

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 82-2008

MACHRAY PARK PLAYGROUND RENOVATIONS

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 MACHRAY PARK PLAYGROUND RENOVATIONS

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, March 26, 2008.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

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

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. ADDENDA

- B5.1 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.
- B5.2 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.
- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.2.3 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.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 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.
- B6.4 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.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his 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.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- B6.9 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. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
 - (a) Form A: Bid;
 - (b) Form B: Prices:

- (c) Design Drawings as per B10;
- (d) Component Description as per B11.
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 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.
- B7.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.4.1 Samples or other components of the Bid 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.
- B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.8 Bids shall be submitted to:

The City of Winnipeg Corporate Finance Department Materials Management Branch 185 King Street, Main Floor Winnipeg MB R3B 1J1

B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 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 own name, his 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 own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 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.
- B8.4 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 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 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.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.
- B8.4.2 All signatures shall be original.
- B8.5 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.

B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 Notwithstanding C12.2.3(c), prices on Form B: Prices shall include the Manitoba Retail Sales Tax (MRST, also known as PST), but exclude GST.
- B9.2 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.
- B9.3 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. DESIGN DRAWINGS

B10.1 The Bidder should submit drawings which illustrate the proposed design and play equipment, such as plan, perspective, and any other submissions to illustrate the design intent. Additional drawings may be requested prior to award for more detailed evaluation.

B11. COMPONENT DESCRIPTION

B11.1 The Bidder shall submit component description and / or graphic or catalogue reference outlining specifications of play equipment components.

B12. QUALIFICATION

- B12.1 The Bidder shall:
 - (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B12.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) be responsible and not be suspended, debarred or in default of any obligations to the City (a list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt).

- B12.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- B12.4 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B12.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B13. OPENING OF BIDS AND RELEASE OF INFORMATION

- B13.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, or in such other office as may be designated by the Manager of Materials.
- B13.1.1 Bidders or their representatives may attend.
- B13.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- B13.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- B13.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B14. IRREVOCABLE BID

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

B15. WITHDRAWAL OF BIDS

- B15.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B15.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B15.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

- B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
 - (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.
- B15.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B14.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B16. EVALUATION OF BIDS

- B16.1 Award of the Contract shall be based on the following bid evaluation criteria:
 - (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B12 (pass/fail);
 - (c) Total Bid Price (10 Points) pursuant to B16.4.3;
 - (d) Design / Submission (90 points) pursuant to B16.5;
 - (i) Senior Play Area Design (60 points)
 - (ii) Junior Play Area Design (30 points)
 - (e) economic analysis of any approved alternative pursuant to B6.
- B16.2 Further to B16.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B16.3 Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B16.4 Further to B16.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B16.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B16.4.2 Further to B16.1(c) the Award Authority may reject a Bid as being non-responsive if it exceeds the budget as shown on Form B: Prices.
- B16.4.3 The Total 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.
- B16.5 Further to B16.1(d), Design / Submission shall be evaluated with a weighting of 90 points out of a total of 100 possible points. The Senior and Junior Play Area Designs shall be evaluated separately. The Senior Play Area design shall be evaluated with a weighting of 60 points out of a total of 100 possible points, and the Junior Play Area design shall be evaluated with a weighting of 30 points out of a total of 100 possible points. Design / Submission will be evaluated considering the Bidder's Bid Submission and any other information required.
- B16.5.1 The evaluation for the **Senior Play Area** design shall be based on the following criteria:

- (a) compliance with CSA Standards (pass/fail);
- (b) play value (maximum 30 points)
 - (i) 10 points Variety of play activities provided by play equipment:
 - ♦ 3 points climbing;
 - 2 points balancing;
 - ◆ 2 points sliding;
 - ◆ 2 points social play;
 - 1 point spinning;
 - (ii) 10 points Provides opportunities for social / interpersonal interaction and cooperative play;
 - (iii) 5 points Variety of access points & egress points;
 - (iv) 5 points Provides for fine and gross motor and sensory development;
- (c) Designed for inclusive play using Universal Design principles (maximum 8 points)
 - (i) Complies with section 4.5.4 of the City of Winnipeg Accessibility Design Standards (www.winnipeg.ca/ppd/pdf files/Access Design Standards.pdf) (pass/fail);
 - 4 points Layout of the play area for integration of the wheelchair accessible components to promote inclusive play;
 - (iii) 4 points Layout of the play area and inclusion of components that promote inclusive play for people with visual impairment.
- (d) Layout/circulation (maximum 14 points)
 - 4 points Flow and relationship within playstructure and/or between play area activities;
 - (ii) 3 points Layout / orientation of components on Site and in relation to park entrances and sitting areas;
 - (iii) 5 points optimize visual access into and within the play area for security purposes;
 - (iv) 2 points slide orientation (metal facing north).
- (e) Durability (maximum 8 points)
 - (i) 4 points Use of durable/ tamper-resistant materials, low maintenance finishes and connector systems, and ease of repair/ replacement of the products used in the playground area.
 - (ii) 4 points Minimal use of plastic components in play equipment.
- B16.5.2 The evaluation for the **Junior Play Area** design shall be based on the following criteria:
 - (a) compliance with CSA Standards (pass/fail);
 - (b) play value (maximum 17 points)
 - (i) 7 points Variety of play activities provided by play equipment;
 - ◆ 1 point Balancing;
 - 2 points Climbing;
 - ♦ 2 points Creative/ Imaginative Play;
 - ♦ 2 points Motion (ie. Springing, spinning...);
 - (ii) 5 points Provides opportunities for social / interpersonal interaction and cooperative play;
 - (iii) 5 points Provides for fine and gross motor and sensory development;
 - (c) accessible play component— (maximum 2 points)
 - (d) Layout/circulation (maximum 7 points)
 - 2 points Flow and relationship within playstructure and/or between play area activities;

- (ii) 2 points Layout / orientation of components on site and in relation to park entrances and sitting areas:
- (iii) 2 points optimize visual access into and within the play area for security purposes;
- (iv) 1 points slide orientation (metal facing north).
- (e) Durability (maximum 4 points)
 - (i) 2 points Use of durable/ tamper-resistant materials, low maintenance finishes and connector systems, and ease of repair/ replacement of the products used in the playground area.
 - (ii) 2 points Minimal use of plastic components in play equipment.
- B16.6 Further to B16.5.1 and B16.5.2, if Contractor states play equipment components are compliant with CSA Standards which are not, liquidated damages shall be charged as per D14 should this result in additional design and/or meeting time on the part of the Contract Administrator.

B17. AWARD OF CONTRACT

- B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B17.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B17.2.1 Without limiting the generality of B17.2, the City will have no obligation to award a Contract where:
 - (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B17.3 Subject to B17.2, where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the responsive Bid having the highest points based on evaluation criteria.
- B17.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.
- B17.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B17.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

CO. 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 Branch internet site at http://www.winnipeg.ca/matmgt.
- 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

- (a) The Work to be done under the Contract shall consist of:
 - (i) Removals:
 - (ii) Excavation, stockpile, and disposal;
 - (iii) Construction of asphalt paved area;
 - (iv) Supply and installation of timber edging;
 - (v) Supply and installation of site furniture;
 - (vi) Supply and installation of topsoil and sod as required in accordance with the requirements;
 - (vii) Supply and installing the new play equipment within existing timber edging;
 - (viii) Supply and installing the new wood fibre surfacing, including drainage works.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Shauna Prociuk Design Assistant 15-30 Fort Street Winnipeg, Manitoba R3C 4X5

Telephone No. (204) 986-3938 Facsimile No. (204) 986-7524

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

D4. CONTRACTOR'S SUPERVISOR

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

D5. NOTICES

- D5.1 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.
- D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

D5.3 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:

The City of Winnipeg Chief Administrative Officer Secretariat Attn: Chief Administrative Officer Administration Building, 3rd Floor 510 Main Street Winnipeg MB R3B 1B9

Facsimile No.: (204) 949-1174

D5.4 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 address or facsimile number:

The City of Winnipeg Corporate Services Department Legal Services Division Attn: City Solicitor 185 King Street, 3rd Floor Winnipeg MB R3B 1J1

Facsimile No.: (204) 947-9155

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

D6.1 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.

D7. INSURANCE

- D7.1 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) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
- D7.2 Deductibles shall be borne by the Contractor.
- D7.3 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.
- D7.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

D8. PERFORMANCE SECURITY

- D8.1 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.
- D8.1.1 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.
- D8.2 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.

D9. SUBCONTRACTOR LIST

D9.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

D10. DETAILED WORK SCHEDULE

- D10.1 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.
- D10.2 The detailed work schedule shall consist of the following dates:
 - (a) start date;
 - (b) installation of timber edging:
 - (c) grading of play area and excavation of Rock Sump Pit;
 - (d) excavation of holes for play equipment posts;
 - (e) arrival of play equipment to Site;
 - (f) concrete pouring for posts;
 - (g) installation of hard surfaces:
 - (h) expected completion.
- D10.3 Other milestone dates appropriate to this project should also be included to make the Contract Administrator aware of them.

SCHEDULE OF WORK

D11. COMMENCEMENT

- D11.1 The Contractor shall not commence any Work until he is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D11.2 The Contractor shall not commence any Work on the Site until:
 - (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D6;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) evidence of the insurance specified in D7;
 - (iv) the performance security specified in D8; and
 - (v) the Subcontractor list specified in D9.
 - (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.
 - (c) the Contractor has provided a written schedule of work outlining dates and duties to be performed.
- D11.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order.

D12. SUBSTANTIAL PERFORMANCE

- D12.1 The Contractor shall achieve Substantial Performance within twenty (20) consecutive Working Days of the commencement of the Work as specified in D11.
- D12.2 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.
- D12.3 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.

D13. TOTAL PERFORMANCE

- D13.1 The Contractor shall achieve Total Performance within twenty five (25) consecutive Working Days of the commencement of the Work as specified in D11.
- D13.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D13.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D14. LIQUIDATED DAMAGES

D14.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City five hundred dollars

- (\$500.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D14.2 If the Contractor misrepresents the CSA compliance of play equipment being installed and this results in additional design and/or meeting time on the part of the Contract Administrator, the Contractor shall pay the City five hundred dollars (\$500) per Working Day for each and every Working Day during which such additional work continues.
- D14.3 The amount specified for liquidated damages in D14.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D14.4 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D15. EXISTING SERVICES AND UTILITIES

D15.1 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

D16. ACCESS TO SITE

- D16.1 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.
- D16.2 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.

D17. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- D17.1 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.
- D17.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- D17.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- D17.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.
- D17.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- D17.6 The Contractor and Sub-contractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

D18. DAMAGE TO EXISTING STRUCTURES, TREES AND PROPERTY

D18.1 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.

- D18.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area:
 - (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2 metres of trees.
 - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2400 wood planks, or suitable protected as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - (d) Operation of equipment within the drip line of the trees shall be kept to a minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the drip lines of trees. The drip line of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
- D18.3 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.
- D18.4 No separate measurement or payment will be made for the protection of trees.

CONTROL OF WORK

D19. JOB MEETINGS

- D19.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D19.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

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

D20.1 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).

MEASUREMENT AND PAYMENT

D21. PAYMENT

D21.1 Further to C12, effective January 1, 2007 the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D22. WARRANTY

- D22.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D22.2 Notwithstanding C13.2 or D22.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:
 - (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D22.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

D23. SITE RESTORATION

D23.1 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified, the Contractor shall restore all areas of the Site beyond the established limit of Work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.

FORM H1: PERFORMANCE BOND (See D8)

KNOW ALL MEN BY THESE PRESENTS THAT			
(here	inafter called the "Prin	ncipal"), and	
	inafter called the "Su d the "Obligee"), in the	rety"), are held and firmly bound unto THE CITY OF WINNIF sum of	PEG (hereinafter
		dollars (\$)
sum	the Principal and the	to be paid to the Obligee, or its successors or assigns, for the p Surety bind themselves, their heirs, executors, administrators, ly, firmly by these presents.	
WHE	REAS the Principal ha	as entered into a written contract with the Obligee dated the	
	day of	, 20, for:	
BID (OPPORTUNITY NO. 8	32-2008	
MAC	HRAY PARK PLAYGF	ROUND RENOVATIONS	
which	n is by reference made	e part hereof and is hereinafter referred to as the "Contract".	
NOW	/ THEREFORE the co	ndition of the above obligation is such that if the Principal shall:	
(a) (b) (c) (d) (e)	forth in the Contract perform the Work in make all the payme in every other rest Contract; and indemnify and save demands of every claims, actions for Compensation Active performance or not performance or not performance.	orm the Contract and every part thereof in the manner and with ct and in accordance with the terms and conditions specified in the nagood, proper, workmanlike manner; ents whether to the Obligee or to others as therein provided; pect comply with the conditions and perform the covenants of the harmless the Obligee against and from all loss, costs, damage description as set forth in the Contract, and from all penalties or loss, damages or compensation whether arising under ", or any other Act or otherwise arising out of or in any way comperformance of the Contract or any part thereof during varranty period provided for therein;	he Contract; contained in the ges, claims, and s, assessments, "The Workers nnected with the
		SHALL BE VOID, but otherwise shall remain in full force and ef e for a greater sum than the sum specified above.	fect. The Surety
nothi	ng of any kind or matt	CLARED AND AGREED that the Surety shall be liable as Prefer whatsoever that will not discharge the Principal shall operate e Surety, any law or usage relating to the liability of Sureties	e as a discharge
IN W	ITNESS WHEREOF th	he Principal and Surety have signed and sealed this bond the	
	day of	, 20	

SIGNED AND SEALED in the presence of:	(Name of Principal)	
	Per:	(Seal)
(Witness)	Per:	
	(Name of Surety)	
	By: (Attorney-in-Fact)	(Seal)

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

(See D8)

(Date)	
Corpo Legal 185 K	v of Winnipeg Ate Services Department Bervices Division By Street, 3rd Floor By MB R3B 1J1
RE:	PERFORMANCE SECURITY - BID OPPORTUNITY NO. 82-2008
	MACHRAY PARK PLAYGROUND RENOVATIONS
Pursu	nt to the request of and for the account of our customer,
(Name	Contractor)
(Addres	of Contractor)
	REBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding ggregate
	Canadian dollars.
demai Letter payme	andby Letter of Credit may be drawn on by you at any time and from time to time upon writter of for payment made upon us by you. It is understood that we are obligated under this Standby of Credit for the payment of monies only and we hereby agree that we shall honour your demand four twithout inquiring whether you have a right as between yourself and our customer to make such and without recognizing any claim of our customer or objection by the customer to payment by us.
	ount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upor u or by formal notice in writing given to us by you if you desire such reduction or are willing that it be
Partia	drawings are permitted.
	age with you that all demands for payment made within the terms and currency of this Standby f Credit will be duly honoured if presented to us at:
(Addres	
and w	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 (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name of bank or financial institution)	
Per:	
	(Authorized Signing Officer)
Per:	
	(Authorized Signing Officer)

FORM J: SUBCONTRACTOR LIST

(See D9)

MACHRAY PARK PLAYGROUND RENOVATIONS

<u>Name</u>	Address

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 The City of Winnipeg Standard Construction Specifications in 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 Branch internet site at http://www.winnipeg.ca/matmgt.
- 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:

Drawing No.	<u>Drawing Name/Title</u>
M.7-H1	MACHRAY PARK – Existing Conditions & Removals
M.7-H2	MACHRAY PARK – Proposed Site Works
M.7-H3	MACHRAY PARK - Proposed Play Equipment and Surfacing
M.7-H4	MACHRAY PARK – Layout of Play Areas
M.7-H5	MACHRAY PARK – Play Area Safety Surfacing & Drainage
SCD-638a	PLAYGROUND TIMBER EDGE DETAIL
SCD-120A	TACHE STYLE BENCH - COMPOSITE
SCD-645	PARKWAY PATH - ASPHALT

E1.3.1 Above Drawings are available on request in AutoCAD .dwg format or Vectorworks format from the Contract Administrator.

SITE DEVELOPMENT

E2. REMOVALS

- E2.1 General Description
- Existing benches and waste receptacle located within Junior Play Area to be removed and legally disposed of. 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-R7. 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.
- E2.2 Materials
- E2.2.1 Removals include the removal of items (benches and waste receptacle) 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.
- E2.3 Construction Methods
- E2.3.1 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.

- E2.3.2 Removals include the removal of all footings and backfill.
- E2.4 Method of Measurement and Basis of Payment
- E2.4.1 Method of Measurement shall be as follows:
 - (a) Removals will be measured on a lump sum basis for: "Remove existing benches and waste receptacles in junior area".
- E2.4.2 Basis of Payment shall be as follows:
 - (a) Removals 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.

E3. EXCAVATION, STOCKPILE, AND DISPOSAL

- E3.1 General Description
- E3.1.1 This specification shall cover the excavation, stockpiling, and legal disposal of existing surfacing to accommodate new surfacing materials and installations.
- E3.1.2 Work shall include but not be limited to the following:
 - (a) Excavate and stockpile existing playstone within the Senior Play Area.
 - (b) Excavate and dispose of all existing sand and turf to the limits shown on Drawings M.7-H1, M.7-H2, and to the depths necessary to achieve finish grade for:
 - (i) Expanded safety surfacing within Senior Swing Area;
 - (ii) Safety surfacing within Junior Play Area; and
 - (iii) asphalt sitting area.
- E3.2 Materials
- E3.2.1 Excavate and Stockpile includes the excavation of existing playstone as indicated on the Drawings and as directed by the Contract Administrator. Work includes the excavation and stockpiling of clean and uncontaminated Site material.
- E3.2.2 Excavation and Disposal includes the removal of items surfacing materials as indicated on the Drawings and as directed by the Contract Administrator. Work includes the satisfactory disposal of unsuitable Site material such as clays susceptible to frost-heaving, silts, rock rubble rubbish and any surplus suitable Site material.
- E3.2.3 Do not disturb adjacent items designated to remain in place.
- E3.3 Construction Methods
- E3.3.1 Stockpiling of material shall be understood to mean the relocation of all suitable material on the Site in a manner and location acceptable to the Contract Administrator. Stockpile location to be restored to original condition following removal and re-use of playstone.
- E3.3.2 Excavation and disposal includes the removal of items (i.e. sand and turf) 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. Do not disturb adjacent items designated to remain in place.
- E3.3.3 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-R7. 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.

- E3.3.4 Disposal of material shall be understood to mean the hauling of all unsuitable material from the Site and the unloading in a legal manner acceptable to the Contract Administrator. If arrangements are made in advance excavated material may be disposed of on Site at a location designated by the Contract Administrator.
- E3.3.5 Contractor must coordinate with the Contract Administrator to ensure all removals have occurred.
- E3.3.6 Excavation should be coordinated with the installation of play equipment so as not to leave an open excavation area subject to ponding water.
- E3.3.7 Excavate to the limits shown and as necessary to achieve finish grades:
 - (a) Play areas:
 - Safety Surfacing in expanded Senior Area to accommodate a minimum of 300mm wood fibre depth and in accordance with Drawing M.7-H2;
 - (ii) Safety Surfacing in Junior Area to accommodate a minimum of 300mm playstone depth and in accordance with Drawing M.7-H2;
 - (b) Asphalt sitting area 275mm, in accordance with "Asphalt Path Detail" on Drawing M.7-H2 and per E8.
- E3.4 Method of Measurement and Basis of Payment
- E3.4.1 Method of Measurement shall be as follows:
 - (a) Stockpile will be measured on a cubic metre basis for: "Excavate and stockpile existing playstone in Senior Area." on Form B: Prices
 - (b) Excavation and Disposal shall be measured on a cubic metre basis for:
 - "Excavate and legally dispose excess soil and unusable playstone in Senior Area, to allow for a total of 300mm depth safety surfacing";
 - (ii) "Excavate and legally dispose to enlarge Senior Swing Area, to allow for 300mm depth of safety surfacing"; and
 - (iii) "Remove and legally dispose of Sand safety surfacing in Junior Area (including excavating to allow for a total depth of 300mm safety surfacing)" on Form B: Prices.
 - (c) No measurement will be made for the Excavation and Disposal for the asphalt sitting area as these items are incidental to E8.
- E3.4.2 Basis of Payment shall be as follows:
 - (a) Excavation, Stockpile, and Disposal for new safety surfacing within play areas will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.
 - (b) No payment will be made for the Excavation and Disposal for the asphalt sitting area as this shall be incidental to E8.

E4. TIMBER EDGING

- E4.1 General Description
- E4.1.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the drawings and specifications.
- E4.1.2 This specification shall cover the supply and installation of timber edging to expand the Senior Swing Area safety surface, as well as any necessary replacement timbers, which is to be determined on Site in consultation with Contract Administrator.
- E4.2 Materials and Method

- E4.2.1 Layout of edging shall be as per Drawing M.7-H2, or as approved, to adequately provide extents of safety surfacing beneath play equipment, based on the most recent CSA safety zone requirements.
- E4.2.2 Top course shall be stained spruce, No. 2 or better, and bottom course shall be pressure-treated timbers.
 - (a) No wane, bark, checking or splitting permitted.
 - (b) Wood shall be smooth and free of rough areas.
 - (c) All timbers to be 150 x 150mm with a minimum length of 1200mm. Contractor to use longest lengths possible.
 - (d) Top edges of all exposed timbers shall have an 8mm (45°) chamfer.
- E4.2.3 Timbers shall be installed as per Drawing SCD-638a.
- E4.2.4 All timbers shall be cut neatly for a proper fit with no spaces or gaps between. All cuts shall be stained before being secured. All wood should be pre-stained prior to installation. Finished elevations shall ensure that all timbers are smooth, level, set plumb and spaced uniformly.
 - (a) End-cut wood preservative to be applied to the cuts of all pressure treated wood;
 and
 - (b) Olympic Waterproofing Sealant or equivalent to be applied to all sides of spruce top course.
- E4.2.5 Turf shall be repaired as required around edging in accordance with the latest version of City of Winnipeg Standard Specifications CW 3520 for Topsoil and Seeding and as per Drawing SCD-638a.
- E4.2.6 The layout of the timber edging shall ensure that the proper safety zones are created and maintained around the existing swing sets to comply with the latest version of CAN/CSA Z614.
- E4.3 Method of Measurement and Basis of Payment
- E4.3.1 Method of Measurement shall be as follows:
 - (a) Timber Edging will be measured on a linear metre basis for:
 - (i) "Supply and install new timber edging to expand Senior Swing Area, and to replace existing cracked edging" on Form B: Prices.
- E4.3.2 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.

E5. SUB-SURFACE DRAINAGE

- E5.1 General Description
- E5.1.1 This specification shall cover the supply and installation of sub-surface drainage system to drain the Senior Area which is using wood fibre protective surfacing.
- E5.1.2 This sub-surface drainage is to be used in conjunction with the drainage system that is included with the wood fibre protective surfacing in E6.
- E5.1.3 Included within the sub-surface drainage is to be the grading of the Senior Area.
- E5.2 Materials and Methods
 - (a) Granular sump material: 38 mm to 76mm diameter Clean Crushed Stone.

- (b) Filter Fabric: filter cloth.
- (c) Pipe: Perforated PVC Pipe, comes with filter sock. Size shall be 100mm as shown on Drawings.
- (d) The grading of the Senior Area shall ensure that the base of the Area is sloped at a 0.6% to 1% slope towards the low end of the Site, as per Drawing M.7-H5.
- (e) A drain strip or pipe (depending on which wood fibre system is to be used) is to be installed along the lower edge of the play area and the wood fibre drain system is to drain to it.
- (f) The drain strip or pipe shall then direct the drainage of the Wood Fibre system to a low point in which the 0.9m diameter by 1.8m deep Rock Sump Pit shall be located. The sump shall be located at the low point within the Senior Area and as determined on Site with the Contract Administrator.
- E5.3 Method of Measurement and Basis of Payment
- E5.3.1 Method of Measurement shall be as follows:
 - (a) Sub-Surface Drainage will be measured on a lump sum basis for the following:
 - "Sub-Surface Drainage for Senior Area, including Rock Sump Pit" on Form B: Prices.
- E5.3.2 Basis of Payment shall be as follows:
 - (a) Sub-Surface Drainage 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.

E6. PROTECTIVE SURFACING

- E6.1 General Description
- E6.1.1 This specification shall cover the supply and install of two distinct types of safety surfacing: playstone and wood fibre.
- E6.2 Playstone Safety Surfacing
- E6.2.1 Description
 - (a) This specification shall apply to the installation of the salvaged playstone safety surfacing, the supply and installation of new playstone as required to attain the total depths of 300mm in the Junior Area.
- E6.2.2 Materials
 - (a) New Safety Stone shall be 6.0mm Playground Stone, composition shall be Typical Birds Hill glacial till material, 100% clean river-washed granite conforming to the following sizes of sieve:

100% passing 10mm 45% passing 5mm Up to 10% passing 2.5mm Up to 4% passing 1.25mm 0% passing 0.8mm sieve

E6.2.3 Construction Methods

- (a) Existing swing seats shall be temporarily removed or other wise secured so as to prevent use during this operation. Swing seats shall be made operable upon completion of the Work.
- (b) Existing clean playstone shall be stockpiled. Contaminated material shall be removed and legally disposed of.

- (c) The areas shall be excavated to a depth of 300 mm within the existing timber edging as shown on Drawing M.7-H2.
- (d) Salvaged playstone shall be spread over the entire area first, then new material place on top such that the combined depth of material is 300 mm.
- (e) Do not compact the material during installation.
- (f) Installation shall be done by equipment sized to suit the Work being done and the sand shall be spread by hand as necessary in the immediate vicinity of the play equipment so as not to damage same.

E6.3 Wood Fibre Safety Surfacing

E6.3.1 Description

(a) This specification shall cover the supply and installation of Wood Fibre Surfacing within the Senior Area, as shown on Drawing M.7-H3.

E6.3.2 Materials

- (a) Wood Fibre product shall be either Zeager Woodcarpet or Fibar FibarSystem 300 products or substitute in accordance with B6.
 - (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@zeager.com

(ii) Contact for FibarSystem 300:

The Fibar Group LLC

80 Business Park Drive, Suite 300

Armonk, NY 10504-1705

USA

Ph: (800) 342-2721 Fax: (914) 273-8659

info@FibarPlaygrounds.com

(b) Wood Fibre surfacing shall include wood fibre, filter cloth, subsurface drainage system and mats for bottom of slides, if applicable, under swings, and at each accessible entrance to the Play Area.

E6.3.3 Construction Methods

- (a) Wood Fibre shall be installed within the play area, as defined by the existing timber edging, to a minimum depth of 200 mm (after compaction). In play areas where the maximum fall height is 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) The installation of the Wood Fibre shall be done immediately after the play equipment has been installed.
- (c) Installation of entire system, including fibre, filter cloth, subsurface drainage and mats shall be done according manufacturer's instructions. Adequate drainage within play equipment area must be ensured as per same.
- (d) A minimum of one (1) mat must be placed at each Accessible Entrance point to the Senior Play Area.

- (e) Installation shall be done by equipment sized to suit the Work being done and the Wood Fibre shall be spread by hand as necessary in the immediate vicinity of the play equipment so as not to damage same. The play equipment shall be swept clean to the satisfaction of the Contract Administrator after installation of the Wood Fibre.
- E6.4 Method of Measurement and Basis of Payment
- E6.4.1 Method of Measurement shall be as follows:
 - (a) Protective Surfacing shall be measured on a cubic metre basis for the following:
 - (i) "Install stockpiled playstone in Junior Area"; and
 - (ii) "Supply and Install new playstone in Junior Area to a depth of 300mm" on Form B: Prices.
 - (b) Protective Surfacing will be measured on a square metre basis for the following:
 - (i) "Supply and Install Wood Fibre Protective Surfacing in Senior Area, including fibre, cloth and drainage" on Form B: Prices.
- E6.4.2 Basis of Payment shall be as follows:
 - (a) Protective Surfacing will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E7. SAND PLAY AREA

- E7.1 General Description
- E7.1.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the specifications.
- E7.1.2 This specification shall cover the relocation of the existing sand box located within the Junior Play Area. The sand box shall be relocated next to the asphalt sitting area south of the Junior Play Area, as shown on Drawing M.7-H2. Included in this Work is the supply and installation of new sand into the relocated sand box.
- E7.2 Materials
 - (a) Sand: clean sandbox sand.
 - (i) Samples of the specified sand shall be submitted for approval to the Contract Administrator at least seven (7) Calendar Days prior to installation.
- E7.3 Construction Methods
 - (a) After sand box is set in place, and location is approved by Contract Administrator, turf shall be repaired as required around edges in accordance with City of Winnipeg Standard Specifications for Topsoil and Sodding and made to slope away from the sand box.
 - (b) Sand Box shall be filled with sand to a minimum depth of 300mm.
- E7.4 Method of Measurement and Basis of Payment
- E7.4.1 Method of Measurement shall be as follows:
 - (a) Sand Play Area will be measured on a lump sum basis for: "Relocate existing Sand Box and fill with new sand" on Form B: Prices.
- E7.4.2 Basis of Payment shall be as follows:
 - (a) Sand Play Area will be paid for at the Contract Unit Price. 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.

E8. ASPHALT PATH

E8.1 This specification shall cover the supply and installation of asphalt for the new Sitting Area.

E8.2 Excavation

E8.2.1 Description

- (a) This specification shall be done in accordance the City of Winnipeg's Standard Construction Specification CW 3110-R7 "Sub-Grade, Sub-Base and Base Course Construction" and as per SCD-645.
- (b) Excavation shall be understood to include all removal of existing insitu material necessary to achieve finished grade and as indicated on Drawing M.7-H1, all in accordance with E3.

E8.2.2 Construction Methods

- (a) Excavation shall be performed as outlined in CW 3310 –R7 Item 3.2 "Excavation".
- (b) If any pavement exists at the limits of the designated area of removal, these shall be saw cut for the full depth of the pavement prior to the demolition and removal operations. All costs in connection with saw cutting are incidental and shall be included in the unit price bid for excavation.
- (c) All excavated material shall be removed, hauled and disposed of off-site to the satisfaction of the Contract Administrator.

E8.3 Sub-Grade Compaction

E8.3.1 Description

(a) Sub grade compaction shall be done in accordance with City of Winnipeg's Standard Construction Specification CW 3110-R7 - "Sub-Grade, Sub-Base and Base Course Construction".

E8.3.2 Construction Methods

- (a) Sub-grade compaction shall be performed as outlined in CW 3110 R7 item 3.3 "Preparation of Sub-Grade and Placement of Sub-Base material.
- (b) Sub-grade shall be free of any fibrous organics, softened and disturbed soil. The prepared sub-grade shall be proof rolled with a heavy sheep's foot roller (min 25 passes) and inspected by the Contract Administrator to detect for any soft spots prior to the placement of overlying granular fills.

E8.4 Geotextile Fabric

E8.4.1 Description

(a) Geotextile Fabric shall be placed in accordance with City of Winnipeg's Standard Construction Specification CW 3130 – "Supply and Installation of Geotextile Fabrics".

E8.4.2 Materials

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

E8.4.3 Construction Methods

(a) Separation/Reinforcement geotextile fabric shall be installed as outlined in CW 3110 - item 3.1 "Separation/Reinforcement Geotextile Fabric".

E8.5 Crushed limestone sub-base course material

E8.5.1 Description

(a) Crushed limestone sub-base material shall be supplied and installed in accordance with City of Winnipeg's Standard Construction Specification CW 3110-R7 - "Sub-Grade, Sub-Base and Base Course Construction".

E8.6 Materials

(a) Crushed Limestone sub-base material shall be 50 mm (2") as specified and to the depth of 150 mm (6") as shown on the drawings.

E8.6.2 Construction Methods

- (a) Crushed limestone sub-base material shall be supplied and installed as outlined in CW 3110 –R7 – item 3.4 "Placement of Sub-Base Material with Geotextile Fabric".
- (b) All limestone sub-base material shall be placed and compacted as specified to a finished thickness as shown on the drawings.

E8.7 Crushed Limestone Base Course Material

E8.7.1 Description

(a) Crushed limestone base material shall be supplied and installed in accordance with City of Winnipeg's Standard Construction Specification CW 3110-R7 - "Sub-Grade, Sub-Base and Base Course Construction".

E8.7.2 Materials

(a) Crushed Limestone base coarse material shall be 20 mm (3/4") as specified and to the depth of 50 mm (2") as shown on the drawings.

E8.7.3 Construction Methods

- (a) Crushed limestone base coarse material shall be supplied and installed as outlined in CW 3110 –R7 item 3.5 "Placement of Base Course Material".
- (b) All limestone base coarse shall be placed and compacted as specified to a finished thickness as shown on the drawings.

E8.8 Asphaltic Pavement

E8.8.1 Description

(a) Asphaltic Concrete shall be supplied and installed in accordance with City of Winnipeg Standard Construction Specification CW 3410-R5 – "Asphaltic Concrete Pavement Works".

E8.8.2 Materials

(a) Asphaltic Concrete shall be Type 1A as specified and to a thickness of 75 mm (3") as shown on the drawings.

E8.8.3 Construction Methods

(a) Asphaltic Concrete shall be supplied and installed in accordance with the lines, grades and thickness shown on the Construction Drawings and to City of Winnipeg Standard Construction Specification CW 3410-R5. Asphalt shall be placed in one lift.

E8.9 Crack Sealing

- (a) As a warranty requirement, the Contractor shall rout and seal any and all cracks which may appear during the one-year warranty period. Crack sealing shall conform to the requirements of City of Winnipeg Standard Construction CW 3250 – R3.
- (b) No separate payment will be made for this item as it is considered a warranty issue and shall fall under G.C. 13 Warranty.

E8.10 Quality Control for Hard Surfaced Areas

- (a) Further to Section 10, Quality Control, of CW 3110-R5 and CW 3410-R5, the Contract Administrator may obtain a qualified independent testing lab to conduct tests on materials to determine the acceptability of the sub-grade, sub-base, base course and asphaltic concrete as placed by the Contractor in accordance with the requirements of this Specification.
- (b) The Contractor shall not proceed with each granular fill placement or asphalt installation until test results have been reviewed and the approval to proceed is granted by the Contract Administrator.
- (c) The Contract Administrator will conduct a survey of the operation to verify installation of specified layer thickness.
- (d) Non-conformity with the specified test requirements or compacted layer thickness will constitute sufficient grounds for rejection of the Work.
- E8.11 Method of Measurement and Basis of Payment
- E8.11.1 Method of Measurement shall be as follows:
 - (a) Asphalt Path will be measured on a square metre basis for: "Supply and install asphalt path and seating area, including excavation" on Form B: Prices.
 - (b) Excavation and base work shall be incidental to the measurement of Asphalt Path listed above and as shown on Form B: Prices.
- E8.11.2 Basis of Payment shall be as follows:
 - (a) Asphalt Path will be paid for at the Contract Unit Prices as indicated on Form B: Prices. The amount to be paid for shall be the total number of units 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.

E9. ASPHALT RAMP

- E9.1 This specification shall cover the supply and installation of asphalt top-up to ramp existing asphalt path up to the Play Areas.
- E9.2 Asphaltic Pavement
- E9.2.1 Description
 - (a) Asphaltic Concrete shall be supplied and installed in accordance with City of Winnipeg Standard Construction Specification CW 3410-R5 – "Asphaltic Concrete Pavement Works".
- E9.2.2 Materials
 - (a) Asphaltic Concrete shall be Type 1A as specified and to a thickness of 75 mm (3") as shown on the drawings.
- E9.2.3 Construction Methods
 - (a) Asphaltic Concrete shall be supplied and installed in accordance with the lines, grades and thickness shown on the Construction Drawings and to City of Winnipeg Standard Construction Specification CW 3410-R5. Asphalt shall be placed in one lift.
 - (b) The top layer of timber edging where the asphalt ramps up into the Play Area shall be sawcut at each end at a 45 degree angle. The asphalt top-up shall be laid to create a smooth transition from existing asphalt path to the top of the bottom timber edging course.
 - (c) The edges of the asphalt ramp shall be gently tapered to ground level as to not create a tripping hazard.

- (a) As a warranty requirement, the Contractor shall rout and seal any and all cracks which may appear during the one-year warranty period. Crack sealing shall conform to the requirements of City of Winnipeg Standard Construction CW 3250 R3.
- (b) No separate payment will be made for this item as it is considered a warranty issue and shall fall under G.C. 13 Warranty.
- E9.4 Method of Measurement and Basis of Payment
- E9.4.1 Method of Measurement shall be as follows:
 - (a) Asphalt Ramp shall be measured on a square metre basis for: "Supply and install asphalt ramp into Junior and Senior Play Areas" on Form B: Prices.
 - (b) Removal of existing timbers to create asphalt ramp shall be incidental to the measurement of Asphalt Ramp listed above and as shown on Form B: Prices.
- E9.4.2 Basis of Payment shall be as follows:
 - (a) Asphalt Ramp will be paid for at the Contract Unit Prices as indicated on Form B: Prices. The amount to be paid for shall be the total number of units 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.

E10. SITE FURNITURE

- E10.1 Description
- E10.1.1 This specification shall cover the supply and installation of one (1) Tache Bench.
- E10.1.2 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work as shown on Drawing B.100-B2 and specified herein. Supply includes pick up and payment from source identified below.
- E10.2 Materials
- E10.2.1 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.
- E10.2.2 Site Furniture shall be:
 - (a) "Tache Bench-Composite" as per SCD-120A, Product #52501067, or substitute in accordance with B6.
- E10.2.3 Contact for Site Furniture:

Aaron Lennon

Supervisor of Central Repair/Manufacturing Facility

City of Winnipeg

Fleet Management Agency Division

Public Works Department

215 Tecumseh St

Winnipeg. MB R3E 3S4

Telephone No. (204) 986-5505 Facsimile No. (204) 986-1248

E10.3 Construction Methods

(a) All Work is to be located and installed in accordance with the Drawings M.7-H2 and SCD-120A, 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 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.
- E10.4 Method of Measurement and Basis of Payment
- E10.4.1 Method of Measurement shall be as follows:
 - (a) Site Furniture will be measured on a per unit basis for the following items:
 - (i) "Supply and Install Tache Style Bench Composite 1.8 m" on Form B: Prices.
- E10.4.2 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.

E11. SODDING AND SEEDING

- E11.1 Description
- E11.1.1 This Specification shall amend and supplement the City of Winnipeg Specifications CW 3510-R8, CW 3520-R5 and CW 3540-R4. The Contractor shall install mineral sod or seed and a minimum 75mm (for sod) or 100mm (for seed) compacted thickness of topsoil, as required.
- Play equipment areas: The Contractor shall install topsoil and seed around the perimeter of new timber edging areas to clean up turf disturbed by the Work. Seed and topsoil shall be installed at a distance of a maximum of 500mm from the new timber edging around Senior Swing Area.
- E11.1.3 Path areas: The Contractor shall install topsoil and seed around the perimeter of newly constructed asphalt path and sitting area to clean up turf disturbed by the Work, if necessary.
- E11.1.4 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 seed and topsoil unless otherwise directed by the Contract Administrator.
- E11.1.5 Thirty (30) day maintenance period on sod will commence at Total Performance and acceptance.
- E11.2 Method of Measurement and Basis of Payment
- E11.2.1 Method of Measurement shall be as follows:
 - (a) Seeding will be measured on a square metre basis for:
 - (i) "Supply and install Topsoil and Seed" on Form B: Prices.
- E11.2.2 Basis of Payment shall be as follows:
 - (a) Sodding and Seeding 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. GENERAL COMMENTS

- E12.1 This specification shall cover the supply and installation of the Play Equipment as listed below and specified herein.
- E12.2 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the drawings and specifications.
- E12.3 The Contractor shall obtain all approvals including the requisite Development Permit.
- E12.4 For vandalism and safety reasons, the Play Equipment for both the Senior and Junior Play Areas shall have a minimal amount of plastic components as well as allow for clear sight lines through the structure.

E12.5 Senior Play Area:

- (a) Shall comprise of an accessible structure or equipment that may include ramps or transfer platforms as well as ground-level equipment. The design submitted shall include non-traditional play equipment that minimizes the use of decks, therefore enabling access components from a multitude of points and creating an inclusive play area for all abilities.
- (b) Approximately 70-80% of play equipment budget;
- (c) Play equipment to be designed for children ages 5-12;
- (d) Play equipment must provide the following play activities:
 - (i) Balancing;
 - (ii) Sliding;
 - (iii) Climbing;
 - (iv) Social play; and
 - (v) Spinning.
- (e) The design submission shall be evaluated as per B16.5.1.

E12.6 Junior Play Area:

- (a) Approximately 20-30% of play equipment budget;
- (b) Play equipment and/or independent components to be designed for children ages 18 months 5 years;
- (c) Play equipment must include minimum one (1) metal slide;
- (d) To include a minimum of one (1) accessible play component that can be accessed from walkway:
- (e) Along with the slide the play equipment must provide the following play activities:
 - (i) Balancing;
 - (ii) Climbing;
 - (iii) Creative/Imaginative Play;
 - (iv) Motion (ie. Springing, spinning...);
 - (v) Any other play activities that budget and space allows.
- (f) If a playstructure is proposed, it must include 1 (one) easy access stair for access of adult caregiver or reduced mobility access;
- (g) The design submission shall be evaluated as per B16.5.2.
- E12.7 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.

- E12.8 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) Cable rides;
 - (e) Sand diggers;
 - (f) Merry-go-rounds;
 - (g) Tire Swings;
 - (h) Talk tubes;
 - (i) Binoculars / telescopes;
 - (j) Barrel rollers; and
 - (k) Large number of plastic components.

E13. PLAYSTRUCTURES

- E13.1 General Description
- E13.1.1 This specification shall cover the supply and installation of one or more Playstructures as specified herein.
- E13.1.2 Play equipment shall be installed in the Play Areas as shown on the attached Drawing M.7-H3. The play equipment and their safety zones must fit into the proposed play areas as shown on Drawing M.7-H4.
- E13.2 Materials
- E13.2.1 Posts / Caps
 - (a) All posts shall be a minimum 5" O.D. round or 4" square tubing.
 - (b) 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.
 - (c) 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.
 - (d) 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).
 - (e) 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.
- E13.2.2 Decks (if applicable)
 - (a) 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'.
- E13.2.3 Clamping System
 - (a) All deck, rail and play component clamping systems shall be fabricated from zinc plated, galvanized steel, stainless steel or aluminium. Tamper proof, corrosion resistant fasteners shall be used to retain clamping systems.
- E13.2.4 Handrails, Safety Rails and Handloops (if applicable)

- (a) 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.
- (b) 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.

E13.2.5 Hardware

- (a) 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.
- (b) All necessary hardware shall be provided.

E13.2.6 Poly Components

- (a) Poly components such as slides and hoods shall be fabricated from U.V. stabilized, rotationally moulded linear low-density polyethylene.
- (b) Poly components such as play panels shall be fabricated from compression moulded solid colour, U.V. stabilized, high-density polyethylene.

E13.2.7 Slides (if applicable)

- (a) Stainless steel is preferred for slide beds, although a plastic slide may be used if there is a stainless steel slide also on the Site. North or east orientation preferred.
- E13.2.8 Each playstructure shall have kick plates and hand loops as required to meet the most recent Canadian Standards Association Standards.

E13.3 Installation

- E13.3.1 Play equipment shall be installed as per manufacturer's specifications and in accordance with the most recent Canadian Standards Association Standards.
- E13.3.2 All posts and other vertical items shall be plumb and true to vertical, if so designed.
- E13.3.3 All decks shall be level, if so designed.
- E13.4 Method of Measurement and Basis of Payment
- E13.4.1 Method of Measurement shall be as follows:
 - (a) Playstructures will comprise only part of the overall Play Equipment, measured on a lump sum basis for the two separate areas:
 - (i) "Supply and Install Accessible Senior Structure and/or Independent Components";
 - (ii) "Supply and Install Junior Structure and/or Independent Components" on Form B: Prices. These shall include all Play Equipment, including Independent Components located within the Play Area.

E13.4.2 Basis of Payment shall be as follows:

(a) Playstructures 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.

E14. INDEPENDENT COMPONENTS

E14.1 General Description

E14.1.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the specifications.

- E14.1.2 This specification shall cover the supply and installation of Independent Components as specified herein.
- E14.1.3 Independent Components shall be installed as per the proposed design, as the proposed budget will allow.
- E14.1.4 Independent Components shall be installed in the available areas as shown on Drawing M.7-H3. The Components and their safety zones must fit into the proposed play area.

E14.2 Materials

- E14.2.1 All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all parts and materials.
- E14.2.2 There shall be a minimum (or no) amount of hollow plastic components. Solid plastic is acceptable.
- E14.2.3 There shall be a minimum amount of solid elements which limit visibility through the Site.

E14.2.4 Fasteners

(a) All hardware shall be tamper-proof in design and requiring 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.

E14.2.5 Finishes

(a) 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.

E14.2.6 Slides

- (a) If an independent slide is proposed, stainless steel is preferred. If other slides are proposed on the Site one may be plastic. North or east orientation preferred. If independent slide over 4' high is proposed, support posts must be minimum 5"O.D.
- (b) Tube (enclosed) slides and plastic spiral slides will not be accepted.
- E14.3 Method of Measurement and Basis of Payment
- E14.3.1 Method of Measurement shall be as follows:
 - (a) As identified in E13.4.1, measurement will be incorporated into the lump sum cost for each play area. As such, no separate measurement will be made for Independent Components.
- E14.3.2 Basis of Payment shall be as follows:
 - (a) Independent Components, if proposed, shall be included in Items "Supply and Install Accessible Senior Structure and/or Independent Components" and "Supply and Install Junior Structure and/or Independent Components" on Form B: Prices. No separate payment shall be made.

E15. ELEVATED SAND TABLE

- E15.1 General Description
- E15.1.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the specifications.
- E15.1.2 This specification shall cover the supply and installation of an Elevated Sand Table that is wheelchair accessible, located off the asphalt path next to the relocated sand box.
- E15.1.3 The Elevated Sand Table shall be installed in such a way that it can be accessed by wheelchair via the asphalt path next to the relocated sand box, as shown on Drawing M.7-H3. The size of the asphalt path can be adjusted to allow various sized Sand Tables. If the

size or location of the path must be adjusted this must be mentioned in the design submission.

- E15.1.4 The location of the Elevated Sand Table next to the relocated sand box shall not create any potential for entrapment or other hazards.
- E15.2 Materials
- E15.2.1 All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all parts and materials.
- E15.2.2 The Elevated Sand Table shall not hold water.
- E15.2.3 There shall be a minimum (or no) amount of hollow plastic components. Solid plastic is acceptable.
- E15.2.4 There shall be a minimum amount of solid elements which limit visibility through the Site.
- E15.2.5 Fasteners
 - (a) All hardware shall be tamper-proof in design and requiring 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.
- E15.2.6 Finishes
 - (a) 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.
- E15.3 Method of Measurement and Basis of Payment
- E15.3.1 Method of Measurement shall be as follows:
 - (a) Elevated Sand Table will be measured on a unit basis for "Supply and install Elevated Sand Play Table" as indicated on Form B: Prices.
- E15.3.2 Basis of Payment shall be as follows:
 - (a) Elevated Sand Table 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. FOUNDATIONS

- E16.1 General Description
- E16.1.1 All playground equipment posts, bases and anchors are to be set in concrete footings or piles to ensure stability and prevent frost heaving. The current Standard Construction Specifications of the City of Winnipeg, CW 2160-R4 Concrete to be used in Underground Works, is to be utilized in the installation of the concrete works for all below ground components.
- E16.2 Materials
- E16.2.1 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 ratio 0.49.

E16.3 Installation

- E16.3.1 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.
- E16.3.2 All concrete footings for play equipment shall be a minimum of 3' depth, or in accordance with Manufacturer's specifications, whichever is greater.
- E16.4 Method of Measurement and Basis of Payment
- E16.4.1 Method of Measurement shall be as follows:
 - (a) Foundations shall be incidental to the measurement of Playstructures, Independent Components, and Elevated Sand Table listed above and as shown on Form B: Prices.
- E16.4.2 Basis of Payment shall be as follows:
 - (a) No separate payment shall be made for play equipment foundations.

E17. MAINTENANCE KITS

- E17.1 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.
- E17.2 There shall be no payment for the maintenance kits.