



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 432-2005

BCI – AUBREY PARK PLAYGROUND

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	4
Form G1: Bid Bond and Agreement to Bond	5
Form G2: Irrevocable Standby Letter of Credit and Undertaking	7

PART B - BIDDING PROCEDURES

B1. Project Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Addenda	1
B6. Substitutes	2
B7. Bid Submission	3
B8. Bid	3
B9. Prices	4
B10. Qualification	4
B11. Bid Security	5
B12. Opening of Bids and Release of Information	5
B13. Irrevocable Bid	6
B14. Withdrawal of Bids	6
B15. Evaluation of Bids	7
B16. Award of Contract	7

PART C - GENERAL CONDITIONS

C1. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	1
D4. Contractor's Supervisor	1
D5. Notices	1
D6. Furnishing of Documents	2

Submissions

D7. Insurance	2
D8. Performance Security	3
D9. Subcontractor List	3

Schedule of Work

D10. Commencement	3
D11. Substantial Performance	4
D12. Total Performance	4
D13. Liquidated Damages	4
D14. Scheduled Maintenance	4

Control of Work

D15. Job Meetings	5
D16. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	5

Warranty

D17. Warranty	5
---------------	---

Template Version: C120050301

Form H1: Performance Bond	6
Form H2: Irrevocable Standby Letter of Credit	8
Form J: Subcontractor List	10

PART E - SPECIFICATIONS

General

E1. Applicable Specifications, Standard Details and Drawings	1
--	---

General Requirements

E2. Access To Site And Damage To Existing Structures And Property	1
E3. Site Enclosures	2
E4. Canadian Standards Association Guidelines	2
E5. Maintenance Kits	2

Specifications

E6. Removals and Site Preparation	2
E7. Tree Pruning	2
E8. Retaining Walls and Berm	3
E9. Concrete Curbs	4
E10. Granular Play Surfaces	5
E11. Granular Paths / Pads	6
E12. Wood Bollards	6
E13. Topsoil and Finish Grading	7
E14. Sodding	7
E15. Boulders	8
E16. Site Furniture	8
E17. Swings	9
E18. Play Equipment	11
E19. Foundations	13

PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 BCI – AUBREY PARK PLAYGROUND

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, August 23, 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 10 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 B15.

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;
- (c) Form G1: Bid Bond and Agreement to Bond, or
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or
a certified cheque or draft.

B7.2 All components of the Bid Submission shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely in ink, to constitute a responsive Bid.

B7.3 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.

B7.3.1 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.

B7.4 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B7.5 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 12 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 and the corporate seal, if the corporation has one, should be affixed;
 - (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 and shall be witnessed except where a corporate seal has been affixed.
- 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. BID SECURITY

B11.1 The Bidder shall provide bid security in the form of:

- (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
- (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking 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 included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
- (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.

B11.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B11.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

B11.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B11.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.

B11.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.

B11.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

B12. OPENING OF BIDS AND RELEASE OF INFORMATION

B12.1 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.

- B12.1.1 Bidders or their representatives may attend.
- B12.1.2 Bid Submissions determined by the Manager of Materials, or his designate, to not include the bid security specified in B11 will not be read out.
- B12.2 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>.
- B12.3 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>.
- B12.4 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.

B13. IRREVOCABLE BID

- B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B13.2 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 until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

B14. WITHDRAWAL OF BIDS

- B14.1 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.
- B14.1.1 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.
- B14.1.2 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 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B14.1.3 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 12 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B14.1.3(b), declare the Bid withdrawn.
- B14.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B13.2 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, including the right to retain the Bidder's bid security.

B15. EVALUATION OF BIDS

B15.1 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.

B15.2 Further to B15.1(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.

B15.3 Further to B15.1(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.

B15.4 Further to B15.1(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.

B15.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.

B16. AWARD OF CONTRACT

B16.1 The City will give notice of the award of the Contract by way of a letter of intent, or will give notice that no award will be made.

B16.2 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.

B16.2.1 Without limiting the generality of B16.2, 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.

B16.3 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.

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.

C1.1.1 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 site redevelopment and the supply and installation of play equipment and site furnishings at Aubrey Park, Aubrey Street, Winnipeg.

D3. CONTRACT ADMINISTRATOR

- D3.1 The Contract Administrator is David Wagner Associates Inc., represented by:
David Wagner
Landscape Architect
4 – 430 River Avenue
Winnipeg, Manitoba
R3L 0C6
Telephone No. (204) 452-2426
E-mail. dwagner@dwla.ca
- D3.2 At the pre-construction meeting, David Wagner 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 e-mail address 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. FURNISHING OF DOCUMENTS

D6.1 Upon award of the Contract, the Contractor will be provided with one (1) complete set of the Bid Opportunity in Adobe Acrobat (.pdf) format. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him at cost.

SUBMISSIONS

D7. INSURANCE

D7.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) all inclusive, with The City of Winnipeg and David Wagner Associates Inc. 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;

D7.2 Deductibles shall be borne by the Contractor.

D7.3 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 the date specified in GC:4.1 for the return of the executed Contract.

D7.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

D8. PERFORMANCE SECURITY

D8.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

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

D8.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D8.2 If the bid security provided in his Bid Submission was not a certified cheque or draft pursuant to B11.1(c), 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 letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in GC:4.1 for the return of the executed Contract.

D9. SUBCONTRACTOR LIST

D9.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract.

SCHEDULE OF WORK

D10. COMMENCEMENT

D10.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.

D10.2 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 D7;
 - (iv) the performance security specified in D8;
 - (v) the Subcontractor list specified in D9; and

- (vi) the name of the Contractor's Supervisor specified in D4.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- (c) The Contractor has submitted to the Contract Administrator order confirmation and delivery dates for all key items, as identified at the pre-construction meeting, including but not limited to the play equipment, site furniture, and safety stone.

D11. SUBSTANTIAL PERFORMANCE

- D11.1 The Contractor shall achieve Substantial Performance by May 15, 2006.
- D11.2 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.
- D11.3 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.

D12. TOTAL PERFORMANCE

- D12.1 The Contractor shall achieve Total Performance by May 31, 2006.
- D12.2 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.
- D12.3 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.

D13. LIQUIDATED DAMAGES

- D13.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City one thousand dollars (\$1000) per Calendar Day for each and every Calendar Day following the day fixed herein for Total Performance during which such failure continues.
- D13.2 The amount specified for liquidated damages in D13.1 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D13.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D14. SCHEDULED MAINTENANCE

- D14.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
 - (a) Maintenance of sod as specified in E14.3..

- D14.2 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

D15. JOB MEETINGS

- D15.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D15.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D16. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D16.1 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).

WARRANTY

D17. WARRANTY

- D17.1 Notwithstanding GC:13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter unless extended pursuant to GC:13.2.1 or GC:13.2.2, in which case it shall expire when provided for thereunder.
- D17.2 Notwithstanding GC:13.2 or D17.1, 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.
- D17.2.1 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.
- D17.3 Manufacturer's warranties on play equipment shall apply.

FORM H1: PERFORMANCE BOND
(See D8)

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. 432-2005

BCI – AUBREY PARK PLAYGROUND

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)

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>
L1	Existing Conditions and Removals Plan
L2	Development Plan
L3	Layout and Grading Plan
SCD-105A	Post & Chain Fencing

GENERAL REQUIREMENTS

E2. ACCESS TO SITE AND DAMAGE TO EXISTING STRUCTURES AND PROPERTY

- E2.1 Access to the Sites as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E2.2 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the Site of the Work. For all damage incurred thereto in the performance of the Work, the Contractor shall upon instructions from and to the satisfaction of the City thereof, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the City thereof and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City and David Wagner Associates Inc. from all claims made directly or indirectly against them in respect to any such damage.
- E2.3 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on private property. 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. 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.
- E2.4 Care shall be taken to protect existing trees and their root systems from damage, compaction, and contamination resulting from construction to the satisfaction of the Contract Administrator. No heavy equipment shall be driven or parked on the area within the drip line of any trees.

E3. SITE ENCLOSURES

- E3.1 Temporary site enclosures, as determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.
- E3.2 Site enclosures shall be considered incidental to the Contract Work.

E4. CANADIAN STANDARDS ASSOCIATION GUIDELINES

- E4.1 All playground equipment supplied and the method of installation shall be in accordance with the latest edition of the "National Standard of Canada, CAN/CSA-Z614-03".

E5. MAINTENANCE KITS

- E5.1 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.

SPECIFICATIONS

E6. REMOVALS AND SITE PREPARATION

- E6.1 General Description
- (a) This specification shall cover the removal of items such as play equipment, site furnishings, wood edging and sand base as specified on the Drawings.
- E6.2 Execution
- (a) Playstructures and site furnishings are to be removed including any bases or foundations in their entirety. All play equipment is to be destroyed and, under no circumstances, is any of it to be sold or reused. Removals are to be scheduled such that no partial or unsafe structures are left unsecured. Removals are to be scheduled with the installation of new play equipment, so that the park is without play equipment for a period of no more than two (2) weeks.
- (b) All wood edging, including the sandbox, is to be removed. The sand base from the existing play area is to be removed and the area excavated to the depth required for the installation of new safety stone.
- (c) All removed materials are to be disposed of off site in a safe and legal manner.
- E6.3 Basis of Payment
- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of removal, excavation and disposal.
- (b) Items of Work:
- (i) Removals and Site Preparation

E7. TREE PRUNING

- E7.1 General Description
- (a) This specification shall cover the pruning of trees within the park.
- E7.2 Qualifications

- (a) Staff is to have Canadian Nursery Landscape Association certificate.

E7.3 Tool Maintenance

- (a) Tools are to be clean and sharp throughout the pruning operations. Tools that tear or crush bark are not to be used.
- (b) Tools are to be disinfected before each plant is pruned.
- (c) Tools are to be disinfected before each cut on diseased plants.

E7.4 Disinfectant

- (a) 20% solution of sodium hypochlorite or 70% solution of ethyl alcohol.

E7.5 Pruning

- (a) Dead, dying, diseased and weak growth shall be pruned from trees as designated by the Contract Administrator.
- (b) Low hanging branches that interfere with play equipment safety shall be removed.
- (c) Contractor shall use proper pruning standards and procedures as outlined in Ontario Ministry of Agriculture, Food and Rural Affairs "Pruning Ornamentals" #483-1992 and as directed by the Contract Administrator.
- (d) Pruned material shall be collected and disposed of off site.

E7.6 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all pruning as directed on Site.
- (b) Items of Work:
 - (i) Tree Pruning

E8. RETAINING WALLS AND BERM

E8.1 General Description

- (a) This specification shall cover the supply and installation of retaining walls as shown on the Drawings. Construction of the berm behind the walls shall be considered incidental to this Work.

E8.2 Materials

- (a) Retaining Wall: Barkman Roman Pisa, colour Sierra Grey with Roman Coping, colour Charcoal.
- (b) Unit Pavers: Barkman Holland Stone, colour Sierra Grey.
- (c) Granular base: to CW 3110-R5 for crushed limestone base course material and as per manufacturer's specifications.
- (d) Adhesive
 - (i) Snap Edge, Bond-Loc All Weather Landscape Products Adhesive or approved equal.

E8.3 Method: Retaining Walls

- (a) Wall layout and grading shall be subject to inspection by the Contract Administrator.
- (b) Retaining walls, base and drainage system shall be installed as per Drawings and according to manufacturer's specifications.

- (c) Subgrade preparation shall conform to levels and compaction required to allow for installation of granular base.
- (d) Base shall be compacted to 95% standard Proctor Density.
- (e) Retaining walls shall be installed true to grade such that the top of the finished wall is level across its entire length. The wall is to step down in equal increments at the wall ends.
- (f) The lower wall is to be level across entire length. The distance between the back of that wall and the front of the upper wall shall be adjusted such that the unit pavers fit between, tight and without cutting.
- (g) The base course stones shall be levelled and compacted with a mechanical plate vibrator using a 19mm thick plywood or neoprene pad under the plate. Stones are to be true to grade and free of movement.
- (h) All courses shall be fixed down with adhesive as the wall is being constructed, to the satisfaction of the Contract Administrator.
- (i) The area on top of the lower wall is to be paved with unit pavers set on compacted granular and a 25mm layer of leveling sand, and according to manufacturer's specifications. Unit pavers are to be set tight to each other and fit with minimal cutting.

E8.4 Method: Berm

- (a) The berm behind the walls shall be constructed from clean compacted fill to the grades shown on the Drawings.
- (b) In fill areas, the Contractor shall scarify the existing ground to a minimum depth of 150mm prior to the placement of any fill.
- (c) Compaction shall include the use of sheep's foot or other suitable compaction equipment as approved by the Contract Administrator to achieve a minimum compaction of 95% Proctor Density.
- (d) The transition areas from slope to flat shall be eased to facilitate maintenance.

E8.5 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of material supply including the granular, sub-grade preparation, and proper material installation. Site grading and berm construction shall be considered incidental to the Work.
- (b) Items of Work
 - (i) Retaining Walls and Berm

E9. CONCRETE CURBS

E9.1 General Description

- (a) Further to CW 3310-R8, this specification shall cover the supply and installation of concrete curbs as shown on the Drawings and described as:
 - (i) Concrete Edge Curb
 - (ii) Concrete Sandbox Edge

E9.2 Materials and Methods

- (a) All curbs shall be in accordance with CW-3310-R8.
- (b) Concrete Edge Curb shall be as shown on Drawings. The top grade of the curb shall be determined on Site and approved by the Contract Administrator. The layout shall be confirmed with the play equipment supplier(s) to assure compliance with CSA safety distances from all equipment.

- (c) Concrete Sandbox Edge shall be as shown on Drawings.
 - (i) The top of the curb shall be level across its length.
 - (ii) The wood cap shall be installed on top of the concrete edge and this shall be considered incidental to the Work. The wood cap is to be as shown on the Drawings. The wood shall be spruce, pine or fir, No. 2 or better, no wane, bark, twisting, checking or splitting permitted. Full lengths of wood shall be used per side and the wood is to be sanded smooth with chamfered edges. The ends shall be rounded. The wood shall be treated with Bio-Wash Ltd., Mill Glaze Away and Natural Deck Oil as per manufacturer's specifications.
- (d) Granular base: to CW 3110-R5 for crushed limestone base course material.

E9.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured by the lineal metre, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, and proper material installation.
- (b) Items of Work:
 - (i) Concrete Edge Curb
 - (ii) Concrete Sandbox Edge

E10. GRANULAR PLAY SURFACES

E10.1 General Description

- (a) This specification shall cover the supply and installation of Safety Stone and Sandbox Sand.

E10.2 Materials

- (a) Safety Stone shall be clean washed granite meeting the following:

100% passing	10mm sieve
15% passing	5mm sieve
10% passing	2.5mm sieve
4% passing	1.25mm sieve
1% passing	0.80mm sieve

- (b) Sandbox Sand: clean sandbox sand.
- (c) Samples of the specified materials shall be submitted for approval to the Contract Administrator at least seven (7) Calendar Days prior to installation.

E10.3 Method

- (a) Play area to receive Safety Stone is to be excavated to the depth required for correct depth of stone as shown on Drawings. Safety Stone shall be installed within the play area to a minimum depth of 250mm and to CSA.
- (b) The Sandbox area shall be filled with sandbox sand to a minimum depth of 400mm. The area is located close to existing poplar trees and care is to be taken during excavation so as not to damage tree roots. Sand depth shall be reduced as required in the vicinity of the trees.
- (c) The installation of the Safety Stone shall be done immediately after the play equipment has been installed.

- (d) Installation shall be done by equipment sized to suit the Work being done and the Stone shall be spread by hand in the immediate vicinity of the play equipment so as not to damage the same.
- (e) The play equipment shall be swept clean as required after installation of the Stone.

E10.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a cubic metre basis, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, and proper material installation.
- (b) Items of Work
 - (i) Safety Stone
 - (ii) Sandbox Sand

E11. GRANULAR PATHS / PADS

E11.1 General Description

- (a) This specification shall cover the supply and installation of Granular Paving and Pads including sub-grade preparation.

E11.2 Materials and Method

- (a) Granular Paving
 - (i) Sub-base: 100mm depth of 50mm down crushed limestone compacted in two layers over compacted sub-grade.
 - (ii) Base: 50mm depth of 19mm down crushed limestone, compacted.
 - (iii) Top: 25mm of 6mm down crushed limestone, compacted.
- (b) The granular pathways shall be constructed to function within proposed drainage patterns. The path within the retaining wall area shall drain away from that area.
- (c) A Granular Pad shall be constructed for the picnic table.

E11.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, and proper material installation.
- (b) Items of Work:
 - (i) Granular Paths / Pads

E12. WOOD BOLLARDS

E12.1 General Description

- (a) This specification shall cover the supply and installation of Wood Bollards as shown on the Drawings.

E12.2 Materials and Method

- (a) Wood Bollard: round wood posts as specified on the Drawing and SCD-105A with no chains. Bollards are to be installed by direct burial method at 1.8m O.C. Bollards are to be installed plumb and in a straight line and height with each other.

E12.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the unit price for the "Items of Work" listed below, which price shall include all costs of material supply, and proper material installation. Site restoration work shall be considered incidental to the Work.
- (b) Items of Work:
 - (i) Wood Bollards

E13. TOPSOIL AND FINISH GRADING

E13.1 General Description

- (a) Further to CW 3540-R3, this specification shall cover the supply and installation of topsoil for the establishment of turf.

E13.2 Materials

- (a) Topsoil: As per CW 3540-R3.

E13.3 Methods

- (a) The topsoil and finish grading shall be installed as per CW3540-R3 or as directed by the Contract Administrator.

E13.4 Basis of Payment

- (a) Payment for Work specified under this section shall be included with the price for sodding.

E14. SODDING

E14.1 General Description

- (a) Further to CW 3510-R8, this specification shall cover the supply and installation of sod.

E14.2 Materials and Method

- (a) Sodding
 - (i) As per CW 3510-R8.
 - (ii) Sod shall be mineral base.

E14.3 Maintenance Period

- (a) The Contractor shall maintain the sod for 30 Calendar Days after the completion of the installation or until such a time as the turf is established in accordance with CW 3510-R8.

E14.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, proper material installation, maintenance and all other items incidental to the Work. Payment for Sodding shall be in accordance with the following:
 - (i) Seventy-five (75%) following supply and placement and issuance of Certificate of Substantial Performance by the Contract Administrator.
 - (ii) Twenty-five (25%) following termination of the maintenance period.
- (b) Items of Work
 - (i) Sodding

E15. BOULDERS

E15.1 General Description

- (a) This specification shall cover the supply and installation of natural Boulders including the granular base.

E15.2 Materials and Method

- (a) Boulders: Granite boulders, 1.0 to 1.4m in size, no sharp edges.
- (b) Granular base: 19mm \emptyset down crushed limestone. Each boulder is to have a granular base and a 200mm wide granular mowing strip around it.
- (c) Location and positioning of boulders shall be determined on Site and approved by the Contract Administrator.

E15.3 Basis of Payment

- (i) Payment for Work specified under this section shall be paid for at the Unit Price, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, and proper material installation.
- (b) Items of Work
 - (i) Boulders c/w Granular Base

E16. SITE FURNITURE

E16.1 General Description

- (a) This specification shall cover the supply and installation of site furniture as shown on the Drawings.

E16.2 Materials and Method

- (a) Waste Receptacles shall be Metal Slat Type SCD-119, painted black. This item is to be purchased from the City of Winnipeg and will require pick-up and installation.
- (b) Picnic Table
 - (i) DuMor, Inc. Site Furnishings, Picnic Table 100-60PL, recycled plastic. It shall have the embedment support option S-1. Colour shall be Green for the metal and Redwood for the recycled plastic.
 - (ii) Tables are to be installed according to Drawings and manufacturer's specifications.
- (c) Benches
 - (i) DuMor, Inc. Site Furnishings, Bench 88-60PL, recycled plastic. They shall be 1.8M (6') in length and have arm rests. They shall have the embedment support option S-1. Colour shall be Green for the metal and Redwood for the recycled plastic.
 - (ii) Benches are to be installed according to Drawings and manufacturer's specifications.
- (d) Bike Rack
 - (i) Madrax Circa, CIR-6-IG-P-Forest Green.
 - (ii) Bike racks are to be installed according to Drawings and manufacturer's specifications.
- (e) Benches, tables, bike racks and waste receptacles are to be installed in conjunction with the Granular Paving. Tops of concrete footings are to be 200mm below finished grade of all paving. Site furnishings are to be kept clean of any granular, concrete or other materials. Any damaged surfaces shall be touched-up to the satisfaction of the Contract Administrator.

E16.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per unit basis, for the Items of Work listed below, which price shall include all costs of material supply, and proper material installation. Site restoration work shall be considered incidental to the Work.
- (b) Items of Work:
 - (i) Waste Receptacles
 - (ii) Picnic Tables
 - (iii) Benches
 - (iv) Bike Rack

E17. SWINGS

E17.1 General Description

- (a) This specification shall cover the supply and installation of complete Swing sets as specified herein.

E17.2 Materials – Senior Swings

- (a) Product Description
 - (i) SportsPlay Equipment Inc, Model #581-440: Tri-pod Leg, Two Bay, Heavy Duty Swing Frame, 3.0m (10') high, complete with four (4) slash-proof rubber belt seats, heavy duty chain, swing hangers and 9.5mm (3/8") HD 'S' Hooks.
- (b) Topbeam
 - (i) All topbeams shall be fabricated from 90mm (3 1/2") O.D. 7 gauge, RS40 galvanized steel pipe.
- (c) Legs
 - (i) All legs shall be fabricated from 60mm (2 3/8") O.D. 10 gauge, RS40 galvanized steel pipe. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating and the bottom end of the posts shall be sealed with a moisture barrier.
- (d) Yoke Clamps
 - (i) All 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.
- (e) Swing Hangers
 - (i) All swing hangers shall be fabricated from galvanized malleable iron and have oil impregnated bearings pressed in.

E17.3 Materials – Junior Arch Swings

- (a) Product Description
 - (i) Landscape Structures Inc, Model #100050A and 111579A: Two Bay, Heavy Duty Arch Swing Frame, 2.4m (8ft.) high, complete with three (3) slash-proof rubber, enclosed infant seats and one (1) slash-proof rubber belt seat, heavy-duty chain, swing hanger clamp assemblies and bolt links.
- (b) Topbeam and Legs
 - (i) All topbeams and legs shall be fabricated from 127mm (5") O.D. aluminum alloy tube (.125" wall thickness) with a baked-on polyester powdercoating. The powder coating finish shall meet or exceed ASTM standards for hardness, adhesion, impact

and salt spray resistance. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating prior to powdercoating. The bottom end of the posts is to be sealed with a moisture barrier.

- (ii) Colour: pine green.
- (c) Swing Hanger Clamp Assembly
 - (i) All swing hangers shall be fabricated from cast aluminum with powdercoat finish.

E17.4 Materials – Tire Swing

- (a) Product Description
 - (i) Landscape Structures Inc, Model #120891A: Heavy Duty Arch Swing Frame, 2.28m (7.5 ft.) high, complete with tire seat, heavy-duty chain, and self-lubricating 360° rotating swing hanger.
- (b) Topbeam
 - (i) The top beam shall be fabricated from a weldment comprised of 127mm (5") O.D. x 11GA (.120") galvanized steel tubing, 90mm (3.5") O.D. RS-20 (.125") galvanized steel tubing and 7 GA. (.179") flat steel gussets. Tee clamps and tire swing clamps are to be mechanically attached in the factory. The topbeam shall be finished with a baked-on polyester powdercoating.
- (c) Legs
 - (i) Legs shall be fabricated from 127mm (5") O.D. aluminum alloy tube (.125" wall thickness) with a baked-on polyester powdercoating. The bottom end of the posts is to be sealed with a moisture barrier.
- (d) Finish
 - (i) The powder coating finish shall meet or exceed ASTM standards for hardness, adhesion, impact and salt spray resistance. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating prior to powdercoating.
 - (ii) Colour: pine green.
- (e) Swing Hanger Assembly
 - (i) Swing hanger assembly shall be machined from 303 stainless steel with oil impregnated bronze bearings.

E17.5 Materials - Accessories

- (a) Swing Chain
 - (i) All swing chain shall be 4/0 straight link, galvanized steel.
- (b) Enclosed Infant (Bucket) Seats
 - (i) All enclosed infant seats shall be moulded of U.V. stabilized, high quality, rubber with a tempered stainless steel reinforcement plate insert moulded inside, rendering the seats slashproof. Infant seats shall be fully enclosed to prevent slipping out and provide extra lower back support.
- (c) Belt Seats
 - (i) All belt seats shall be moulded of U.V. stabilized, high quality, rubber with a tempered stainless steel reinforcement plate insert moulded inside, rendering the seats slashproof. The perimeter shall be moulded to form a blunt, impact absorbing edge.
- (d) Tire Seat
 - (i) Tire shall be rotationally molded from U.V. stabilized E.V.A. and high density polyethylene, blended to retain flexibility at below freezing temperatures.
- (e) Hardware

- (i) All fasteners shall be socketed and tamperproof in design, and either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel. Bolt links and "S" hooks shall be drop forged carbon steel, heat treated and hot dipped galvanized.

E17.6 Installation

- (a) Swings shall be installed as per the Canadian Standards Association Guidelines. Refer to Clause E4. For foundations refer to Clause E19.
- (b) Installation of swings shall be coordinated with associated site development work. Swings shall be secured and rendered unusable until safety surfacing is in place.
- (c) Swings shall be installed by factory certified installers only and to manufacturer's specifications.
- (d) Swings shall be ordered and installation dates scheduled immediately upon award of contract. Refer to Clause D10.2(c).

E17.7 Basis of Payment

- (a) Payment for work specified under this section shall be paid for at the unit price for the "Items of Work" listed below, which price shall include all costs of supply and installation.
- (b) Items of Work:
 - (i) Senior Swings
 - (ii) Junior Arch Swings
 - (iii) Tire Swing

E18. PLAY EQUIPMENT

E18.1 General description

- (a) This specification shall cover the supply and installation of the Playstructure, Sand Play Equipment / Play Panels, Accessible Play Panels and the Climbing Boulder as shown on the Drawings.

E18.2 Product

- (a) Playstructure: Landscape Structures Inc, Playbooster System # 37502A-2.
- (b) The Sand Play Equipment / Play Panels: Landscape Structures Inc, Playbooster System # 37502B-2.
- (c) The Accessible Play Panels: Landscape Structures Inc, Playbooster System # 37502C-2.
- (d) Climbing Boulder: Dynamo Playgrounds, Medium Boulder #BO-2.

E18.3 Shop Drawings

- (a) Further to CW 1110-R1, shop drawings shall be submitted to the Contract Administrator for the play equipment.
- (b) Shop Drawings shall include, but not be limited to:
 - (i) Layout and configuration of equipment including required safety zones.
 - (ii) Colours
 - (iii) Installation methods and foundation design, including a P.Eng. stamp for concrete pile design.

E18.4 Materials

- (a) Posts / Caps

- (i) All posts shall be a minimum of 127mm (5") O.D. round tubing. All posts shall be fabricated from aluminum (0.125" min. wall thickness) tubing with a baked-on TGIC polyester powder coating. The powder coating finish shall meet or exceed ASTM standards for hardness, adhesion, impact and salt spray resistance. All fabrication cuts drill holes and weld joints shall be sprayed with a corrosion resistant coating prior to powder coating. The bottom end of the posts is to be sealed with a moisture barrier.
- (ii) Top caps for posts shall be aluminum die cast and powder coated the same as the post colour. All caps shall be factory installed and secured in place with tamper proof, self-sealing rivets.
- (b) Decks
 - (i) All decks shall be manufactured from vinyl-coated, perforated steel. Deck heights, shapes and configurations shall be as shown on the Drawings.
- (c) Clamping System
 - (i) All deck, rail and play component clamping systems shall be fabricated from zinc plated, and galvanized steel, stainless steel or aluminum, and baked-on polyester powdercoated to match post colour unless noted otherwise. Tamper proof, corrosion resistant fasteners shall be used to retain clamping systems.
- (d) Handrails, Safety Rails, Play Panels and Handloops
 - (i) All handrails and safety rails shall be fabricated using a minimum of 1 1/8" O.D. with a 120" wall thickness steel tubing. After all fabrication activities have occurred including end cuts, drill holes, bends and weld joints, all components shall be hot dipped galvanized and baked-on polyester powdercoated.
 - (ii) Handloops and play panels shall be permalene panels.
- (e) Hardware
 - (i) All fasteners shall be socketed and tamper proof in design, and either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.
- (f) Slides
 - (i) Poly slides shall be rotationally moulded from U.V. stabilized linear low density polyethylene. Colours are to be compounded not dry-blended. Slides are to have an adjustable footer to allow for contraction and expansion. Hoods are to have built-in handle.

E18.5 Play Components

- (a) The following play components are to be included on the Playstructure:
 - (i) one (1) Double Swirl Poly Slide, 48" deck.
 - (ii) one (1) Cliff Climber, 48" deck, inclined plank with footholds and chain.
 - (iii) one (1) Firepole, 48" deck, handhold panels.
 - (iv) two (2) Deck-to-Deck Steps, 32" deck difference, handrail barriers.
 - (v) one (1) Pipe Barrier c/w Steering Wheel.
 - (vi) one (1) Loop Ladder, 48" deck.
 - (vii) one (1) Clatter Bridge, 84" length, 48" decks, c/w handrails.
 - (viii) one (1) Overhead Parallel Bars / Horizontal Ladder c/w End Vertical Ladder.
 - (ix) one (1) Step Deck, 8" height, c/w two (2) handloop assemblies.
- (b) The playstructure shall have grab bars, kickplates and handhold panels as shown on the Drawings and as required to meet the CAN/CSA -Z614-03.
- (c) The following play components are to be included with the Sand Play Equipment / Play Panels:

- (i) One (1) Ship Bow Assembly
 - (ii) One (1) Store Front Panel
 - (iii) One (1) Table Panel
 - (iv) One (1) Slant Entrance Panel
- (d) The following play components are to be included with the Accessible Play Panels:
- (i) One (1) Tic Tac Toe Panel
 - (ii) One (1) Navigator Reach Panel
 - (iii) One (1) Chimes Reach Panel

E18.6 Colours

- (a) Pine Green – Posts
- (b) Brown – Clamps, component metals and steering wheels
- (c) Tan – Slide, handholds and accents
- (d) Tan and Green – Panels

E18.7 Installation

- (a) Play equipment shall be installed as per the Canadian Standards Association Guidelines. The area of safety surfacing around the Playstructure and Climbing Boulder shall be a minimum of 2.15m from the equipment.
- (b) All posts and other vertical items shall be true to vertical. All decks shall be level. For foundations refer to Clause E19.
- (c) Play equipment shall be installed by factory certified installers only and to manufacturer's specifications.
- (d) Installation method for the Climbing Boulder shall be manufacturer's installation option for chain and concrete footings. Shop Drawings for the installation method are required complete with footing / pile design for local frost conditions and a P.Eng stamp.
- (e) Installation of all play equipment shall be coordinated with associated site development work. The play equipment shall be secured and rendered unusable until safety stone is in place.
- (f) Play equipment shall be ordered and installation dates scheduled immediately upon award of contract. Refer to Clause D10.2(c).

E18.8 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the unit price for the "Items of Work" listed below, which price shall include all costs of supply and installation.
- (b) Items of Work:
 - (i) Playstructure
 - (ii) Sand Play Equipment / Play Panels
 - (iii) Accessible Play Panels
 - (iv) Climbing Boulder

E19. FOUNDATIONS

- E19.1** All playground equipment posts, bases and anchors are to be set in concrete footings or piles to ensure stability and prevent frost heaving. The current Standard Construction Specifications of the City of Winnipeg, CW 2160-R6 -Concrete to be Used in Underground Works, is to be utilized in the installation of the concrete works for all below ground components.

E19.2 The specific concrete requirements shall be:

- (a) Sulfate resistant, Type 50 Cement
- (b) 28 day compressive strength of 30 Mpa
- (c) maximum aggregate size of 40mm, nominal
- (d) slump 90 20mm
- (e) maximum water/cement ratio 0.45

E19.3 Installation

- (a) Contractor shall notify the Contract Administrator at least 48 hours prior to installation of concrete, so that footings may be inspected in advance of concrete being poured.
- (b) Playstructure posts shall have a minimum 300mm (12") diameter concrete footing and shall be centred in the concrete footing to provide a minimum 50mm (2") band of concrete on all sides.
- (c) Work under this section is considered incidental to the installation of play equipment and site furniture.