



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 313-2005

TANYA PARK SITE RENOVATIONS

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PART B

BIDDING PROCEDURES

PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 TANYA PARK SITE RENOVATIONS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 27, 2005.

B2.2 Bid Submissions 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 GC:3.1, 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 shortly before submitting his Bid.

B5.3 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 shall 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 B14.

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 SUBMISSION

B7.1 The Bid Submission consists of the following components:

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

B7.2 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.

B7.2.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.

B7.3 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B7.4 Bid Submissions 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 Submission 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.

B9.2 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. QUALIFICATION

B10.1 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;
- (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
- (c) be financially capable of carrying out the terms of the Contract;
- (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
- (e) have successfully carried out Work, similar in nature, scope and value to the Work;
- (f) employ only SubContractors who:
 - (i) are responsible and not suspended, debarred or in default of any obligation 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>); and
 - (ii) have successfully carried out Work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract;
- (g) have a written Workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba);

B10.2 The Bidder shall be prepared to 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.

B10.3 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.

B11. OPENING OF BIDS AND RELEASE OF INFORMATION

B11.1 Bid Submissions 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.

B11.1.1 Bidders or their representatives may attend.

B11.2 After the public opening, the names of the Bidders and their Total Bid Prices as read out (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>.

B11.3 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>.

B11.4 The Bidder is advised that any information contained in any Bid Submission 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.

B12. IRREVOCABLE BID

B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B12.2 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.

B13. WITHDRAWAL OF BIDS

B13.1 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.

B13.1.1 Notwithstanding GC:23.3, 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.

B13.1.2 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.

B13.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials shall:

- (a) retain the Bid Submission until after the Submission Deadline has elapsed;
- (b) open the Bid Submission 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 B13.1.3(b), declare the Bid withdrawn.

B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 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.

B14. EVALUATION OF BIDS

B14.1 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 B10 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B6.

B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements if the interests of the City so require.

B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid Submission or in other information required to be submitted, that he is responsible and qualified.

B14.4 Further to B14.1(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.

B14.4.1 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.

B15. AWARD OF CONTRACT

B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B15.2 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.

B15.2.1 Without limiting the generality of B15.2, 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.

B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.

- B15.4 Notwithstanding GC:4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B15.5 The Contract, as defined in GC:1.1, 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

C1. GENERAL CONDITIONS

C1.1 The *General Conditions for Construction Contracts* (Revision 2000 11 09) are applicable to the Work of the Contract.

C1.1.2 The *General Conditions for Construction Contracts* 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>.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for Construction Contracts*, these Supplemental Conditions are applicable to the Work of the Contract.
- D1.2 The General Conditions are amended by striking out "The City of Winnipeg Act" wherever it appears in the General Conditions and substituting "The City of Winnipeg Charter".
- D1.3 The General Conditions are amended by striking out "Tender Package" wherever it appears in the General Conditions and substituting "Bid Opportunity".
- D1.4 The General Conditions are amended by striking out "Tender Submission" wherever it appears in the General Conditions and substituting "Bid Submission".
- D1.5 The General Conditions are amended by deleting GC:6.16 and GC:6.17. The City of Winnipeg is now within the jurisdiction of the Manitoba Ombudsman pursuant to The Ombudsman Act.

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of general renovations to Tanya Crescent Park including the renovation of the playground.
- D2.2 The major components of the Work are as follows:
- (a) Renovations and extension of the existing crusher fines pathways.
 - (b) Refurbishment of existing local wood chip paths.
 - (c) Relocation and extension of existing bollard fence.
 - (d) Site drainage improvements including regrading, sodding, and subsurface drains.
 - (e) Removal and replacement of existing playground curb.
 - (f) Relocation of existing playground equipment.
 - (g) Supply and installation of new playground equipment.
 - (h) Supply and Installation of new play surface material.
 - (i) Refurbishment of existing Site furniture.
 - (j) Supply and installation of new Site furniture.

D3. CONTRACT ADMINISTRATOR

- D3.1 The Contract Administrator is Dean Spearman Landscape Architect , represented by

Dean Spearman

83 Lafayette Bay
Winnipeg, Manitoba
R3T 3J9

Telephone No. (204) 261-4137

Facsimile No. (204) 261-4137

D3.2 At the pre-construction meeting, Dean Spearman 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 GC:23.2.2, 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 attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg
Chief Administrative Officer Secretariat
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
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

D6. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

D6.1 Further to GC:6.12 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 and approval of such plans.

D6.2 All notices, consents, approvals, statements, authorizations, documents, or other communications to the City shall be submitted to the Contract Administrator.

D6.3 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.

- D6.4 All Work shall be performed in a manner compliant with the Manitoba Workplace Health and Safety act.
- D6.5 All Work shall be performed in a manner compliant with the Manitoba Workplace Health and Safety Fall Protection Guidelines
- D6.6 The Contractor and SubContractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Safety and Health Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator or his/her encountering of suspected hazardous material during the course of Work.

D7. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

- D7.1 Further to GC:17, all necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrub, 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 Work. For all damage incurred thereto in the performance of the Work, the Contractor shall upon instructions from and to the satisfaction of the Contract Administrator and the owners thereof, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the Contract Administrator and the owners thereof. The cost of which shall be borne entirely by the Contractor.
- D7.2 The Contractor shall also indemnify and save harmless the City and the Contract Administrator, from all claims made directly or indirectly against it in respect to such damage.
- D7.3 The Contractors 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. The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while he is Working near them.
- D7.4 Any damage caused by the negligence of the Contractor or his Sub-Contractors to the adjacent Works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract Administrator.

D8. TEMPORARY UTILITIES

- D8.1 Further to GC:6.12, the Contractor shall make his own arrangements in connection with the temporary use of lighting, power, gas, sewer, water or other utilities, and pay all costs in connection therewith.
- D8.2 All necessary permits, fees, and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

D9. PROTECTION OF THE SURVEY INFRASTRUCTURE

- D9.1 Notwithstanding CW 1130-R1 3.14 'Protection of Survey Infrastructure' of the Standard Construction Specifications, current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.
- D9.2 Further to GC:6.28(g), at least 72 hours prior to the commencement of the On-Site Work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 986-4826 (8:00 a.m. to 4:00 pm Monday to Friday excluding holidays) to obtain clearance. Geomatics Services

will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.

- D9.3 Where a survey post, bar, or control monument lies in the line of proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.
- D9.4 Outline survey monuments and geodetic control monuments at or adjacent to the Site, not in line of the proposed construction that are damaged or disturbed by the Contractor shall be replaced or relocated by the City or its agent and all associated costs shall be paid for by the Contractor. An approximate estimate of the costs involved to restore a legal survey monument is \$1000 per bar and \$3000 per control monument. Contractors must ensure their landscaping and other subContractors are aware of this clearance procedure and the potential restoration costs.
- D9.5 Where possible, amounts owed to the City in accordance with the above will be deducted from any payments to be made by the City to the Contractor.

SUBMISSIONS

D10. INSURANCE

- D10.1 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) all inclusive, with The City of Winnipeg being added as an additional insured, with a cross-liability clause, such liability policy to also contain a contractual liability, an unlicensed motor vehicle liability and a products and completed operations endorsement to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) automobile liability insurance for owned and non-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;
- D10.2 Deductibles shall be borne by the Contractor.
- D10.3 The Contractor shall provide the City Solicitor with a certificate of insurance of each policy, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.
- D10.4 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.

D11. PERFORMANCE SECURITY

- D11.1 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.

- D11.1.1 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.
- D11.2 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.

D12. SUBCONTRACTOR LIST

- D12.1 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.

SCHEDULE OF WORK

D13. COMMENCEMENT

- D13.1 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.
- D13.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence that the Contractor is 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;
 - (ii) evidence of the Workers compensation coverage specified in GC:6.14;
 - (iii) evidence of the insurance specified in D10;
 - (iv) the performance security specified in D11;
 - (v) the SubContractor list specified in D12; and
 - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D13.3 The Contractor shall provide the Contract Administrator a proposed Schedule of Work for the approval of the Contract Administrator within 7 days of receipt of the Purchase Order.
- D13.4 The Contractor shall commence the Work on the Site within fourteen (14) Working Days of receipt of the Purchase Order.

D14. SUBSTANTIAL PERFORMANCE

- D14.1 The Contractor shall achieve Substantial Performance within sixty (60) consecutive Working Days of the commencement of the Work as specified in D13.
- D14.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D14.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D15. TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance within seventy five (75) consecutive Working Days of the commencement of the Work as specified in D13.
- D15.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D15.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D16. LIQUIDATED DAMAGES

- D16.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City two hundred fifty dollars (\$250) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D17. SCHEDULED MAINTENANCE

- D17.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Maintain sod as specified in E13;
 - (b) Maintain trees as specified in E18;
- D17.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D18. JOB MEETINGS

- D18.1 Job meetings will be held at the Site as determined at the preconstruction meeting. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

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

- D19.1 Further to GC:6.26, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

D20. SAFETY

- D20.1 The Contractor shall comply with the following:
- (a) The City of Winnipeg's Safety in the Workplace Policy for Alcohol or any Mood or Mind Altering Drug in the Workplace.
 - (b) The City of Winnipeg Safety Manual
 - (c) The Public Works Department's Safety Regulations
 - (d) The Province of Manitoba Workplace, Safety and Health Act.
- D20.2 The Contract Administrator and the City of Winnipeg, Public Works Department's Safety Officer has the authority to enforce all the above listed safety and/or health regulations.
- D20.3 Notwithstanding E11.2 the Contractor shall be solely responsible for construction and public safety at the Site and for securing the Site at all times to prevent public access.
- D20.4 The Contractor shall, at his own expense, do whatever is necessary to ensure that when Work is stopped, and the Contractor leaves the Site for whatever reason, the Site and Work is made safe, including but not limited to:
- (a) The removal and/or safe storage of all construction equipment and materials.
 - (b) The equipment installed and/or in the process of installation be completed or secured to ensure that no public hazards exist.
 - (c) That all open excavations be filled; and
 - (d) That all construction debris and surplus excavation material be removed from the Site.

WARRANTY

D21. WARRANTY

- D21.1 Notwithstanding GC:13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to GC:13.2.1 or GC:13.2.2, in which case it shall expire when provided for thereunder.

- D21.2 Notwithstanding GC:13.2 or D21.1, 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.
- D21.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in GC:13.2 for the warranty period to begin.

FORM H1: PERFORMANCE BOND
(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

_____ day of _____, 20____, for:

BID OPPORTUNITY NO. 313-2005

TANYA PARK SITE RENOVATIONS

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

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

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

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

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

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

_____ day of _____, 20____.

SIGNED AND SEALED
in the presence of:

(Witness)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D11)

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 313-2005

TANYA PARK SITE RENOVATIONS

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

(Name of Contractor)

(Address of Contractor)

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

Canadian dollars.

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

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

Partial drawings are permitted.

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

(Address)

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

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

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

(Date)

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

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

This credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 *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>.
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
L-1	Site Plan
L-2	Paving Layout Plans
L-3	Details
L-4	Planting Plan
L-5	Playground

E2. SOILS INVESTIGATION REPORT

- E2.1 Further to GC:3.1, no soils investigation has been done. Should conditions warrant, the Contractor is responsible for conducting and supplying the Soils Investigation Report.

GENERAL REQUIREMENTS

E3. LOCATION OF WORK

- E3.1 Tanya Crescent Park – located between Tanya Crescent and Mahonee Drive.

E4. LAYOUT OF WORK

- E4.1 As a part of the contract, the Contractor shall be responsible to establish and maintain all control lines and grade stakes in accordance with City of Winnipeg geodetic information and the information supplied on the Working drawings. Expense incurred for the re establishment of grade stakes, control lines, monuments and other related survey information or requirements shall be entirely paid for by the Contractor.
- E4.2 All layout Work shall be inspected and approved by the Contract Administrator prior to construction.
- E4.3 Before commencing Work the Contractor shall satisfy himself as to the meaning and correctness of all stakes and marks and no claims shall be entertained by the City of Winnipeg or the Contract Administrator on account of any alleged inaccuracies. If any error is suspected in the plans, specifications, or the directions of the Contract Administrator, Work shall be discontinued until the errors are rectified, but no claims shall be made on account of any delay occasioned thereby.

E5. SITE CLEANUP AND RESTORATION

- E5.1 All pathways, streets, approaches, driveways, and properties near the Work Site shall be kept clean at all times by the Contractor.
- E5.2 Upon completion of the Work the Contractor shall immediately remove all excess materials and debris from the Work Site.
- E5.3 Total performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all plant, tools, equipment, waste, debris, and surplus earth, to the satisfaction of the Contract Administrator. Unless otherwise specified, the Contractor shall restore all areas of the Site which have been disturbed by the Contractor's operations to as good or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.

WORK

E6. DEMOLITION AND REMOVALS

- E6.1 This section shall cover the removal of existing crusher fines path and crusher fines paved area where it is called for on the drawings. It shall also cover the removal of surplus or poor condition plant material, removal of the existing play ground curb, removal of the existing play surfacing, removal of the existing concrete sidewalk and removal of the existing bollard fence where called for on the drawings.
- E6.2 To the extent and limits shown on the drawings, where the existing crusher fines path is to be removed, the existing crusher fines path is to be excavated to a depth sufficient to remove the existing granular material in its entirety. The Contractor is to lay out the area of the path to be removed from Site and the Contract Administrator is to approve the location and the extent of this Work prior to Work beginning.
- E6.3 Excavated granular material is to be removed from the Site and disposed of in a legally acceptable manner. Should the quality of existing granular material be acceptable and the contamination of the material with clay or soil be minimal and following inspection and approval of the granular material by the contract administrator, the granular material may be used in the base layer of the new crusher fines path.
- E6.4 Trees specified for removal shall be removed from the Site in their entirety (top and roots). Removed trees may be chipped for reuse on the local wood chip path or removed from the Site and disposed of in a legal manner.
- E6.5 Grassed areas specified for removal shall have the grass surface and growing medium (soil) removed to the elevation of subsurface layer (clay). The excavated material shall be removed from the Site and disposed of or recycled in an environmentally responsible and legal manner.
- E6.6 The existing wooden play curb and wooden curbs from turfstone areas and the existing concrete sidewalk are to be removed from the Site and disposed of in a legal and environmentally responsible manner.
- E6.7 Turfstone is to be removed from the Site, stacked neatly on pallets, and delivered to a city Site to be designated by the Contract Administrator.
- E6.8 Measurement and payment for this section shall be on the following basis;
- (a) Removal of crusher fines path shall be considered incidental to the supply and installation of the new materials specified on the drawings. There will be no measurement or separate payment for this Work.

- (b) Removal of existing grassed areas shall be considered incidental to the supply and installation of the new materials specified on the drawings. There will be no measurement or separate payment for this Work.
- (c) Removal and disposal of timber edging, turf stone and wooden play curb and existing concrete sidewalk shall be on a lump sum basis as per the schedule of prices.
- (d) Trees and other plant material shall be measured and paid for on a lump sum basis as per the schedule of prices.

E6.9 There will be no measurement or additional payment for removal of any material beyond that approved by the Contract Administrator prior to the commencement of excavation/demolition.

E7. REGRADING AND RESODDING

- E7.1 This specification covers the excavation and disposal of unsuitable or excess material, the supply and installation of topsoil and sod, the topdressing and seeding of seam, edges and areas of minor Site restoration. It shall also cover Site regarding where called for on the drawings.
- E7.2 Areas to be graded, or regraded and resodded are to be laid out on Site and approved by Contract Administrator before commencing regrading Work. Work outside the limits approved by the Contract Administrator will not be measured and will not be paid for under this section but considered incidental to the Work. Incidental Site restoration shall conform to the same specifications.
- E7.3 Prior to excavation, the perimeter of the areas being sodded are to be cut with a sod cutter in straight lines.
- E7.4 Where new sod meets existing turf the transition shall be a uniform even surface that is consistent with existing grades. Such joints are to be topdressed and seeded at the discretion of the Contract Administrator. There shall be no additional measurement or payment for topdressing and seeding.
- E7.5 Excavate in-situ material and/or supply additional sub-base material to accommodate the topsoil and sod in a manner conforming to the drainage pattern described in the drawings. Where no new drainage pattern is described in the drawings the excavation and/or installation of fill shall be consistent with existing drainage patterns. In no case shall grading operations impede Site drainage. Placed fill material shall be compacted to 95% of proctor density. Dispose of excess material as directed by Contract Administrator.
- E7.6 Topsoil and sod are to be supplied and installed as per CW 3510 and CW 3540.
- E7.7 Measurement and Payment will be at the contract unit price per square meter for 'Regrading and Resodding'. Measurement shall be of the actual area sodded. Price shall be payment in full for supplying materials and for performing all operations listed below:
- (a) Excavate in-situ material and/or supply additional sub-base material.
 - (b) Supply and installation of topsoil.
 - (c) Supply and placement of sod.
 - (d) maintenance of sod.
- E7.8 Measurement and Payment will be at the contract unit price per square meter for 'PlayGround Regrading'. Measurement shall be of the actual area regarded in the play ground. Price shall be payment in full for supplying materials and for performing this regarding.

E7.9 There will be no measurement and payment for excavation and or grading operations in areas where crusher fines paving, or interlock paving is called for. Said excavation or grading shall be considered incidental to the Crusher Fines Paving or the Interlock Paving.

E8. CRUSHER FINES PAVING

E8.1 This specification covers the supply and installation of Crusher fines paving including all excavation, compaction, geotextile, sub-base and base construction as well as gravel surfacing, and repair of existing sod to ensure a smooth transition to the roadway. Other items necessary to complete this portion of the Work and not noted elsewhere are considered incidental to this Work. This specification shall also cover the rehabilitation of existing crusher fines paving.

E8.2 Sub-base, base materials and depths are as noted on drawing.

E8.3 Except as specifically noted on the drawing areas of crusher fines paving are to be constructed so as to function with existing drainage patterns and are to have a minimum cross slope of 2%.

E8.4 Crusher fines paving is to meet existing landscaping, concrete paving and crusher fines paving in a neat and precise manner.

E8.5 Where rehabilitation of crusher fines paving is called for the Contractor shall destroy any weeds in the crusher fines path, scarify the path surface, compact, and install 40 mm of new 5 to 10 mm crusher fines limestone, wet the surface, and compact.

E8.6 Measurement and Payment for new crusher fines paving will be at the contract unit price per square meter for 'Crusher Fines Paving'. Measurement shall be of the actual area covered by Crusher fines. Price shall be payment in full for supplying materials and for performing all operations listed below:

- (a) Excavate in-situ material to accommodate the pavement structure including base and subbase. Disposal of excess material.
- (b) Supply and installation of Geotextile.
- (c) Supply and placement of Crushed limestone base course.
- (d) Supply and placement of Crushed surfacing.
- (e) Repair of grass (tie-in) at edge of newly constructed paving.

E8.7 Measurement and payment for rehabilitated crusher fines paving shall be at the unit price per square meter for "Renovate Existing Crusher Fines Paving". Measurement shall be of the actual area of paving rehabilitated. Price shall be payment in full for supplying materials and for performing all operations required in connection with this Work.

E9. WOOD BOLLARD FENCING

E9.1 This specification shall cover the removal/relocation of the existing bollard fence as well as supply and installation of new bollard fencing as described in the drawings.

E9.2 Wood bollards are to be round wood posts as specified on the drawing. Bollards are to be installed by direct burial method. Bollards are to be plumb and in a straight line with each other. Tops of bollards are to follow the contour of the ground except for minor undulations. All cuts are to be treated with end cut preservative.

E9.3 Where removal of the bollard fence is called for on the drawings the existing bollard fence is to have the chain removed and the bollards pulled from the ground. The resultant holes are to be filled with bentonite clay compacted in maximum 15 cm lifts. The top 10 cm of backfill shall be topsoil and have grass seed applied. Bidders are to note that should settlement of the backfill

occur during the warranty period additional fill and seeding will be required as part of the warranty obligations.

- E9.4 Where the existing bollards scheduled for removal are sound and unstained they may be reused in the new bollard fence.
- E9.5 Install bollards in minimum 300 mm diameter holes minimum 900 mm below existing grade and backfill with compacted granular material in 150 mm lifts. Bollards area to be set plumb with the tops of bollards at a consistent height above existing grade.
- E9.6 Excavated material is not to be placed on adjacent grass surfaces. Excavated materials may be placed on plywood sitting on adjacent grassed surface. Plywood or fill is not to remain on the grassed surface for a period longer than 24 hours. Excavated material shall be removed from Site and disposed of legally.
- E9.7 Contractor is to note that any damage to existing grassed areas not scheduled for refurbishment or replacement is to be made good at the expense of the Contractor. If a skid steer auger is to be used that skid steer is to be fitted with tracks in order to minimize compaction of surrounding surfaces.
- E9.8 Measurement and payment for Bollard fencing will be per bollard installed in the new fence at the contract unit price per bollard.
- E9.9 Measurement and payment for the removal of the existing bollard fencing shall be lump sum.

E10. TREES

- E10.1 This section shall cover the supply and installation of trees.
- E10.2 Trees shall be of the size and type specified on the drawings. Trees which fail to meet this specification will be rejected.
- E10.3 The Contract Administrator reserves the right to inspect trees at their original source and the give direction as to root and branch pruning requirements.
- E10.4 Plant material shall be of quality and sizing consistent with all sections of "Canadian Guide for Nursery Stock" latest edition as published by the Canadian Nursery Trades Association. Plants are to be measured when in their natural position. Height and spread dimensions refer to the main body of the plant and not to the distance from branch tip to branch tip. Measurement of calliper is to be at a height of 15 cm above the base of the tree as measured in the nursery. All other measurements are to be as per Canadian Guide for Nursery Stock.
- E10.5 Trees shall be of number one grade having only sturdy stems that are reasonably straight for type, a well balanced crown and a single dominant leader. Trees shall be well branched, true to type, and structurally sound. Contract Administrator reserves the right to reject any trees that do not meet this criteria or show signs of disease, mechanical damage, insect or rodent damage, sunscald, frost cracks. All parts of the tree shall be moist and show live, green cambium beneath the surface of the bark.
- E10.6 Plants from native stands, woodlots, orchards or abandon nurseries shall be deem 'collected'. The use of collected plants will not be permitted.
- E10.7 Nomenclature for plants specified shall conform to the International Code of Nomenclature for Cultivated Plants and shall be in accordance with the approved scientific names given in the latest edition of Standardized Plant Names. Names not found within the Standardized Plant Names shall be understood to be in accordance with locally accepted practice. Where there is

doubt or ambiguity the Bidder/Contractor shall notify the Contract Administrator and request clarification. The clarification of the Contract Administrator shall be considered final.

- E10.8 Topsoil Backfill mix shall be screened garden soil with a mixture of two parts black loam topsoil, one part sand and one part peatmoss.
- E10.9 Tree stakes shall be heavy duty T rail iron stakes 37 mm x 37mm by 2.4 m primed with one coat of black zinc rich plant paint to CGSB 1GP-181B. Section of stake above ground shall be painted with one coat of black enamel paint.
- E10.10 Protection of stock
- (a) All nursery stock shall be well protected from damage from the time of digging until the time of planting on Site. Supplier and Installer are to ensure that the root ball is protected from drying out, and that all roots have been cleanly cut.
 - (b) Transport of nursery stock shall be done in a manner so that trees do not suffer damage during transport. Branches shall be tied to reduce the risk of mechanical damage. Equipment used to handle nursery stock shall be padded. Nursery stock shall be maintained in a moist condition from the time of arrival on Site until the time of planting.
- E10.11 All trees installed as a part of this contract shall be guaranteed for a period of two years from the recognized completion date. Any plants found in poor condition or dead during this period shall be replaced with stock meeting the original specification and using methods/techniques consistent with the original specification, without cost to the owner. During the growing season this replacement shall occur within two weeks of the Contractor being notified of the condition of the plants. In the event that an acceptable replacement tree is not available at the time a replacement is called for the Contractor shall remove the dead plant from the Site within the two-week period and restore the planting hole. The replacement tree shall be installed at the time it becomes available. Excepted is material or items damaged as a result of accidental causes or vandalism, which will not be subject to warranty.
- E10.12 Contract Administrator reserves the right to extend the Contractor's warranty obligations for an additional one year period if, at the end of the initial warranty period leaf development and growth are not sufficient to ensure future survival.
- E10.13 Plants shall be planted in a manner consistent with the planting details on the drawings.
- E10.14 Replacement plant material installed under the terms of the warranty shall be maintained for a period of two years from the date that the replacement plant is installed. At the end of the maintenance period the Contractor is to remove any stakes, guy wires from the Site.
- E10.15 Plants shall be measured and paid for at the unit prices for their size and type. All stakes, guywires, tree protection, mulch and topsoil are to be considered incidental to the installation of the tree and will not be measured or paid for separately.
- E10.16 Plant List

Quantity	Common Name/ <i>Botanical Name</i>	Size / Notes
8	Manchurian Ash / <i>Fraxinus mandshurica</i> 'Mancana'	65 mm calliper, Min. 3m height. 80 cm. wire basket. Specimen quality. Well branched head above 1.8 m ht. Single straight trunk.
7	Patmore Ash / <i>Fraxinus pennsylvanica</i> 'Patmore'	65 mm calliper, Min. 3m height. 80 cm. wire basket. Specimen quality. Well branched head above 1.8 m ht. Single straight trunk.

15	Basswood / <i>Tilia americana</i>	65 mm calliper, Min. 3m height. 80 cm. wire basket. Specimen quality. Well branched head above 1.8 m ht. Single straight trunk.
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E11. TREES TRANSPLANTING

- E11.1 This section shall cover the transplanting of existing trees scheduled to be transplanted on Site.
- E11.2 Deciduous trees are to be moved when in a dormant state. If the schedule of Work does not permit the moving of the tree while in a dormant state the Contractor will be required to use an anti-dessicant. Moving while not dormant shall only be permitted with the prior written consent of the contract administrator.
- E11.3 Evergreen trees may be moved after the new growth has hardened off or prior to the breaking of buds. It shall not be moved during the period between the breaking of buds and the new growth hardening off under any circumstances.
- E11.4 Trees shall be mechanically dug with machinery specifically designed for the transplantation of trees such as a tree spade. They shall be transplanted directly to their new locations and shall not be stored or left out of the ground.
- E11.5 Tree root balls shall be as specified in the Canadian Standards for Nursery Stock for Collected or native material from woodlots or fence rows.
- E11.6 Immediately after moving the tree the transplanted tree is to be staked, mulched, and watered.
- E11.7 Measurement and payment shall be per each as indicated on the schedule of unit prices. Said payment shall be understood to include all incidental items, staking, clearing of utilities, moving of the trees, protection of or repair of damage to existing surfaces that may be involved in the transplanting of the trees.

E12. TREE MAINTENANCE

- E12.1 This section shall cover the maintenance for all trees supplied and installed or transplanted during the course of this contract.
- E12.2 The Contractor shall be responsible for maintaining the plant material from installation for a period of two years from the date of installation or from the date of total performance which ever is later. It is expected that the plants shall be actively maintained from May 1 to October 31st of each year.
- E12.3 The replacement of any deciduous or coniferous plant material shall initiate the start of an additional 2 year maintenance on the replaced plant.
- E12.4 Active maintenance is to include;
- (a) Watering
 - (b) Weeding control (tree well only)
 - (c) Pest and Disease control
 - (d) Pruning
 - (e) Tree Support and tie maintenance and adjustment
 - (f) Winter protection

- E12.5 Water shall be applied as required to maintain optimum conditions. During dry weather the Contractor should expect to water on a weekly basis. Each tree is to be thoroughly watered when it is watered (40 liters per 25 mm of calliper). Contractor is to avoid over watering by reducing the frequency during wet weather.
- E12.6 Contractor shall maintain tree pits in a weed free condition throughout the maintenance period. Weed should be removed frequently and not left to establish for a period greater than 10 days.
- E12.7 Contractor is to control pests and diseases as required. Contractor shall inform the Contract Administrator prior to applying pesticides and use only those pesticides of low mammalian toxicity. Persons applying pesticides shall have a valid pesticide applicators license and strictly follow manufacturers instructions regarding the application of the chemicals and the safety precautions required to apply them.
- E12.8 Pruning shall be done by persons with a valid Manitoba Tree Pruners license. Pruning shall be as necessary to remove dead or damaged limbs as well as maintain species typical form and healthy growth. Pruning shall be done in accordance with industry accepted methods to standard good practice. In the event of a disagreement the opinion of the Contract Administrator as to what constituted standard good practice shall be considered final.
- E12.9 Tree support and stakes are to be inspected at each weeding/watering to ensure that they are properly adjusted.
- E12.10 At the end of each growing season Contractor is to ensure that tree is properly fitted with rodent protection as per the planting detail.
- E12.11 Maintenance operation are to be diarised. Each diary entry is to contain the following;
- (a) Maintenance Site Forman
 - (b) Date
 - (c) Weather conditions
 - (d) Actions performed
- E12.12 Maintenance of the installed trees shall be paid at the rate specified in the unit prices for tree maintenance and paid for at the end of the maintenance period. Maintenance of the transplanted tree shall be paid at the rate specified in the unit prices for tree maintenance and paid for at the end of the maintenance period.

E13. SUB-SURFACE DRAINAGE

- E13.1 This section shall cover the supply and installation of the shallow buried drainage system.
- E13.2 Drainage pipe shall be Multi-Flow. Size shall be 150 mm. All fittings shall be sized to fit.
- E13.3 Backfill shall be coarse sand with a 1 to 2 mm particle size.
- E13.4 Surface emitter shall be NDS #620 or equivalent.
- E13.5 Following the rough grading trenches for the drain pipe are to be dug. Trench shall be of the width specified on the drawings. Location of trench shall be as shown as drawings. The bottom surface of the trench is to be free of loose particles and is to have a minimum 0.5 per cent slope to the drainage outlet or the slope shown on the drawings. Where the trench is to pass through an area of existing sod the excavated material is not to be placed directly on the grass surface. Excavated materials may be placed on plywood sitting on adjacent grassed surface. Plywood or fill is not to remain on the grassed surface for a period longer than 24 hours. Excavated material if not required as fill elsewhere shall be removed from Site and disposed of legally.

- E13.6 Multi-Flow drain pipe is to be placed in trench using Multi-Flow centering device. Trench is to be backfilled to the surface. Backfill is to be lightly tamped into place and watered. In the case of trenches extending into existing grassed areas coarse sand backfill is to be seeded with grass seed.
- E13.7 Pipe is to extend to and connect to a surface emitter as shown on the drawings.
- E13.8 The Contractor shall be responsible for restoration of any surfaces damaged during the Work under this section. There shall be no separate measurement or payment for restoration Work required as a result of this Work.
- E13.9 Measurement and payment shall be on a per linear meter basis for the actual length of pipe installed. All trenching, backfill, fittings, emitter, and seeding are to be considered incidental to the supply and installation of the pipe.

E14. SITE FURNITURE

- E14.1 This specification will cover the supply and installation of new Site furniture as well as the relocation and refurbishment of existing Site furniture.
- E14.2 The following park furniture may be obtained by contacting Fleet Management Agency, City of Winnipeg, Central Manufacturing/Repair Facility, 215 Tecumseh Street, attn Bill Dowbyhuz or Murray Burton.
- (a) Bonnacastle park bench. Finish shall be Tache Green
 - (b) Metal slat waste receptacle. Finish shall be black
- E14.3 Benches and waste receptacles shall be installed into concrete filled holes, minimum 400 mm diameter by 600 mm depth. Top of the concrete shall be minimum 100 mm below the finish surface of the granular paving. Top of concrete shall be sloped to drain away from the post.
- E14.4 Benches to be relocated shall be removed from their current location. All concrete shall be removed from the post. Metal parts shall be sandblasted, bare metal primed, and repainted with rust inhibiting enamel. Wooden parts shall be removed and refinished to match the new benches. Benches shall then be reassembled and installed in the same manner as new benches.
- E14.5 Existing waste receptacle shall be removed. All concrete shall be removed from the post. Metal parts shall be repaired as necessary, sandblasted, bare metal primed, and painted with rust inhibiting black enamel.
- E14.6 Measurement and payment shall be for each as per the schedule of prices. Said price shall include all Work necessary to supply and/or remove and refurbish and install each item of Site furniture.

E15. POURED IN PLACE CONCRETE CURB AND EDGING

- E15.1 This section shall cover the supply and installation of the poured in place concrete curb for the Site entries as well as the poured in place concrete edging for the playground.
- E15.2 Concrete shall be Type 1 as per City of Winnipeg Standard Construction Specifications section 3310.
- E15.3 Granular base shall be 20 mm diameter crushed limestone.
- E15.4 Reinforcing steel shall be 12m. with 10 m ties at 600 mm O.C.

- E15.5 Concrete is to be trowel finish. All exposed edges are to be bullnose as shown on the drawings.
- E15.6 Concrete edging and curb shall have saw cut control joints at 1500 mm O.C. and at all corners.
- E15.7 Curbs and edging are to be measured per linear meter actually installed on the Site and shall be paid for at the Unit Price. This payment shall be understood to include all concrete, excavation, base, reinforcing, compaction, placement and finishing.

E16. PLAY STRUCTURE

- E16.1 This section shall cover the supply and installation the play structure shown on the drawings.
- E16.2 Play structure shall be Landscape Structures Inc. PlayBooster system as shown on drawings and available from Playgrounds-R-Us, Telephone (204) 632-7000 or approved substitute in accordance with B6.
- E16.3 All products and installation are to conform to the Canadian Standards Association Guidelines as presented in the latest edition of the 'National Standards of Canada, CAN/CSA-Z614-03.
- E16.4 Playstructure materials are to conform to the following;
- (a) Decks
 - (i) All decks shall be of modular design and have 5/16" diameter holes on the standing surface. There shall be a minimum of (4) slots in each face to accommodate face mounting of components. Decks shall be manufactured from a single piece of low carbon 12 GA (.105") sheet steel conforming to ASTM specification A-569. The sheet shall be perforated then flanged formed and reinforced as necessary to ensure structural integrity. The unit shall then be vinyl coated brown only. Decks shall be designed so that all sides are flush with the outside edge of the supporting posts.
 - (b) Posts/Caps
 - (i) Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to Cranberry Red. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low-density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.
 - (c) Clamping System
 - (i) Each functional clamp assembly shall have an appropriate number of half clamps and shall be fastened to mating parts with (2) 3/8" x 1 1/8" pinned button head cap screws (SST) and (2) stainless steel (SST) recessed "T" nuts. A 1/4" aluminum drive rivet w/stainless steel pin is used to insure a secure fit to the post.
 - (d) Fasteners
 - (i) Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise specified by manufacturer. All primary fasteners shall include a locking patch type material that will meet the minimum torque requirements of IFI-125. Manufacturer to provide special tools for pinned tamperproof fasteners.
 - (e) Rotationally Molded Poly Parts
 - (i) These parts shall be molded using prime compounded linear low-density polyethylene with a tensile strength of 2500 psi per ASTM D638 and with color and

UV-stabilizing additives. Wall thickness varies by product from .187" (3/16") to .312" (5/16").

- (f) Permalene Parts
 - (i) These parts shall be manufactured from 3/4" thick high-density polyethylene that has been specially formulated for optimum U.V. stability and color retention. Products shall meet or exceed density of .960 G/cc per ASTM D1505, tensile strength of 2400 PSI per ASTM D638.

E16.5 Playstructure Colours

- (a) Cranberry Red ; Posts, Clamps
- (b) Tan: Over Heads, Climbers, pods, barriers, Slide hoods
- (c) Permalene: Tan, Tan/Red
- (d) Tender Tuff: Brown

E16.6 The following play/structural components are to be included in the playstructure.

- (a) 111404A - Posts For Decks 148"/72" Deck
- (b) 111404B - Posts For Decks 140"/64" Deck
- (c) 111404C - Posts For Decks 132"/56" Deck
- (d) 111404D - Posts For Decks 124"/48" Deck
- (e) Kick Plate:
- (f) 111228A - Square Tenderdeck, Brown Only
 - (i) Square Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A569. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 47" x 47". Finish: TenderTuff, brown in color.
 - (ii) Deck Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, color specified.
 - (iii) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
- (g) 119514A - Pilot Panel, (2-Color Permalene)
 - (i) Permalene Panel: Two color panel measures 35 5/8" wide x 41" high, color Tan/Red.
 - (ii) Wheel: 12" diameter cast 319.1 aluminum alloy. Shaft-303 stainless steel. Finish: TenderTuff, Red.
 - (iii) Wheel Bracket: Weldment comprised of formed 3/16" plate and 5/8" O.D. shaft. Finish: Powdercoat, Cranberry Red.
 - (iv) Steering Wheel Cap: Aluminum alloy 6061-T6. Finish: Powdercoat, white in color.
 - (v) Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: Powdercoat, Cranberry Red.
 - (vi) Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: Powdercoat, Cranberry Red.
 - (vii) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

- (viii) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, Cranberry Red
- (h) 123340C - 18" Stainless Steel Slide 64" - 72" Deck
 - (i) Slide Bedway: Formed from 16 GA (.060") 304 stainless steel with 2B finish and 1" O.D. stainless steel top rail turned down and capped at both ends.
 - (ii) Hood: Rotationally molded from U.V. stabilized linear low density polyethylene, Tan.
 - (iii) Rail: 1 1/8" O.D. 6061-T6 aluminum extrusion with 5/16" walls. Finish: Powdercoat, Tan.
 - (iv) Spacer Plate: Fabricated from 3/16" HRS flat steel. Finish: Powdercoat, brown in color.
 - (v) Bolt Caps: Made from injection molded polypropylene, U.V. stabilized, white in color.
 - (vi) Footer: Fabricated from 1.660 O.D. RS-20 (.085" - .095") galvanized steel tubing. Finish: Powdercoat, Cranberry Red.
 - (vii) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (viii) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, Cranberry Red.
- (i) 130798A - Double Poly Slides Double Swirl Slide, 48" - 56" Deck
 - (i) Slide: Rotationally molded from U.V. stabilized linear low density polyethylene, Tan.
 - (ii) Hood: Rotationally molded from U.V. stabilized linear low density polyethylene, Tan.
 - (iii) Rail: Extruded from 1.125" O.D. x .312" W. 6061-T6 aluminum. Finish: Powdercoat, Tan.
 - (iv) Rail Spacer: Fabricated from 1.3125" O.D. x 16 GA (.065") steel tubing. Finish: Powdercoat, Tan.
 - (v) Mid-Support: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: Powdercoat, Cranberry Red.
 - (vi) Support: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: Powdercoat, Cranberry Red.
 - (vii) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (viii) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, Cranberry Red.
- (j) 122570C - Cliff Climber 64" Deck
 - (i) Climber Plank: Flange formed from 11 GA (.120") sheet steel conforming to ASTM A569. Standing surface is perforated with 5/16" diameter holes. Finish: TenderTuff, brown in color.
 - (ii) Climber Bracket: Fabricated from formed 3/16" x 2" HR flat steel. Finish: Powdercoat, brown in color.
 - (iii) Climber Steps/Panels: Solid color permalene, Tan/Red.
 - (iv) Chain: 3/16" Chain zinc plated. Finish: TenderTuff, brown in color.
 - (v) Footer: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 3/16" x 2" HR flat steel. Finish: Powdercoat, brown in color.

- (vi) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (vii) Upper Bracket: Weldment comprised of formed 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 1 3/4" wide steel half clamps. Finish: Powdercoat, Tan.
 - (viii) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, Cranberry Red.
- (k) 135345B - Pod Climbers 24" Deck
- (i) Disc: Rotationally molded from U.V. stabilized linear low density polyethylene, disc measures 14" in diameter x 7" high, Tan.
 - (ii) Handhold Panel: Solid color permalene, Tan.
 - (iii) Handloop: Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread. Finish: TenderTuff, Tan.
 - (iv) Support: Weldment comprised of 1.900" O.D. RS-20 (.090" - .100"), 1.315" O.D. RS-20 (.080" - .090") and 3/16" x 5" diameter plate. Finish: Powdercoat, Tan.
 - (v) Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: Powdercoat, Tan.
 - (vi) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (vii) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, Cranberry Red.
- (l) 116246B - Step Ladders, Brown Steps Only 40" Deck
- (i) Step Ladder: Fabricated and formed from 14 GA (.075") HRPO sheet steel with 5/16" perforated holes for steps and welded 12 GA (.105") HRPO sheet steel for sides. Finish: TenderTuff, brown in color.
 - (ii) Handhold Panel: Solid color permalene with 3/4" x 1 1/8" handholds, Tan.
 - (iii) Handrail: Formed from 1.125" O.D. x 11 GA (.120") galvanized steel tubing. Finish: TenderTuff, Tan.
 - (iv) Footer: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 2" zinc plated steel strap. Finish: Powdercoat, brown in color.
 - (v) Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: Powdercoat, Cranberry Red.
 - (vi) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (vii) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, Cranberry Red.
- (m) 116249B - Vertical Ladders, Deck To Ground Vertical Ladder, 40" - 48" Deck
- (i) Vertical Ladder: Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing, 1.029" O.D. RS-20 (.070" - .080") and 3/16" x 2" wide steel flat plates. Finish: TenderTuff, Tan.
 - (ii) Footer: Fabricated from 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing. Finish: Powdercoat, color specified.
 - (iii) Handhold Panel: Solid color permalene with 3/4" x 1 1/8" handholds, color specified.
 - (iv) Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: Powdercoat, color specified.

- (v) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (vi) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, color specified.
- (n) 148432B - Corkscrews 56" - 72" Deck
- (i) Corkscrew: Weldment comprised of 1.900" O.D. RS-20 (.090"-.100") galvanized steel tubing, and 1.315" O.D. RS-20 (.080"-.090") galvanized steel tubing. Finish: Powdercoat, color specified.
 - (ii) Handhold Panel: Solid color permalene, color specified.
 - (iii) Spacer Tube: Fabricated from 6061-T6 aluminum 1 1/8" O.D. x 1 1/4". Finish: Powdercoat, color specified.
 - (iv) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (v) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, color specified.
- (o) 126203A - Ring-a-Ling
- (i) Support: Weldment comprised of 2.750" O.D. x .125" wall zinc plated steel tubing and 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing. Finish: Powdercoat, color specified.
 - (ii) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (iii) Ladders: Weldment comprised of 2.375" O.D. RS-40 (.130" - .140") galvanized steel tubing crossover, 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing, formed 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing and formed 1/4" x 3" wide zinc plated steel. Finish: Powdercoat, color specified.
 - (iv) 3" Half Clamp: Fabricated from formed 1/4" x 3" wide zinc plated steel. Finish: Powdercoat, color specified.
- (p) 115375A - Deck to Deck Steps w/Barrier, 2 steps
- (i) Step Sections/Top Step Section: Formed from 12 GA (.105") sheet steel conforming to ASTM A569. Surface is perforated with 1/4" diameter holes. Finish: TenderTuff, brown in color.
 - (ii) Barrier: Weldment comprised of 5/8" solid steel vertical rails and 1 1/8" O.D. x 11 GA (.120") steel horizontal rails top and bottom. Measures 30 11/16" wide x 40" high. Finish: Tendertuff, color specified.
 - (iii) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
 - (iv) Offset Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, color specified.
- (q) 136157A - Disc Challenge "S" Disc Challenge, 123" Module, Max. 40" Decks
- (i) Beam: Weldment comprised of 2.875" O.D. RS-40 (.160"-.170") galvanized steel tubing, 3/16" x 1 7/16" x 1 3/4" formed brackets and 1/4" HRPO flat steel. Finish: Powdercoat, color specified.
 - (ii) Disc: Rotationally molded from U.V. stabilized linear low density polyethylene, disc measures 14" in diameter x 7" high, color specified.

- (iii) Disc Brackets: Weldment comprised of 1.660" O.D. RS-20 (.085 - .095") galvanized steel tubing and 3/16" x 5" diameter plate. Finish: Powdercoat, color specified.
- (iv) Footer: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1" x 5" x 1/4" flat steel. Finish: Powdercoat, color specified.
- (v) Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
- (vi) Half Clamp: Cast aluminum. Finish: Powdercoat, color specified.
- (r) 121948A - Kick Plate 8" Rise
 - (i) Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff, brown in color.

E16.7 Complete Play Structure

- (a) Notwithstanding the items listed above the play structure is to be a complete structure including all miscellaneous fittings, handholds, grab bars, etc required to be a complete structure in accordance with CAN/CSA – Z614-98.

E16.8 Installation

- (a) Playstructure shall be installed in accordance with manufactures specifications.
- (b) All products and installation are to conform to the Canadian Standards Association Guidelines as presented in the latest edition of the 'National Standards of Canada, CAN/CSA-Z614-03.
- (c) All decks shall be level.
- (d) All posts shall be vertical.
- (e) Installation of play structure shall be by factory certified installers only and all installation is to conform to manufacturers specification.
- (f) Installation will be coordinated with other Work on Site. Play structure shall be secured and rendered unusable until safety surfacing is in place.
- (g) Playstructure shall be ordered immediately upon award of contract and the installation dates confirmed.

E16.9 Measurement and payment for the play structure shall be the Unit Price. Measurement shall be on a lump sum basis for the completed structure. Said price shall be deemed to include all costs for the supply and installation of all components of the play structure and accessory items.

E17. SWINGS

E17.1 This section shall cover the supply and installation of the infant swings.

E17.2 Swings shall be Sportsplay #581-240 swing set: 8' high, 2 place w 90 mm (3.5") O.D. 7 gauge top beam and 60mm (2 3/8") 10 gauge legs all RS 40-galvanized with powdercoated red end fittings and two slash proof rubber enclosed infant seats, c.w. heavy duty 4/1 straight link galvanized steel chain, double clevis and bolt links or approved substitute in accordance with B6.

E17.3 All fabrication cuts, drill holes, and weld joints shall be sprayed with a corrosion resistant coating and the bottom end of the posts shall be sealed with a moisture barrier.

E17.4 Yoke clamps shall be either one piece construction and fabricated from 8 gauge RS40 Galvanized steel or two piece, compression clamping cast aluminum or galvanized metal with baked on polyester powdercoating. They shall be complete with tamper proof hardware.

- E17.5 Enclosed infant seats shall be moulded of U.V. stabilized, high quality rubber with a tempered stainless steel reinforcement plate instert moulded inside, rendering the seats slashproof. Infant seats shall be fully enclosed to prevent slipping out and provide extra lower back support.
- E17.6 Swings shall be installed in a manner consistent and in accordance with the Canadian Standards Association Guidelines.
- E17.7 Swings shall be secured and rendered unusable until safety surfacing is in place.
- E17.8 Measurement and payment shall be lump sum as per the schedule of prices. This lump sum shall include all items of Work necessary and incidental to supplying and installing complete and operating swings in accordance with Canadian Standards Association guidelines.

E18. SEESAW

- E18.1 This specification shall cover the supply and installation of the See Saw
- E18.2 The See Saw shall be a Landscape Structures Model #148637B or approved substitute in accordance with B6.
- E18.3 Colour shall be Cranberry Red.
- E18.4 SeeSaw shall be installed in accordance with Manufacturers instructions and in a manner consistent with and compliant to the Canadian Standards Association Guidelines.
- E18.5 Measurement and payment shall be lump sum at the price identified in the schedule of prices.

E19. RELOCATION OF EXISTING PLAY COMPONENTS

- E19.1 This section shall cover the removal, renovation, and reinstallation of existing play equipment.
- E19.2 Play equipment is to be removed, all concrete detached and legally disposed of, existing foundation holes backfilled with bentonite clay compacted in 15 cm lifts, all damaged surfaces restored (painted), and reinstalled in the location shown on the Site.
- E19.3 Reinstallation is to be as per the original manufactures recommendations. In the event of a conflict between the manufacturers specification at the time the equipment was manufactured and the manufacturers current recommendations the reinstallation is only to take place after consultation with the Contract Administrator. The Contract Administrator reserves the right to choose whichever method is deemed in the best interests of the City.
- E19.4 Measurement and payment shall be for each as itemized in the schedule of unit prices. Said payment is understood to include all necessary and incidental items and products needed to perform the removal, renovation, and reinstallation of the existing components.

E20. FOUNDATIONS

- E20.1 All playground equipment posts, bases and anchors are to be set in concrete footings or piles sufficient to ensure stability and prevent frost heaving. Concrete shall conform to the Standard Construction Specification of the City of Winnipeg, CW 2160 (revision in effect 3 days before tender close).
- E20.2 The concrete shall "type B" 32 mpa concrete.
- E20.3 Contractor shall notify the Contract Administrator at least 48 hours prior to the installation of the concrete. The Contractor must obtain approval from the Contract Administrator for the size and

depth of the auger holes and the temporary location of the play structure prior to the installation of the concrete.

- E20.4 Playstructure posts shall have a minimum 350 mm diameter (14") concrete footing and shall be centered in the concrete footing.
- E20.5 Spring Rider and See Saw shall have a minimum 18" diameter concrete footing and shall be centered in the concrete footing.
- E20.6 Depth of the footing shall be sufficient to ensure stability and prevent frost heaving.
- E20.7 Footings shall meet or exceed manufacturers recommendations and National Standard of Canada Can/CSA-Z614-03.

E21. MAINTENANCE KITS

- E21.1 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.

E22. PLAY SURFACING

- E22.1 This specification shall cover the supply and installation of protective surfacing in the playground area.
- E22.2 Safety stone shall be 6-10 mm Playground Stone, composition shall be 6 to 10 mm river washed granite only. Stone shall be rounded and not angular. The stone shall be washed and screened. All stone shall pass a 8mm screen and no stone shall pass a 4 mm screen.
- E22.3 Playground stone shall not be installed until after the rough grading and the subsurface drainage have been inspected and approved by the contract administrator.
- E22.4 Playground stone shall be installed within all play areas, as defined by concrete edging, to a minimum depth of 30 cm.
- E22.5 The play stone shall be installed immediately after the play structure has been installed and prior to the play structure being rendered usable.
- E22.6 Installation shall be done by equipment sized to suit the Work being done and the Playground Stone shall be spread by hand as necessary in the immediate vicinity of the playstructures so as not to damage same. Contractor is cautioned that equipment is not to drive over subsurface drains without suitable protection being provided for drains prior to Work being done. The playstructures shall be swept clean to the satisfaction of the Contract Administrator after the installation of the Playground Stone.
- E22.7 Measurement and payment shall be for the actual area covered by the stone as called for on the drawings and actually covered on the Site. Measurement shall be per square meter covered and payment shall be at the unit price identified in the schedule of prices.

E23. PRECAST CONCRETE UNIT PAVERS

Products

- E23.1 This section shall cover the supply and installation of precast concrete unit pavers, geotextile and granular base for same.

- E23.2 Paving stone shall be as specified on the drawing.
- E23.3 Granular limestone base is to be crushed stone or gravel having hard angular particles, free from clay lumps, cementation, organic material, frozen material or other deleterious materials. It is to be compacted to 100% of proctor density.
- E23.4 Geotextile and landscape fabric are to be a UV resistant, black, woven fabric. Contractor is to submit a .5 sq. m. sample to the Contract Administrator prior to beginning construction.
- E23.5 Bedding sand is to be 2 mm concrete sand with less than 5 % passing a 0.160 mm sieve and 80% passing a 2.5 mm sieve.

Execution

- E23.6 Prepare Sub grade, ensure that clay sub grade has positive drainage, compact to 95% of proctor density.
- E23.7 Lay geotextile in place, install granular and compact, . Ensure finished surface after compaction is at correct elevation and slope.
- E23.8 Install 5 mm thick sand bedding, lay blocks on top of sand bedding. Blocks shall be laid in the patterns specified on the drawings. If no pattern is specified or if it is unclear how the pattern is to be applied to the form the Contractor is to clarify the desired pattern with the landscape architect prior to laying the blocks.

Measurement and Payment

- E23.9 Measurement shall be for the actual area of paving installed.
- E23.10 Payment shall be at the contract unit price for the actual area of interlock paving installed on the Site under this agreement.

E24. RENOVATION OF EXISTING LOCAL WOOD CHIP PATH

- E24.1 This specification shall cover the renovation of the existing wood chip path. This shall be understood to include, removing plants growing in the existing path, pruning surrounding trees and shrubs to ensure 2 m width by 3 m height of clear path, and installing a 15 cm depth of new local wood chip mulch over the existing path.
- E24.2 Local Wood chip mulch is to be local, chipped wood from deciduous prunings or other sources approved by the Contract Administrator. The wood chips shall vary from 25 mm to 60 mm in total length with larger pieces removed from the Site. It shall not contain spruce or pine needles or an excess of leaves.
- E24.3 Contractor is to ensure that all pruning is to be done by fully trained and qualified personnel, licensed by the Province of Manitoba to do this type of Work.
- E24.4 Trees to be removed from the Site are to be identified on Site by the Contract Administrator PRIOR to being removed or otherwise disturbed.
- E24.5 Pruning shall be completed by a licensed Manitoba Arborist and shall be completed in accordance with discussions and approval of the contract administrator prior to the commencement of and of the pruning Work.
- E24.6 Smaller prunings are to be removed from the Site and disposed of in a legal and environmentally appropriate manner. Larger prunings (for instance large branches) are either to be removed from the Site and disposed of, should the source material be free of disease, may be chipped on Site and used as local wood chip mulch.

E24.7 Measurement and payment shall be at the unit price specified on the Prices, per linear meter of existing wood chip path renovated based upon an actual on Site measurement of the renovated path.