 Method of Measurement will be as follows:

- (a) Chain link fence will be measured on a lump sum basis for; “Supply & install chain link fencing for park signage” on Form B: Prices.

E16.2.2 Basis of Payment will be as follows:

- (a) Chain link fencing will be paid for at the Contract Unit Prices. The amount to be paid for shall be 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.

E17. SOIL AND SOD

E17.1 Description

E17.1.1 This Specification shall amend and supplement the most up to date revisions of the City of Winnipeg Standard Construction Specifications CW 3510, CW 3520 and CW 3540 latest revisions. The Contractor shall install mineral sod and a minimum 75mm compacted thickness of topsoil, as required.

- E17.1.2 The Contractor shall install topsoil and sod over all graded areas including: around the perimeter of new play area, paths and sitting areas, as well as over old play areas.
- E17.1.3 Damaged areas: Restoration of damaged areas other than as outlined above shall be incidental to the Work. No separate payment shall be made. Restoration shall be achieved using topsoil and sod unless otherwise directed by the Contract Administrator.
- E17.1.4 Thirty (30) day maintenance period on sod will commence at Total Performance and acceptance.
- E17.2 Method of Measurement and Basis of Payment
- E17.2.1 Method of Measurement shall be as follows:
- (a) Bruce Park - Sodding will be measured on a square metre basis for:
 - (i) "Supply & Install topsoil & sod" on Form B: Prices.
 - (b) Strathmillan Lodge Park - Sodding will be measured on a square metre basis for:
 - (i) "Supply & Install topsoil & sod" on Form B: Prices.
- E17.2.2 Basis of Payment shall be as follows:
- (a) Sodding will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials. And performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E18. PROTECTIVE SURFACING

- E18.1 General Description
- E18.2 This specification shall cover the supply and install of wood fibre safety surfacing, as well as sand safety surfacing, and associated sub-surface drainage and wear mats.
- E18.3 Wood fiber Surfacing
- E18.3.1 Description
- (a) This specification shall cover the supply and installation of Wood Fiber Surfacing within the Play Equipment Area.
 - (b) This specification shall cover the supply and installation of Wood Fiber Surfacing to drain out of the play area and connect subsurface drainage to an emitter as per Drawing SCD-650 and E21.
- E18.3.2 Materials
- (a) Wood Fiber product shall be either Zeagar Woodcarpet or Fiber FibarSystem 200 or 300 products or substitute in accordance with B6.
 - (b) Wood Fiber surfacing shall be supplied by and authorized distributor and delivery slips and/or a warranty certificate from an authorized supplier are to be submitted to the Contract Administrator prior to installation.
 - (i) Contact for Woodcarpet
 - ◆ Zeagar Bros. Inc.
 - ◆ 4000 East Harrisburg Pike
 - ◆ Middletown, PA 17057
 - ◆ USA
 - ◆ Ph: (1-888) 346-8524 or (717) 944-7481
 - ◆ Fax (717) 944-7681
 - ◆ sales@seager.com

- (ii) Contact for FiberSystem 200 or 300:
 - ◆ The Fibar Group LLC
 - ◆ 80 Business Park Drive, Suite 300
 - ◆ Armonk, NY 10504-1705
 - ◆ USA
 - ◆ Ph: (800) 342-2721
 - ◆ FaxL (914) 273-8659
 - ◆ Info@FibarPlaygrounds.com

- (c) If substitute to Zeagar Woodcarpet or Fibar FiberSystem 200 or 300 is proposed, it must meet the following conditions:
 - (i) Materials must be IPEMA certified Engineered Wood Fiber
 - (ii) Material must consist of random-sized, clean, engineered hardwood chips. Standard wood chips or bark mulch are not acceptable.
 - (iii) Materials must meet or exceed ASTM F1292 standards for impact attenuation
 - (iv) Materials must be certified by the CSA and approved for playground use
 - (v) Materials must comply with ASTM F1951 for accessibility under the Canadians with Disabilities Act
 - (vi) 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 Fiber surfacing shall include wood fibre, geotextile fabric, subsurface drainage system and mats under swings and ends of slides.

- (e) Mats are to be installed directly on top of the geotextile fabric and secure in place with two (2) duckbill anchors per mat.

E18.4 Playsand Safety Surfacing

E18.4.1 Description

- (a) This specification shall cover the supply and installation of sand safety surfacing within the swing set areas at Bruce Park.
- (b) This specification shall cover the supply and installation of sand safety surfacing to drain out of the play area and connect subsurface drainage to an emitter as per Drawing SCD-650 and E21.

E18.4.2 Materials

- (a) All materials supplied under this specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.
- (b) Play sand shall be natural washed sand of non-packing, rounded particles, free of fines, clay, silt, stones or other debris and shall meet the following criteria:
 - (i) Materials must meet or exceed ASTM F1292 standards for impact attenuation
 - (ii) Playsand Safety Surfacing shall be course sand of the following Sieve breakdown:

Sieve Size	Cumulative % Passing
10 mm stone	99
5 mm	88
1.25 mm	69
315 um	11
80 um	1.75

- (c) Mats are to be installed directly on top of the geotextile fabric and secure in place with two (2) duckbill anchors per mat

E18.5 Construction Methods

- (a) Wood Fibre shall be installed within the play areas, as defined by the timber/concrete edging to a minimum depth of 205mm (after compaction). In the case where proposed play equipment includes a maximum fall height greater than 2.4m (8'), depth of material to directly correspond to maximum fall height of play equipment in accordance with manufacturer's specifications.
- (b) Sand safety surfacing is to be installed at a minimum depth of 300mm.
- (c) The installation of the safety surfacing shall be done immediately after the play equipment has been installed.
- (d) Do not compact the material during installation.
- (e) Drainage pipe shall be installed from the subsurface drainage system within the play area to run outside of the play area perimeter. The cost of this shall be included in the price of wood fibre or sand surfacing supply and installation.
- (f) Installation of entire system, including safety surfacing, geotextile fabric, subsurface drainage and mats under swings and slide ends shall be done according to manufacturer's instruction. Adequate drainage within play equipment area must be ensured as per same.
- (g) Mud grade of play area shall be graded to drain to one edge of the play area, and area cleared of any debris which inhibits proper drainage or installation of products.
- (h) Geotextile fabric must be cut and fit around playground equipment footings and overlap seams by 300mm.
- (i) Installation shall be done by equipment sized to suit the Work being done and the safety surfacing 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 safety surfacing.

E18.6 Method of Measurement and Basis of Payment

E18.6.1 Method of measurement shall be as follows:

- (a) Bruce Park - Protective Surfacing will be measured on a square metre basis for:
 - (i) "Supply and Install engineered wood fibre safety surfacing (300mm depth) including drainage and emitter", and;
 - (ii) "Supply and Install sand safety surfacing (300mm depth) under swing sets including drainage and emitter", on Form B: Prices.
- (b) Strathmillan Lodge Park - Protective Surfacing will be measured on a square metre basis for:
 - (i) "Supply and Install engineered wood fibre safety surfacing (205mm compacted depth for 8 ft. fall ht.) including drainage and emitter" on Form B: Prices

E18.6.2 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 (SM), 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.

E19. TIMBER EDGING

E19.1 General Description

- E19.1.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the drawings and specifications.

E19.1.2 This specification shall cover the supply and installation of single and double tier timber edging to contain the wood fiber safety surfacing in the New Play Area as per Drawings.

E19.2 Materials

E19.2.1 All caps and screws shall be as described on SCD 651 and SCD 651A.

E19.2.2 All granular base material shall conform to CW 3110 and CW3130 latest revisions. All material supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.

E19.2.3 All bottom row timbers to be pressure treated (P.T.) pine or fir, No.2 or better, no wane, bark, checking or splitting permitted. Wood shall be smooth and free of rough areas. All bottom Timber to be 140mm x 140mm with a minimum length of 1200mm.

E19.3 Construction Methods

E19.3.1 Installation shall be as per SCD-651, SCD-651A. Layout shall be established on site as per the drawings provided. Contractor is to ensure that layout is established in order to achieve the minimum safety zones for the proposed play equipment, in accordance with the most recent CSA safety zone requirements, and that those safety zones can be established wholly within the curbing as laid out on site.

E19.3.2 Timbers shall not be installed until after all rough grading is complete and both the rough grading and the layout and has been reviewed and approved as consistent with the general intent of the design drawings by the Contract Administrator.

E19.3.3 Granular base shall be installed as per detail provided and compacted to a minimum of 95 percent Standard Proctor Density.

E19.3.4 Timbers shall be installed as per Details provided. Base course timbers shall be pinned with a minimum of two (2) 19mm diameter by 500mm rebar at maximum 1200mm O.C.

E19.3.5 All timbers shall be cut neatly for a proper fit with no spaces or gaps between, unless specified for drainage. All cuts shall be treated with end cut as per manufacturers recommendation before being secured. Finished elevations shall ensure that all timbers are smooth, level, set plumb and spaced uniformly. Cuts treated with end cut preservative after being joined will not be accepted.

E19.3.6 Composite cap joints to be offset from bottom timber joints by a minimum of 450mm. composite caps shall be pre-drilled, set with grain of wood curved down, and fastened to base course with screws treated for ACQ use and sized to suit. composite capping above base course shall be secured with double row of screws offset at 225mm and installed at 600mm O.C. Minimum length of composite pieces shall be 1200mm.

E19.3.7 Composite cap shall be applied to existing play curb and attached consistent with provided details.

E19.3.8 Turf shall be repaired as required around edging in accordance with the CW 3510-R9.

E19.4 Measurement and Payment

E19.4.1 Method of Measurement shall be as follows:

- (a) Bruce Park – N/A
- (b) Strathmillan Lodge Park - Timber Edging will be measured on a linear meter basis for:
 - (i) "Supply and Install two layer timber edging with composite cap" on Form B: Prices.

E19.4.2 Basis of Payment shall be as follows:

- (a) Timber Edging 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.

E20. CONCRETE PLAY SURFACE EDGING

E20.1 Description

E20.1.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the drawings and City of Winnipeg specification CW 3310 latest revision.

E20.1.2 This specification shall cover the supply and installation of concrete play surface edging to contain the safety surfacing in the New Play Area as per Drawings.

E20.2 Materials

E20.2.1 All granular base material shall conform to CW 3110 and CW3130 latest revisions. All material supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.

E20.2.2 Concrete size, type, and reinforcement shall be as per SCD-643. Contractor to ensure all 3 sides of concrete curb edge are finished smooth.

E20.3 Construction Methods

E20.3.1 Installation shall be as per SCD-643. Layout shall be established on site as per the drawings provided. Contractor is to ensure that layout is established in such a way as to ensure that minimum safety zones for the proposed play equipment in accordance with on the most recent CSA safety zone requirements can be established wholly within the curbing as laid out on site.

E20.3.2 Turf shall be repaired as required around edging in accordance with the CW 3510-R9.

E20.4 Measurement and Payment

E20.4.1 Method of Measurement shall be as follows:

(a) Bruce Park – Concrete Play Surface Edging will be measured on a linear meter basis for:

(i) "Supply and Install concrete play surface edging curb" on Form B: Prices.

(b) Strathmillan Lodge Park – N/A

E20.4.2 Basis of Payment shall be as follows:

(a) Concrete Play Surface Edging 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.

E21. SUB-SURFACE DRAINAGE

E21.1 Description

E21.1.1 This Work shall consist of providing and placing a geocomposite prefabricated drain system as described in the plans as per SCD-659. The quantities of drain as shown on the plans may be increased or decreased at the direction of the Contract Administrator based on actual site conditions that occur during construction of the project. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of Work.

E21.2 Material

E21.2.1 Drainage pipe will be Multi-Flow or approved substitute in accordance with B6. Drainage pipe will be 150mm (6"). The manufacturer will size and approve all fittings for use with Multi-Flow or approved substitute drainage pipe.

E21.2.2 The drain conduit shall be of flexible, prefabricated, rounded rectangular shaped, composite product. The drain conduit will be wrapped with a non-woven geotextile and will be a non-woven needle-punched construction and consist of long-chain polymeric fibres composed of polypropylene, polyethylene or polyamide. The fibres will be oriented into a multi-directional stable network whereby they retain their positions relative with each other and allow the passage of water as specified. The fabric will be free of any chemical treatment or coating, which reduced permeability and will be inert to chemical commonly found in soil. The geotextile will conform to the following minimum average role values.

Weight	ASTM D-3776	3.0 – 4.0
Tensile Strength	ASTM D-4632	100 – 130
Elongation %	ASTM D-4632	50 – 70
Puncture, lb	ASTM D-751	35 – 60
Mullen Burst, psi	ASTM D-3786	110 – 215
Trapezoidal Tear, lb	ASTM D-4533	40 -42
Coefficient of Permeability	ASTM D-4491	.2 - .4 cm/sec
Flow Rate, gpm/ft2	ASTM D-4491	100 – 140
Permittivity, 1/sec	ASTM D-4491	1.3 – 2.0
Apparent Opening Size	ASTM D-4751	60/70 Max. US Std Sieve Opening
Seam Strength, lb/ft	ASTM D-4595	100
Fungus	ASTM G-21	No Growth

E21.2.3 The drainage core shall be made of high-density polyethylene. The core shall be constructed using interconnected corrugate pipers that define and provide the flow channels and structural integrity of the drain. The geotextile shall function only as a filter. The core of the edge drain shall conform to the following physical property requirements

Thickness, inches	ASTM D-1777	1.0
Flow Rate, gpm/ft*	ASTM D-4716	29
Compressive Strength, psf	ASTM D-1621 (modified sand method)	6000
Pipe Stiffness, pii	ASTM D-2412	100

* At gradient = 0.1, pressure = 10 psi for 100 hours

E21.2.4 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 manufacturers connector designed specifically for the purpose. Cleanouts will be provided as indicated on the drawings.

E21.2.5 Pipe

- (a) Pipe for drain outlet laterals will be either 100 mm (4") PVC pipe meeting the requirements of ASTM D-2729 or ASTM F-949, or high-density polyethylene pipe meeting the requirements of AASHTO M252.
- (b) A rodent screen made of 0.3-inch square opening size, 0.063-inch 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.
- (c) Emitter shall be a 3" polyethylene pop-up drainage emitter with elbow joint, product reference number NDS #620 or approved substitute in accordance with B7. MultiFlow or approved substitute shall be connected to emitter by using manufacturer's adapter for connecting drainage pipe to 75mm or 100mm round orifice or appropriate hardware.
 - (i) Contact for emitter:
Consolidated Turf
986 Powell Avenue
Winnipeg, MB
R3H 0H6
Tel: 204-633-7276
Fax: 204-633-3447

E21.3 Backfill for Trenches

- (a) As per SCD-659

E21.4 Methods

- E21.4.1 The layout of the subdrain is to be marked on Site and approved by the Contract Administrator prior to trenching.
- E21.4.2 Subdrain within the play area is to be laid on the prepared surface to facilitate cross movement of water. Subdrain shall be installed below geotextile and in conformance with details provided.
 - (a) Play area to be graded to drain towards subdrain. This subdrain is to be used in conjunction with the appropriate wood fiber drainage layer to bring excess water out of the play area.
- E21.4.3 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.
- E21.4.4 Fittings for the drain will be installed in accordance with the manufacturer's recommendations and Specifications.
- E21.4.5 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.

E21.5 Measurement and Payment

- E21.5.1 Method of Measurement shall be as follows:
 - (a) No measurement shall be made for subsurface drainage as it is incidental to E18.
- E21.5.2 Basis of Payment Shall be as follows:
 - (a) No payment shall be made for subsurface drainage as it is incidental to E18.

E22. PLAY EQUIPMENT

- E22.1 This specification shall cover the supply and installation of the Play Equipment as listed below and specified herein.

- E22.2 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the drawings and specifications.
- E22.3 The Contractor shall obtain all approvals including permit if required
- E22.4 **Play Area:**
- (a) Bruce Park - Play equipment designed for children ages 2-12 (with emphasis on 5-12). Play equipment must provide the following play activities:
 - (i) Sensory & Imaginative Play;
 - (ii) Climbing;
 - (iii) Motion; and
 - (iv) Sliding.
 - (b) Strathmillan Lodge Park - Play equipment designed for children ages 2-5. Play equipment must provide the following play activities:
 - (i) Sensory & Imaginative Play;
 - (ii) Climbing;
 - (iii) Motion; and
 - (iv) Sliding.
 - (c) The design submission shall be evaluated as per B17.
 - (d) If a playstructure is proposed, it must include 1 (one) transfer station for access of adult caregiver or reduced mobility access;
- E22.5 If colour is a feature of posts, top caps and panels, the Contract Administrator shall have the ability to modify specified colours from the proposed design after Contract Award. If the price of the equipment in the Bid Submission is subject to the colours of the proposed design, this must be indicated in the Bid Submission.
- E22.6 Components which are unacceptable are the following:
- (a) Wooden structures;
 - (b) Tube (enclosed) slides and enclosed crawl tubes;
 - (c) Play panels with many small moving parts;
 - (d) Talk Tubes;
 - (e) Barrel rollers; and
 - (f) Large number of plastic components.
- E22.7 Components which are generally not accepted but may be considered are the following:
- (a) Cable rides;
 - (b) Sand diggers;
 - (c) Merry-go-rounds; and
 - (d) Tire Swings.
- E22.8 Playstructures
- E22.8.1 General Description
- (a) If a Playstructure is specified, this specification shall cover the supply and installation of it.
 - (b) Play equipment shall be installed in the play areas as shown on the attached Drawings. The play equipment and their safety zones should fit into the proposed play areas as shown on Drawings. Efficiency and good use of space will be considered in the evaluation of submissions.
- E22.8.2 Materials

- (a) Posts / Caps
 - (i) All posts shall be a minimum 5" O.D. round or 4" square tubing for a post and deck structure.
 - (ii) 3.5 " O.D. round or 3.0" square tubing will be permitted in circumstances where a multi-deck structure has decks of varied heights which are all under 4', or for structures with 2 decks or less.
 - (iii) All posts shall be fabricated from either aluminium (0.125" min. wall thickness) or galvanized steel (0.120" 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 2 3/8" O.D. round posts fabricated out of steel or aluminum (min. 10 gauge wall thickness) is 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 (if applicable)
 - (i) All decks shall be manufactured from vinyl-coated perforated steel or a steel core composite. Deck heights may vary to a maximum height of 6'.
- (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 15/16" (24mm) O.D. with a 120" 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.
- (e) Hardware
 - (i) All fasteners shall be socketed and tamper proof in design, and either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.
 - (ii) All necessary hardware shall be provided.
- (f) Poly Components
 - (i) Poly components such as slides and hoods shall be fabricated from U.V. stabilized, rotationally molded linear low-density polyethylene.
 - (ii) Poly components such as play panels shall be fabricated from compression molded solid colour, U.V. stabilized, high-density polyethylene.
- (g) Slides (if applicable)
 - (i) **Stainless steel. A minimum of one is required; plastic slide may be used for additional slides. North or east orientation preferred.**
- (h) Each playstructure shall have kick plates and hand loops as required to meet the most recent Canadian Standards Association Standards.

E22.8.3

Installation

- (a) Play equipment shall be installed as per manufacturer's specifications and in accordance with the most recent Canadian Standards Association Standards.
- (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.

E22.9 Independent Components

E22.9.1 General Description

- (a) The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the specifications.
- (b) This specification shall cover the supply and installation of Independent Components as specified herein.
- (c) Independent Components shall be installed as per the proposed design, as the proposed budget will allow.
- (d) Independent Components shall be installed in the available areas as shown on Drawings. The Components and their zones must fit into the proposed play area.

E22.9.2 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 amount of solid elements which limit visibility through the Site.
- (d) Fasteners
 - (i) All hardware shall be tamper-proof in design and require special tools. It shall be either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel. All necessary hardware and tools shall be provided.
- (e) 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.
- (f) Foundations
 - (i) Shall be as per "E24 FOUNDATIONS".

E22.10 Method of Measurement and Basis of Payment

E22.10.1 Method of Measurement shall be as follows:

- (a) Bruce Park - Play Equipment shall be measured on a lump sum basis for:
 - (i) "Supply & install 2-12 play equipment (emphasis on 5-12 yrs.) c/w required wear mats", on Form B: Prices
- (b) Strathmillan Lodge Park - Play Equipment shall be measured on a lump sum basis for:
 - (i) "Supply & install 2-5 play equipment c/w required wear mats", on Form B: Prices

E22.10.2 Basis of Payment shall be as follows:

- E22.11 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.

E23. **SWING SET**

E23.1 General Description

- (a) Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the specifications.

E23.1.2 This specification shall cover the supply and installation of minimum one (1) complete swing standard as specified herein:

- (a) One (1) Three Leg Heavy Duty Swing Frame, 2.4m (8ft.) high, 2-Bay, complete with two (2) slash-proof rubber, enclosed infant seats, and two (2) slash-proof rubber belt seat, heavy-duty chain, swing hangers and hammer locks / bolt links.
- (b) One (1) Two Leg Heavy Duty Swing Frame, 2.4m (8ft.) high, 1-Bay, complete with , heavy-duty chain, swing hangers and hammer locks / bolt links, two (2) slash-proof rubber, enclosed infant seats in location shown on Drawing 1/B-L2.0.

E23.2 Materials

E23.2.1 Topbeam

- (a) All topbeams shall be fabricated from **3 1/2" O.D. 8 gauge (minimum), RS40 galvanized steel pipe with anti-wrap**. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating.

E23.2.2 Legs

- (a) All legs shall be fabricated from 2 3/8" O.D. 10 gauge, RS40 galvanized steel pipe. 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.

E23.2.3 Yoke Clamps

- (a) All yoke clamps shall be either one piece construction and fabricated from 8 gauge, RS40 galvanized steel pipe or two piece, compression clamping cast aluminum or galvanized metal complete with tamper-proof hardware.

E23.2.4 Swing Hangers

- (a) All swing hangers shall be fabricated from galvanized malleable iron and have oil impregnated bearings pressed in.

E23.2.5 Swing Chain

- (a) All swing chain shall be 4/0 straight link, galvanized steel.

E23.2.6 Enclosed Infant (Bucket) Seats

- (a) All enclosed infant seats shall be moulded of U.V. stabilized, high quality, rubber with a tempered stainless steel reinforcement plate insert moulded inside, rendering the seats slash-proof. Infant seats shall be fully enclosed to prevent slipping out and provide extra lower back support.

E23.2.7 Belt Seats

- (a) All belt seats shall be moulded of U.V. stabilized, high quality, rubber with a tempered stainless steel reinforcement plate insert moulded inside, rendering the seats slash-proof. The perimeter shall be moulded to form a blunt, impact absorbing edge.

E23.2.8 Hardware

- (a) All fasteners shall be tamper proof in design, requiring special tools. The fasteners shall be either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.

E23.2.9 Concrete Foundations

- (a) Post shall be installed into a concrete footing the composition of which is detailed in E24.

E23.3 Installation

E23.3.1 Installation shall be in accordance with Manufacturers specifications.

- E23.3.2 Top rail is to be level and posts securing anchored in concrete.
- E23.3.3 Swing seats shall not be installed until the protective surfacing (in accordance with E18) has been installed
- E23.4 Method of Measurement and Basis of Payment
- E23.4.1 Method of Measurement shall be as follows:
- (a) Bruce Park Park - Swing Set will be measured on a per unit basis for:
 - (i) "Supply and Install a single bay swing set with 2 bucket seats" on Form B: Prices.
 - (b) Strathmillan Lodge Park - Swing Set will be measured on a per unit basis for: "Supply and Install 2 bay swing set with 2 belts and 2 buckets c/w wear mats under belts" on Form B: Prices.
- E23.4.2 Basis of Payment shall be as follows:
- E23.4.3 Swing Set 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.

E24. FOUNDATIONS

- E24.1 General Description
- E24.1.1 All playground equipment posts, bases and anchors are to be set in concrete footings or piles to ensure stability and prevent frost heaving. An alternative to concrete footings or piles that may be approved includes a welded and secured rail mounting system. The current Standard Construction Specifications of the City of Winnipeg, CW 2160-R7 – latest revision – Concrete to be used in Underground Works, is to be utilized in the installation of the concrete works for all below ground components.
- E24.2 Materials
- E24.2.1 The specific concrete requirements shall be:
- (a) Sulfate resistant, Type 50 Cement;
 - (b) 28 day compressive strength of 30 Mpa;
 - (c) Maximum aggregate size of 20mm, nominal;
 - (d) Slump 80 +/- 20mm;
 - (e) Maximum water/cement ration 0.49
- E24.3 Installation
- E24.3.1 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 2" concrete at any point around the post.
- E24.3.2 All concrete footings for play equipment shall be a minimum of 3' depth, or in accordance with Manufacturer's specifications, whichever is greater.
- E24.4 Method of Measurement and Basis of Payment
- E24.4.1 Method of Measurement shall be as follows:
- (a) Foundations shall be incidental to the measurement of Play Equipment listed above and as shown on Form B: Prices.
- E24.4.2 Basis of Payment shall be as follows:

(a) No separate payment shall be made for play equipment foundations.

E25. MAINTENANCE KITS

- E25.1 All play equipment shall include the supply of maintenance kits. 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.
- E25.2 There shall be no payment for the maintenance kits.