



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 646-2007**

**PLAYGROUND RENOVATIONS SITE WORKS AND FURNISHINGS**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 PLAYGROUND RENOVATIONS SITE WORKS AND FURNISHINGS

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, November 8, 2007.

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

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

### **B3. SITE INVESTIGATION**

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

### **B4. ENQUIRIES**

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

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

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

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

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

### **B5. ADDENDA**

B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.

B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.

B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B5.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

## **B6. SUBSTITUTES**

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
  - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
  - (c) identify any anticipated cost or time savings that may be associated with the substitute;
  - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
  - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with 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 COMPONENTS**

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

- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B7.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.8 Bids shall be submitted to:  
The City of Winnipeg  
Corporate Finance Department  
Materials Management Branch  
185 King Street, Main Floor  
Winnipeg MB R3B 1J1
- B8. BID**
- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
  - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
  - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;

- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.

B8.4.2 All signatures shall be original.

B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

## **B9. PRICES**

B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.2 Notwithstanding C.12.2.3(c), prices on Form B: Prices shall include the Manitoba Retail Sales Tax (MRST, also known as PST), but exclude the GST

B9.3 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.

B9.4 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; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B10.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B10.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B10.4 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B10.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

### **B11. OPENING OF BIDS AND RELEASE OF INFORMATION**

B11.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, or in such other office as may be designated by the Manager of Materials.

B11.1.1 Bidders or their representatives may attend.

B11.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

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 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 C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

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 will:

- (a) retain the Bid until after the Submission Deadline has elapsed;
- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in 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 is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

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 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

B14.5 This Contract may be awarded as a whole or separately in sections as identified on Form B: Prices.

B14.5.1 Notwithstanding B9.1, the Bidder may, but is not required to, bid on any one or more sections.

B14.5.2 Notwithstanding B9.1, the City shall not be obligated to award any section to the responsible Bidder submitting the lowest evaluated responsive Bid for that section and shall have the right to choose which is in its best interests. If the Bidder has not bid on all sections, he shall have no claim against the City if his partial Bid is rejected in favour of an award of the Contract on the basis of a section upon which he has not bid

#### **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 Subject to B15.2, 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.

B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

B15.4 Notwithstanding C4, 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 C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

## **PART C - GENERAL CONDITIONS**

### **C0. GENERAL CONDITIONS**

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

## **PART D - SUPPLEMENTAL CONDITIONS**

### **GENERAL**

#### **D1. GENERAL CONDITIONS**

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

#### **D2. SCOPE OF WORK**

D2.1 The Work to be done under the Contract shall consist of removal and disposal of existing play equipment, bases, safety surfaces, site furnishings, paving materials and vegetation, site grading, excavation for new play areas, supply and installation of asphalt paving, crushed limestone paving, concrete paving, timber edging, site furnishings, shrub bed preparation, and sod and topsoil.

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

- (a) Removal and Disposal;
- (b) Excavation and Rough Grading;
- (c) Grading;
- (d) Remove existing play equipment and concrete bases;
- (e) Remove and dispose of existing site furnishings (including concrete bases);
- (f) Remove and dispose of existing timber edging;
- (g) Remove and dispose of existing play stone and sand surfacing;
- (h) Remove and dispose of existing trees and shrubs (including root mass);
- (i) Sawcut, excavation, remove and dispose of asphalt paving and unsuitable base courses;
- (j) Construction of asphalt paving;
- (k) Construction of crushed limestone pathway;
- (l) Construction of concrete paving and curbing;
- (m) Supply and installation of timber edging;
- (n) Supply and installation of Site Furniture;
- (o) Supply and installation of Chain Link Fence;
- (p) Supply and installation of Shrub Bed;
- (q) Supply and installation of topsoil and sod as required in accordance with the requirements attached.

#### **D3. CONTRACT ADMINISTRATOR**

D3.1 The Contract Administrator is Scatliff+Miller+Murray Inc., represented by:

Mr. Derek Murray  
8<sup>th</sup> Floor – 136 Market Avenue  
Winnipeg, MB  
R3B 0P4  
  
Telephone No. (204) 927-3444  
Facsimile No. (204) 927-3443

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

#### **D4. CONTRACTOR'S SUPERVISOR**

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

#### **D5. NOTICES**

- D5.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

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

The City of Winnipeg  
Chief Administrative Officer Secretariat  
Attn: Chief Administrative Officer  
Administration Building, 3rd Floor  
510 Main Street  
Winnipeg MB R3B 1B9  
Facsimile No.: (204) 949-1174

- D5.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

The City of Winnipeg  
Corporate Services Department  
Legal Services Division  
Attn: City Solicitor  
185 King Street, 3rd Floor  
Winnipeg MB R3B 1J1  
Facsimile No.: (204) 947-9155

#### **SUBMISSIONS**

#### **D6. AUTHORITY TO CARRY ON BUSINESS**

- D6.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

#### **D7. SAFE WORK PLAN**

- D7.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D7.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

## **D8. INSURANCE**

D8.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
- (c) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.

D8.2 Deductibles shall be borne by the Contractor.

D8.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.

D8.4 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.

## **D9. PERFORMANCE SECURITY**

D9.1 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.

D9.1.1 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.

D9.2 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.

## **D10. SUBCONTRACTOR LIST**

D10.1 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.

## **D11. DETAILED WORK SCHEDULE**

D11.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C:4.1 for the return of the executed Contract.

D11.2 The detailed work schedule shall consist of the following dates:

- (a) Start date;
- (b) Completion of removals;
- (c) Excavation of new play areas and pathways;
- (d) Installation of timber edging (to be coordinated with Play Equipment Contractor);
- (e) Concrete pouring for site furnishings;
- (f) Installation of paved surfaces (concrete, asphalt, crushed limestone and unit pavers);
- (g) Shrub bed preparation;
- (h) Installation of site furnishings; and
- (i) Expected completion

D11.3 Other milestone dates appropriate to this project should also be included to make the Contract Administrator aware of them

## **SCHEDULE OF WORK**

### **D12. COMMENCEMENT**

D12.1 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.

D12.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
  - (i) evidence of authority to carry on business specified in D6;
  - (ii) evidence of the workers compensation coverage specified in C6.15;
  - (iii) the Safe Work Plan specified in D7;
  - (iv) evidence of the insurance specified in D8;
  - (v) the performance security specified in D9;
  - (vi) the Subcontractor list specified in D10; and
  - (vii) the detailed work schedule specified in D11.
- (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.

D12.3 The Contractor shall commence the Work on the Site no later than May 15, 2008.

### **D13. WORKING DAYS**

D13.1 Further to C1.1(gg), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at

one time on one type of Work while at another time a Working Day may be based on another type of Work. When more than one type of major Work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.

- D13.2 In the event that incidental Work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental Work until such time as it is up to schedule.
- D13.3 When the major type of Work involves restoration of the Site to the condition it was prior to rainfall, Working Days shall not be charged.

#### **D14. RESTRICTED WORK HOURS**

- D14.1 The Contractor shall require written permission 48 hours in advance from the Contract Administrator for any Work to be performed between the hours of 8:00 p.m. and 7:00 a.m., or on Saturdays, Sundays, Statutory Holidays and/or Civic Holidays. In addition, such Work shall conform with all applicable laws and/or by-laws and specifically the Noise Control By-Law No. 2480/79.

#### **D15. WORK BY OTHERS**

- D15.1 Works by others on or near the Site will include but not necessarily be limited to:
- (a) Maintenance Work by City of Winnipeg;
  - (b) Supply and Installation of Play Equipment and Safety Surfacing by Play Equipment Contractor(s);
- D15.2 Supply and Installation of trees by other contractor(s)

#### **D16. SUBSTANTIAL PERFORMANCE**

- D16.1 The Contractor shall achieve Substantial Performance within twenty (20) consecutive Working Days of the commencement of the Work as specified in D12.
- D16.2 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.
- D16.3 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.

#### **D17. TOTAL PERFORMANCE**

- D17.1 The Contractor shall achieve Total Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D12.
- D17.2 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.
- D17.3 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.



## **D18. LIQUIDATED DAMAGES**

- D18.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City five hundred dollars (\$500.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D18.2 The amount specified for liquidated damages in D18.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D18.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

## **D19. SCHEDULED MAINTENANCE**

- D19.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Topsoil and Sod as specified in E30;
- D19.2 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**

### **D20. JOB MEETINGS**

- D20.1 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.
- D20.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

### **D21. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

- D21.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

## **MEASUREMENT AND PAYMENT**

### **D22. PAYMENT**

- D22.1 Further to C12, effective January 1, 2007 the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

## **WARRANTY**

### **D23. WARRANTY**

- D23.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D23.2 Notwithstanding C13.2 or D23.1, 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; or
- D23.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

**FORM H1: PERFORMANCE BOND**  
(See D9)

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. 646-2007

PLAYGROUND RENOVATIONS SITE WORKS AND FURNISHINGS

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 D9)

\_\_\_\_\_  
(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. 646-2007  
PLAYGROUND RENOVATIONS SITE WORKS AND FURNISHINGS

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 AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
SW-DP1	Dorge Park Existing Conditions & Removals
SW-DP2	Dorge Park Proposed Siteplan
SW-RP1	Robertson Playground Existing Conditions & Removals
SW-RP2	Robertson Playground Proposed Siteplan
SW-MC1	Marlow Court Playground Existing Conditions & Removals
SW-MC2	Marlow Court Playground Proposed Siteplan
SW-FS1	Furby Street Playground Existing Conditions & Removals
SW-FS2	Furby Street Playground Proposed Siteplan
SW-FS3	Furby Street Playground Layout and Paving Plan
D1	Details
SCD 119	Waste Receptacle Metal Slant Type
SCD-120A	Tache Bench - Composite
SCD-228A	Concrete Sidewalk
SD-243	Sodding Details

### GENERAL REQUIREMENTS

#### E2. SOILS INVESTIGATION REPORT

- E2.1 Further to C3.1, no soil inspection has been done. Contractor to supply soils investigation report if site conditions warrant

#### E3. TRUCK WEIGHT LIMITS

- E3.1 The City shall not pay for any portion of Material which results in the vehicle exceeding the maximum gross vehicle weight allowed under *The City of Winnipeg Traffic By-Law*, unless such vehicle is operating under special permit.

#### E4. PRE-CONSTRUCTION MEETING

- E4.1 The Contractor shall not begin the Work under this Contract until a pre-construction meeting has been held between representatives of the Play Equipment Contractor, the Site Works Contractor, the City of Winnipeg and the Contract Administrator.



## **E5. SITE ACCESS**

- E5.1 All access to be on the designated routes through the Site. These routes will be determined at the pre-construction meeting.
- E5.2 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E5.3 The Contractor's operation 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. Damage to areas beyond the marked routes shall be repaired by and at the expense of the Contractor to the satisfaction of the Contract Administrator.

## **E6. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT**

- E6.1 The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress in 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.
- E6.2 Ambulance/ Emergency vehicle access must be maintained at all times.

## **E7. SITE CONDITION**

- E7.1 The Contractor shall examine the Site and make themselves familiar with the existing conditions (both above and below grade) and nature of Work to be done.
- E7.2 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.
- E7.3 The Contractor shall set all necessary control lines, benchmarks, survey, elevation stakes and layout in accordance with the individual site conditions and in consultation with the Contract Administrator.

## **E8. PROTECTION OF EXISTING TREES**

- E8.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities:
- (a) All trees will have a 3m radius protective zone calculated from the circumference at the base of the trunk which will remain free of digging, trenching, grade changes, stock piling of materials and soil compaction, except as minimum to construct berm or swales throughout the duration of the Contract. Protective fencing around these areas is required.
  - (b) Trees within and immediately adjacent to proposed construction and those identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400 mm wood planks, or suitably protected as approved by the Contract Administrator. Do not use nails or other fasteners that penetrate the tree trunk. The width and length of strapping may be reduced to suit the tree being protected as approved by the Contract Administrator.
  - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches) where 1 inch diameter equals 1 foot measured from the outside edge of the trunk of the tree at 6 inches above grade. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation. They must be properly trimmed with sharp tools to prevent crushing or being pulled by construction equipment. No paint is required. All

exposed roots must be mulched until the excavated area is filled with clean earth to avoid exposure to sunlight and desiccation.

- (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
- (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- (f) Repair, replace and maintain tree protection materials during construction until the Project completion.
- (g) Carefully remove safety fencing and strapping material without harming the tree as soon as the construction and restoration Work is complete.

E8.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his designate.

E8.3 No separate measurement or payment will be made for the protection of existing structures, trees and property.

## **E9. EXISTING SERVICES AND UTILITIES**

E9.1 Other than required to be done by the Contractor under the Work of this contract, all necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing plant material, pavements, streets, roads, boulevards, light standards, hydro poles, fences, fire hydrants, culverts, water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the Site of the Work. For all damage incurred in the performance of the Work (either directly or indirectly), the Contractor shall either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to the Contract Administrator, and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City from all claims made directly or indirectly against it in respect to any such damage.

E9.2 The Contractor's attention is drawn to the existing underground lines or services that may be located in the area of the Work.

E9.3 The Contractor shall take all necessary precautions when performing the Work to ensure that no damage is done to these existing services.

E9.4 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

E9.5 All costs in connection with this item including location of the existing service, repairs to any existing services damaged by the construction operation, etc. shall be included in the unit prices bid for supply and installation of the items included under this Contract.

E9.6 The Contractor will be required to 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.

E9.7 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.

## **E10. PROTECTION OF SURVEY INFRASTRUCTURE**

- E10.1 Notwithstanding clause 4 "Protection of Survey Bars" of the Standard Provisions; Current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.
- E10.2 Further to C: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 am to 4:00 pm Monday to Friday excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.
- E10.3 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.
- E10.4 Survey monuments and geodetic control monuments at or adjacent to the Site, not in the line of the proposed construction that are damaged or disturbed by the Contractor shall be replaced or relocated by the City 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 \$1,000 per bar and \$3,000 per control monument. Contractors must ensure their landscaping and other subcontractors are aware of this clearance procedure and the potential restoration costs.
- E10.5 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.

## **E11. STAKES AND MARKS**

- E11.1 Further to C:6.28(h), the Contractor will mark, to the extent he determines to be necessary, the location, alignment and elevation of the Work by means of stakes or marks, for review and approval by the Contract Administrator. The Contractor shall make the completed Works conform to the lines and marks thus approved and indicated.
- E11.2 The Contractor shall notify the Contract Administrator immediately of the disturbance of any such stakes or marks. The cost of correcting any errors arising out of neglect of the Contractor to so notify the Contract Administrator shall be borne entirely by the Contractor, as well as the cost of replacing any disturbed stakes or marks.
- E11.3 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 on account of any alleged inaccuracies. If any error is suspected in the Drawings, 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.
- E11.4 The Contractor shall determine and provide all dimensions and elevations measured from the stakes or marks

## **E12. WATER USED BY CONTRACTOR**

- E12.1 Notwithstanding CW 1120.3.7:
- E12.1.1 Water for use by the Contractor may be obtained from the City of Winnipeg waterworks system.
- E12.1.2 Should the Contractor wish to obtain water from a City hydrant, he shall make application either in person or by phoning the Permits Clerk at 986-3184 (8:30 am to 4:30 pm Monday to Friday excluding holidays). The Contractor shall advise the Permits Clerk of the hydrant he wishes to use. The Water Services Divisions of the Water and Waste Department will

inspect the hydrant to ensure that the location is suitable and that the hydrant is in good working condition. If the requested hydrant is found to be unacceptable, arrangements will be made for the use of an alternate hydrant.

- E12.1.3 When the application has been approved, the Permits Clerk will contact the Contractor and issue the permit. The permit may not be issued the same day the application is made. The Contractor shall obtain the permit for hydrant use from the Customer Services Division of the Public Works Department, 107-1155 Pacific Avenue. Permit fees will be charged in accordance with the latest version of the Waterworks By-law. All water used shall be metered and protected against contamination by the use of approved backflow prevention devices. The City will rent the meter to the Contractor at the rate established by the Waterworks By-law. The Contractor shall provide a lockable box, piping, valves, and backflow prevention equipment in accordance with Waterwork's guidelines. The backflow preventer(s) must be tested by a plumber licensed to test backflow preventers. The Permits Clerk can provide a list of licensed plumbers and additional information on the requirements for obtaining a use of hydrant permit.
- E12.1.4 The Contractor shall pay for all water used in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.

### **E13. TEMPORARY RELOCATION OF AFFECTED STRUCTURES**

- E13.1 The Contractor shall temporarily relocated any portable structure such as benches, waste receptacles, picnic benches, etc. which will interfere with the construction of the Work and are not identified as items to be relocated. The Contract Administrator will identify the temporary locations for the portable structures. Following the completion of the applicable Work the Contractor shall replace the structures to the locations designated by the Contract Administrator. These relocations shall be considered incidental to the associated Works and no separate measurement for payment will be made.

### **E14. SITE ENCLOSURES**

- E14.1 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.
- E14.2 Site enclosures shall be considered incidental to the Contract Work.

### **E15. PRODUCT APPROVALS**

- E15.1 The Contractor shall, following award, prepare a complete list of all material to be used on the project and submit the list to the Contract Administrator seventy-two (72) hours prior to start of construction.
- E15.2 The Contractor shall only use material which has been approved by Specification CW3710-R1 or by the Contract Administrator. The list shall provide the product, the manufacturer and the supplier.
- E15.3 All Workmanship and materials furnished and supplied under this Specification are subject to close and systematic inspection and testing by the Contract Administrator. The contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of the Specifications.
- E15.4 The Contractor shall wholly be responsible for the supply, safe storage, and handling of all materials set forth in this specification, and the control of all operations, incidental thereto notwithstanding any inspection or approval that may have been previously given.

### **E16. SURFACE RESTORATION**

- E16.1 The Contractor shall temporarily repair any Work commenced and not completed in the 2007-2008 construction season to the satisfaction of the Contract Administrator. The Contractor shall

maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

## **SITE DEVELOPMENT**

### **E17. REMOVALS**

#### **E17.1 Description**

E17.1.1 This Specification is supplemental to CW 3110.

E17.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as herein specified.

E17.1.3 Work shall include, but not necessarily confined to, the following:

- (a) Stockpile suitable, approved material on site for reuse (clean topsoil, clay fill and gravel fill) in a secure location. Remove and legally dispose of unsuitable material. Stockpile location to be restored to original condition following removal and re-use of material.
- (b) Remove and legally dispose of existing play equipment, including concrete bases, protective surfacing (play stone and sand) and timber edging as per the Drawings
- (c) Remove and legally dispose of 3 existing wood bollards for Dorge Park as identified on drawing SW-DP1
- (d) Remove and legally dispose of 1 existing tree in Dorge Park as identified on drawing SW-DP1
- (e) Remove and legally dispose of 4 existing benches and 1 waste receptacle, including foundations, for Robertson Playground as identified on drawing SW-RP1
- (f) Remove and legally dispose of 2 existing trees in Robertson Playground as identified on drawing SW-RP1
- (g) Remove and legally dispose of 3 existing benches and 2 waste receptacles, including foundations, for Marlow Court as identified on drawing SW-MC1
- (h) Remove and legally dispose of 1 existing tree in Marlow Court as identified on drawing SW-MC1
- (i) Clean existing planting bed and remove and salvage existing plants for Furby Street Playground as directed by Contract Administrator and as identified on drawing SW-FS1
- (j) Remove and legally dispose of existing trees and unsuitable plantings for Furby Street Playground as directed by Contract Administrator and as identified on drawing SW-FS1
- (k) Sawcut, Remove and Legally Dispose of Asphalt Pathway for Furby Street Playground as identified on drawing SW-FS1
- (l) Remove and Legally Dispose of 4 existing benches, 2 waste receptacles, 1 concrete planter, section of chain link fence, including foundations, for Furby Street Playground as identified on drawing SW-FS1
- (m) Remove and Legally Dispose of 1 drinking fountain, including underground components, for Furby Street Playground as identified on drawing SW-FS1
- (n) Sawcut, Remove and Legally Dispose of Concrete Drainage Channel for Furby Street Playground as identified on drawing SW-FS1
- (o) Remove and Legally Dispose of Vertical Water Column for Furby Street Playground as identified on drawing SW-FS1

- (p) Excavate and Stockpile 2 existing wrought iron fence posts for reuse for Furby Street Playground as identified on drawing SW-FS1

## E17.2 Construction Methods

- E17.2.1 The Contractor shall remove existing pavement in accordance with 9.2 of CW 3110.
- E17.2.2 Prior to beginning the earthwork and grading the Contractor shall clear the Site and remove all existing trees and shrubs to be removed as indicate on the Removal Plan, including roots masses, and debris, etc. that is located within the limits of the Work. Obtain Contract Administrators approval prior to removing any trees. The material shall be loaded, hauled and legally disposed of off site at a location approved by the Contract Administrator.
- E17.2.3 All tree stumps for removed trees shall be removed to the satisfaction of the Contract Administrator. The Contractor shall load and haul all stumps, rubbish and all other surface litter from the Site and legally dispose of these materials at dumps located by the Contractor and approved by the Contract Administrator. Any materials dropped or spilled on any streets during the hauling operations shall be promptly cleaned up by and at the expense of the Contractor, the satisfaction of the Contract Administrator.
- E17.2.4 All foundations shall be removed to full depth to the satisfaction of the Contract Administrator. Fill all holes resulting from removals with compacted clay fill in seeded or sodded areas and compacted granular fill in paved areas.
- E17.2.5 Excavate and remove existing asphalt paving and base courses. Dispose of unsuitable material off site at a facility approved by the City of Winnipeg. The Contractor shall Sawcut the existing to produce a clean straight edge when excavated.
- E17.2.6 Concrete Drainage Channel and Vertical Water Column (including mechanical components) Furby Street Playground to be removed. Dispose of materials off site at a facility approved by the City of Winnipeg
- E17.2.7 Contractor to clean existing planting bed for Furby Street as as identified on drawing SW-FS1. Remove and salvage suitable plants in Furby Street Playground for reinstallation as directed by Contract Administrator. Stockpile location will be determined on site by Contract Administrator. All unsuitable materials are to be removed and legally disposed. Existing shrub bed to be cultivated for new plantings.
- E17.2.8 Contractor to stockpile, clean, remove solder points and repaint wrought iron fence posts of Furby Street Playground as per drawing notes for reinstallation of wrought iron posts. Stockpile location will be determined on site by Contract Administrator. All surplus materials are to be removed and disposed. Dispose of materials off site at a facility approved by the City of Winnipeg
- E17.2.9 The Contractor shall ensure that upon completion of the removal operations, the Site is left in a neat condition free from debris, etc. for approval by the Contract Administrator prior to placing base courses and clean fill.
- E17.2.10 The Contractor and all sub-contractors shall examine the Site and make themselves familiar with the existing conditions and the nature of the Work to be done.
- E17.2.11 Prevent damage to surface or underground utility lines which are to remain. Make good any damage.
- E17.2.12 Do not disturb soil within branch spread of trees to remain.
- E17.2.13 Disposal of material shall be understood to mean the hauling of all unsuitable material from the Site and the unloading in a legal manner acceptable to the Contract Administrator. If arrangements are made in advance excavated material may be disposed of on Site at a location designated by the Contract Administrator.
- E17.2.14 Contractor must coordinate with the Contract Administrator to ensure all removals have occurred.

### E17.3 Method of Measurement

E17.3.1 Removals, sawcutting, disposal and related Work in accordance with the Drawings and Specification shall be incidental to the lump sum prices bid as listed in the schedule of prices. No payment will be made for material removed outside of the limits of excavation as established by the Contract Administrator.

E17.3.2 Quantities of units will be dependant on the proposed design as submitted by the Play Equipment Contractor.

### E17.4 Basis of Payment

E17.4.1 Removals, sawcutting, disposal and related Work will be paid for at the contract lump sum prices for Item A.1, B.1, C.1 and D.1: "Removals" on Form B: Prices, which price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

## E18. EXCAVATION AND ROUGH GRADING

### E18.1 Description

E18.1.1 This Specification is supplemental to CW 3110 and CW 3170.

E18.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as herein specified.

E18.1.3 Work shall include, but not necessarily confined to, the following:

- (a) Excavation, removals, sawcutting, disposal, subgrade compaction and rough grading of the existing Site for the construction of asphalt pathways, accessible seating nodes, crushed granular path, concrete paving, sodded areas, planting bed and play areas to the design requirements noted on the Drawings and the Specifications, approved on site by the Contract Administrator, to depths as required for each surface.
- (b) Earthwork and grading of the existing Site (cut and fill including compaction of subgrade and fill material) to ensure positive drainage in all paved areas, adjacent sodded areas and planting beds.
- (c) Supply and install imported fill in areas as required to ensure positive drainage
- (d) Excavate, remove and legally dispose for play areas as per the proposed design supplied by the Play Equipment Contractor.
- (e) Excavate, remove and legally dispose of unsuitable subgrade and replace with compacted granular material
- (f) Excavate and regrade existing berm area for Marlow Court as identified on drawings SW-MC1 and SW-MC2, removing and legally disposing of excess material from the Site
- (g) Excavate, Remove, Legally Dispose, Rough Grade and Fill areas where items were removed and will not be replaced.

### E18.2 Materials

E18.2.1 All fill materials shall conform to CW 3170

### E18.3 Construction Methods

E18.3.1 The Contractor shall construct the Site, within the limits indicated, to the design elevations and gradients noted on the Drawings (less the appropriate surface treatment depths specified) and shall excavate, remove and dispose of all unsuitable materials of whatever nature encountered.

- E18.3.2 The Contractor shall construct all sub-grades in accordance with Specification CW 3110. Excavation will be performed as per Item 9.1 of CW 3110. Unsuitable Excavated material shall be disposed of as per Item 9.3 of CW 3110. The Contractor is advised that there may be a surplus of fill on the Site after the design sub-grade level has been achieved. All surplus material will be disposed of in accordance with Item 9.3 of CW 3110.
- E18.3.3 Excavated or graded materials to be approved before use as fill for grading Work. Protect such approved material from contamination. Stockpile in approved locations. Protection and stockpiling are incidental to unit price bid for removals, excavation and rough grading.
- E18.3.4 The Contractor shall excavate topsoil as per CW3170 Section 9.2. Topsoil excavation is incidental to the unit price bid for removals, excavation and rough grading.
- E18.3.5 The Contractor and all sub-contractors shall examine the Site and make themselves familiar with the existing conditions and the nature of the Work to be done.
- E18.3.6 Prevent damage to surface or underground utility lines which are to remain. Make good any damage.
- E18.3.7 The Contractor shall excavate to the design grades shown less the appropriate allowance for surface treatment and shall excavate, remove and dispose of all unsuitable materials of whatever nature encountered.
- E18.3.8 Except for drainage swales, berms and embankments indicated, the design gradient for all other areas shall be considered to be straight grade between the design elevations shown. Changes in grade at swales, berms, embankments and field shall be gently contoured as directed by the Contract Administrator to provide future ease of grass mowing operation.
- E18.3.9 In fill areas, where the difference between the existing grade elevation and the design elevation is less than 300mm the Contractor shall scarify the existing ground to a minimum depth of 150mm prior to placement of any fill.
- E18.3.10 The Contractor is advised that there may be useable clay and gravel fill on site. All suitable material will be reviewed and approved by Contract Administrator and then re-used on site. The re-use of this material on site may reduce the quantity of imported gravel and clean earth fill required. The Contractor shall re-use existing site material prior to delivering new material to the Site.
- E18.3.11 No direct payment will be made for placing and grading of existing fill as all costs for this Work is incidental to the unit price bid for excavation, rough grading and grading.
- E18.3.12 Areas to Fill
- (a) Fill low areas in subgrade of paved areas (asphalt, concrete and crushed limestone paving) with compacted granular subbase material specified in E20 . Cost incidental to unit price bid for paved areas.
  - (b) Fill low areas in sodded areas with excavated clay material (from site excavations or imported as required) free from roots, muskeg, organic or cohesive matter, building debris, waste materials, rubble, rubbish, frozen portions, soluble materials and rocks larger than 25mm (1") in diameter and capable of sustaining plant and seed growth. Compact to 90% S.P.D. in 150mm (6") lifts. Cost of site excavated materials incidental to unit price bid for excavation, rough grading and grading.
  - (c) Construct berms, sloped areas using excavated clay material (from site excavations or imported as required) free from roots, muskeg, organic or cohesive matter, building debris, waste materials, rubble, rubbish, frozen portions, soluble materials and rocks larger than 25mm (1") in diameter and capable of sustaining plant and seed growth. Compact to 90% S.P.D. in 150mm (6") lifts.
  - (d) Prior to placing fill over existing ground, scarify surface to depth of 150mm. Maintain fill and existing surface at approximately the same moisture content to facilitate bonding.
- E18.3.13 The Contractor shall construct all subgrades in accordance with Specification CW 3110. This 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 98% Standard Proctor Density below all paved areas (asphalt, concrete, stone chip and limestone paving), and 90% Standard Proctor Density in all other areas disturbed under this Contract unless otherwise indicated

- E18.3.14 Areas of the Site which are new play areas are to be excavated to the depths required to accept granular surfacing and a minimum 300mm depth of safety play stone (top of safety surfacing to be 50 mm below top of edging) and a minimum of 200mm depth of wood fibre (top of safety surface to be flush with top of timber edging) The areas shall be within the available areas for new play equipment as shown on Drawings in accordance with Timber Edging Details 3/D1 and 4/D1. Exact extents and layout of areas to be excavated to be provided by Play Equipment Contractor.
- E18.3.15 Areas of the Site which are to be sodded are to be excavated to meet the depths as per E30.
- E18.3.16 The Contractor shall construct the sub-grade surface to the following depths below the finished grades for each area:
- |                              |        |
|------------------------------|--------|
| (a) Shrub Bed                | 300 mm |
| (b) Concrete Paving          | 275 mm |
| (c) Concrete Unit Pavers     | 310 mm |
| (d) Asphalt Paving           | 225 mm |
| (e) Crushed Limestone Paving | 200 mm |
- E18.3.17 The Contractor is advised that all excavations, removals, disposal, rough grading, compaction and related Work for construction of sub-base, base course, asphalt paving, concrete paving, granular paving and planting areas and sodded areas (adjacent to paved areas) shall be incidental to the unit prices bid for each item as listed in the Schedule of Prices.
- E18.3.18 Following earth moving, rough grading and compaction the Work areas shall be fine graded to provide a maximum deviation of 50mm in 10 metres from the design grade with no low areas that hold water. The finished surface of all disturbed areas shall be dragged and smoothed in such a manner that there are no loose soil particles greater than 50mm in maximum dimensions.
- E18.3.19 Do not disturb soil within branch spread of trees to remain.
- E18.3.20 If required and at locations directed by the Contract Administrator the Contractor shall excavate and remove unsuitable subgrade material and replace it with compacted granular material in accordance with Specification CW3110.
- E18.3.21 Disposal of material shall be understood to mean the hauling of all unsuitable material from the Site and the unloading in a legal manner acceptable to the Contract Administrator. If arrangements are made in advance excavated material may be disposed of on Site at a location designated by the Contract Administrator.
- E18.4 Method of Measurement
- E18.4.1 All Excavation and Rough Grading shall be measured on a volume basis. The numbers to be paid shall be the total number of cubic meters completed in accordance with the Drawings and Specifications and as measure and accepted by the Contract Administrator.
- E18.4.2 Grading for Marlow Court Playground shall be measured on a volume basis. The numbers to be paid shall be the total number of cubic meters completed in accordance with the Drawings and Specifications and as measure and accepted by the Contract Administrator.
- E18.4.3 Quantities of units will be dependant on the proposed design as submitted by the Play Equipment Contractor.
- E18.5 Basis of Payment

E18.5.1 All Excavation and Rough Grading will be paid for at the contract unit price per cubic meter for Item A.2, B.2, C.2 and D.2: "Excavation and Rough Grading" on Form B: Prices, measured as specified herein, which price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

E18.5.2 Grading for Marlow Court Playground will be paid for at the contract unit price per cubic meter for Item C.3: "Grading" on Form B: Prices, measured as specified herein, which price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

## **E19. MATCHING EXISTING GRADES**

E19.1 Whenever the proposed paving or sod meets existing building edge, doorway, or property line, the Contractor shall construct the proposed element to an acceptable grade, as directed by the Contract Administrator, to ensure that proper drainage and accessibility are maintained.

## **E20. BASE COURSE MATERIAL**

E20.1 The Specification shall supplement Standard Construction Specification CW 3110 and CW 3130.

E20.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Supply and Placement of Base Course Material
- (b) Supply and Placement of Sub-Base
- (c) Supply and Installation of Separation/ Reinforcement Geotextile Fabric
- (d) Compaction

E20.3 There will be no separate measurement and payment for supply and placement of sub-base. All Work shall be considered incidental to this specification.

E20.4 There will be no separate measurement and payment for supply and installation of Separation/ Reinforcement Geotextile Fabric. All Work shall be considered incidental to this specification.

E20.5 There will be no separate measurement and payment for compaction. All Work shall be considered incidental to this specification.

E20.6 All costs in connection with the testing and approval of base courses shall be considered incidental to this specification.

E20.7 Method of Measurement/ Basis of Payment

E20.7.1 The Contractor is advised that all Work under this section is incidental to the unit prices bid in those items for which base course material is required under this Contract.

## **E21. CONCRETE WALKWAYS AND CURBS**

E21.1 Description

E21.1.1 The specification shall supplement City of Winnipeg Specification CW 3325-R2 and CW 3310-R11.

E21.2 Material

- E21.2.1 All material shall conform to Specification CW3325-R2 and CW 3310-R11.
- E21.3 Supply of Materials and Equipment
- E21.3.1 The Contractor shall supply all materials and use equipment in accordance with Specification CW 3325-R2.
- E21.4 Construction Methods
- E21.4.1 No concrete work shall commence until the excavation has been completed in accordance with Specification CW 3110 and the drawings and has been approved by the Contract Administrator.
- E21.4.2 Sub-base compaction shall be in accordance with Specification CW 3110.
- E21.4.3 Base Course to be installed to a depth of 150mm in accordance with Specification CW 3110 and the drawings.
- E21.4.4 Reinforcing Steel for Concrete Curbing (Tree Wells) shall be installed as shown on Drawings in accordance with Specification CW 3310-R11.
- E21.4.5 Sidewalk joints shall be constructed, where required, as directed by the Contract Administrator and shall be completed in accordance with Specification CW 3325-R2.
- E21.4.6 Concrete Placement for concrete walkways shall be installed to a depth of 125mm in accordance with Specification CW 3310, Section 9.4.
- E21.4.7 Concrete placement for concrete curbing shall be installed as per drawings, in accordance with Specification CW 3310-R11, Section 9.4.
- E21.5 Method of Measurement
- E21.5.1 Concrete Walkways shall be measured on an area basis for Item D.4: "Concrete Walkway" on Form B: Prices. The area to be paid for shall be the total number of square meters that are installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.
- E21.5.2 Concrete curbing shall be measured on a linear meter basis for Item D.5: "Concrete Curbing (Tree Wells)" on Form B: Prices. The area to be paid for shall be the total number of linear meters that are installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.
- E21.6 Basis of Payment
- E21.6.1 Concrete for Concrete Walkway will be paid for at the Contract Unit Prices per square meter for Item D.4: "Concrete Walkway" measured as specified herein, which price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.
- E21.6.2 Concrete for Concrete Curbing will be paid for at the Contract Unit Prices per linear meter for Item D.5: "Concrete Curbing (Tree Wells)" measured as specified herein, which price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

## **E22. CONCRETE UNIT PAVERS**

- E22.1 Description
- E22.1.1 The specification shall supplement Specification CW 3330 R-3.
- E22.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of

all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Excavation and installation of a base course, supply and installation of bedding sand and supply and installation of unit pavers for areas as indicated on the Drawing.
- (b) Supply and installation of Snap Edge along perimeter adjacent to planting area as indicated on drawing SW-FS2.

E22.1.3 Submit Full size sample of paving stones for Contract Administrator's approval. Deliver samples prepaid to Contract Administrator's business address and Notify Contract Administrator in writing, at time of submission of deviations in samples from requirements of Contract Documents

## E22.2 Material

E22.2.1 Concrete Pavers: Barkman Holland Stone, colour: Autumn Brown. Sizes to be 200mm x 100mm x 60mm;

E22.2.2 Concrete Pavers: Barkman Holland Stone, colour: Charcoal. Sizes to be 200mm x 100mm x 60mm;

E22.2.3 Bedding sand as per CW 3330-R3;

E22.2.4 Filler Sand as per CW 3330-R3;

E22.2.5 Crushed Granular 'A' Base;

E22.2.6 150 mm Height "Snap Edge".

## E22.3 Construction Methods

E22.3.1 Excavation for base material shall be in accordance with Specification CW 3110.

E22.3.2 The preparation of sub-grade, granular base shall be in accordance with CW 3110 and the drawings.

E22.3.3 Base material to be installed to depth as shown on drawing 5/D1.

E22.3.4 Sand Base to be installed in accordance with CW 3330-R3.

E22.3.5 Supply and placing of bedding sand shall be incidental to the installation of the paving stones.

E22.3.6 The paving stones shall be installed in accordance with CW 3330 R-3.

E22.3.7 "Snap Edge" to be installed as per manufacturer's specifications, including all installation hardware in areas as indicated on drawing SW-FS2.

## E22.4 Method of Measurement

E22.4.1 Unit Paving shall be measured on an area basis. The area to be paid for shall be the total number of square meters that are installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.

E22.4.2 Snap Edge shall be measured on a linear meter basis. The linear meter to be paid for shall be the total number of linear meter of Snap Edge that are installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.

## E22.5 Basis of Payment

E22.5.1 Unit Paving will be paid for at the Contract Unit Prices per square meter for Item D.6: "Concrete Pavers", (i): "Barkman Concrete Pavers (Charcoal)" and (ii): "Barkman Concrete Pavers (Autumn Brown)" on Form B: Prices and measured as specified herein. This price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

E22.5.2 Snap Edge will be paid for at the Contract Unit Prices per linear meter for Item D.6: "Concrete Pavers", (iii): "Snap Edge" on Form B: Prices and measured as specified herein. This price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

## **E23. ASPHALT PAVING**

### **E23.1 Description**

E23.1.1 The specification shall supplement City of Winnipeg specification CW 3410 and CW 3110.

E23.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Construction of Asphalt Pathway, including supply and installation of base courses, and asphalt paving as shown on the Drawings.

### **E23.2 Material**

E23.2.1 Subbase as per CW 3110;

E23.2.2 Geotextile as per CW 3130

E23.2.3 Base course as per CW 3110;

E23.2.4 Asphalt as per CW 3410;

### **E23.3 Construction Methods**

E23.3.1 Contractor shall construct a compacted gravel base for asphalt pavement to depths as shown on the Construction Drawings in accordance with City of Winnipeg Specification CW 3110. Additional gravel shall be supplied and installed if necessary to attain proper Subgrade elevations. Cost of constructing compacted gravel base shall be incidental to cost for those items for which compacted gravel base is required.

E23.3.2 Geotextile Fabric

E23.3.3 Geotextile fabric to be installed in accordance with City of Winnipeg Specification CW 3130 and the Construction Drawings.

E23.3.4 Asphalt Surface

E23.3.5 Compacted asphaltic concrete surface shall be constructed in accordance with City of Winnipeg Specification CW 3410 and the Construction Drawings.

### **E23.4 Acceptance**

E23.4.1 Any Work not satisfactory as specified herein and as determined by the Construct Administrator shall be rectified by the Contractor. The process of inspection and correction shall continue until the Contract Administrator is satisfied that the Work is 100% complete and as per the construction drawings and specification.

### **E23.5 Method of Measurement**

E23.5.1 Asphalt Paving shall be measured on an area basis. The area to be paid for shall be the total number of square meters that are installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.

### **E23.6 Basis of Payment**

E23.6.1 Asphalt Paving will be paid for at the Contract Unit Prices per square meter for Item B.4 "Asphalt path and Accessible Seating Nodes" on Form B: Prices and measured as

specified herein. This price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

## **E24. GRANULAR SURFACE PATHWAY**

### **E24.1 Description**

E24.1.1 The specification shall supplement City of Winnipeg specification CW 3110-R10.

E24.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Supply and Installation of granular base course, surface course materials and geotextile, for pathways as indicated on the Drawings.

### **E24.2 Material**

E24.2.1 All material shall conform to CW 3110-R10, CW3130-R1 and this Specification. Where the two do not agree, this Specification shall take precedence. All materials supplied under this Specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.

E24.2.2 Granular Base Course

E24.2.3 Granular base course material for the pathway shall consist of 150mm of 20mm down crushed limestone and shall conform to CW3110-R10 for crushed limestone base course material.

E24.2.4 Granular Surface Course for Granular Surface Pathway

E24.2.5 Granular surface course material for the pathway shall consist of 50mm of crusher fines/ toppings crushed limestone.

E24.2.6 Geotextile Fabric

- (a) Geotextile fabric shall be in accordance with CW 3130-R1.

### **E24.3 Construction Methods**

E24.3.1 Construction method shall conform to Specification CW 3110-R10 'Sub-grade, Sub-base, and Base Course Construction'.

E24.3.2 Contractor shall visit the Site and verify all data and dimensions and report any errors, omissions or discrepancies to the Contract Administrator prior to any installation.

E24.3.3 Contract Administrator to layout pathways. Contractor shall be responsible for interpretation of grades and protection of stakes.

E24.3.4 Sub-Grade

E24.3.5 Prepare compacted sub-grade to the lines and grades as shown on Drawings. Contract Administrator to review sub-grade preparation prior to placement of granular base.

E24.3.6 Granular Base

- (a) Geotextile fabric to be placed between Subgrade and granular base as per CW 3130-R1
- (b) Place granular base material to the lines and grades as shown on Drawings. Extend base minimum 150mm beyond width of 1800mm wide surface course.
- (c) Compact material to a minimum of 95 percent Standard Proctor Density.

E24.3.7 Granular Surface Course

- (a) Place granular surface course material to the lines and grades as shown on Drawings.
- (b) Compact material to a minimum of 95 percent Standard Proctor Density.

**E24.4 Method of Measurement**

E24.4.1 Granular Surface Pathway shall be measured on an area basis. The area to be paid for shall be the total number of square meters that are installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.

**E24.5 Basis of Payment**

E24.5.1 Granular Surface Pathway will be paid for at the Contract Unit Prices per square meter for A.4 and C.5: "Crushed Granular Path" on Form B: Prices and measured as specified herein. This price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

**E25. ADJUSTMENT RING FOR EXISTING CATCH BASIN**

E25.1 The Specification shall supplement Standard Construction Specification CW 2130-R11

E25.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Supply and installation of adjustment ring for Furby Street Playground

E25.3 There will be no separate measurement and payment for supply and installation of adjustment ring. All Work shall be considered incidental to this specification.

**E25.4 Method of Measurement and Basis of Payment**

E25.4.1 The Contractor is advised that all Work under this section is incidental to the unit prices bid for Item D.2: "Excavation and Rough Grading" as shown of Form B: Prices. No separate payment shall be made for adjustment ring.

**E26. TIMBER EDGING**

**E26.1 Description**

E26.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Supply and installation of timber edging to contain the safety surfacing for the playground areas.

**E26.2 Materials and Method**

E26.2.1 Final layout of edging shall be as per Playground Equipment Contractor's proposed design for play equipment surfacing to adequately provide safety surfacing area beneath play equipment, based on the most recent CSA safety zone requirements. Contractor to coordinate timing of Work, quantities and layout of materials with playground equipment supplier.

E26.2.2 A 3.0 meter (10') offset shall be maintained from all existing trees unless approved by Contract Administrator.

- E26.2.3 All timber edging to be installed on 150mm depth x 300mm crushed limestone (20mm down) base.
- E26.2.4 In play areas with play stone protective surfacing, geotextile fabric to be placed between crushed limestone base and play stone. Geotextile fabric to extend over top of limestone base and under timber edging as per drawing 3/D1. Geotextile fabric to extend 1500mm under playground stone.
- E26.2.5 In play areas with Wood Fibre protective surfacing, geotextile fabric to be placed between compacted subgrade and crushed limestone base where Wood Fibre surfacing is to be installed. Geotextile fabric to extend over top of limestone base, under timber edging as per drawing 4/D1
- E26.2.6 All bottom timbers to be ACQ pressure treated (P.T.) pine, No. 2 or better, no wane, bark, checking or splitting permitted. Wood shall be smooth and free of rough areas. All bottom Timber to be 150mm x 150mm with a minimum length of 1200mm.
- E26.2.7 All capping wood to be 32mm x 150mm Pedra wood, minimum length 1200mm. Pedra cap joints to be offset from bottom timber joints by a minimum of 450mm. Fasten Pedra wood to base course with yellow zine plated deck screws.
- E26.2.8 Timbers shall be installed as per Details 3/D1 and 4/D1 on Drawing D1. Base course timbers shall be pinned with a minimum of two (2) 19mm diameter by 900mm rebar at maximum 1200mm O.C. Pedra capping above base course shall be secured with double row of deck screws offset at 225mm and installed at 450mm o.c.
- E26.2.9 All timbers shall be cut neatly for a proper fit with no spaces or gaps between. All cuts shall be stained before being secured. Finished elevations shall ensure that all timbers are smooth, level, set plumb and spaced uniformly.
- E26.2.10 Turf shall be repaired as required around edging in accordance with City of Winnipeg Standard Specifications for Topsoil and Sodding.
- E26.2.11 The layout of the timber edging shall be coordinated with the installation of the play equipment to ensure that the proper safety zones are created around the equipment.
- E26.2.12 Contractor to layout on site for review and approval by Contract Administrator prior to construction.
- E26.2.13 If the Contractor misrepresents the CSA compliance of timber edging being installed and this result in additional design and/or meeting time on the part of the Contract Administrator, the Contractor shall pay the City five hundred dollars (\$500) per Working Day for each and every Working Day during which such additional Work continues.
- E26.2.14 The amount specified for liquidated damages in E26.2.13 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- E26.3 Method of Measurement and Basis of Payment
- E26.3.1 Method of Measurement shall be as follows:
- (a) Timber Edging will be measured on a linear meter basis. The linear meter to be paid for shall be the total number of linear meter of Timber Edging that are installed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.
  - (b) Quantities of units will be dependant on the proposed design as submitted by the Play Equipment Contractor.
- E26.3.2 Basis of Payment shall be as follows:
- (a) Timber Edging will be paid for at the Contract Unit Prices per linear meter for Items A.3, B.3, C.4 and D.3 noted as: "Timber Edging" on Form B: Prices and measured as specified herein. This price shall be full payment for supplying all labour, equipment



and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

## **E27. SITE FURNISHINGS**

### **E27.1 Description**

E27.1.1 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

(a) Benches, Waste Receptacles and Games Table.

### **E27.2 Materials**

E27.2.1 All materials supplied under this specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.

E27.2.2 Benches shall be "Tache Bench - Composite" as per SCD-120\_A, Product #52501067, or substitute approved in accordance with B6.

E27.2.3 Metal Slat Waste Receptacles, as per SCD 119, Product #52501062, or substitute approved in accordance with B6.

E27.2.4 Contact for both Benches and Waste Receptacles:

Aaron Lennon  
Supervisor of Central Repair/Manufacturing Facility  
City of Winnipeg  
Fleet Management Agency Division  
Public Works Department  
215 Tecumseh St  
Winnipeg. MB R3E 3S4

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

E27.2.5 Recycled Plastic, 4- Seat Game Tables, as supplied by DuMor, inc., product number 78-34PL, "Cedar" Recycled Plastic, Support Option – S-1 Embedment, with Black Finish, or substitute approved in accordance with B6.

E27.2.6 Contact for DuMor Recycled Plastic Game Table:

Neil Buller  
GAT Home Company Ltd.  
289 King Street  
Winnipeg, MB R3B 1J8

Telephone No. (204) 943-5050  
Facsimile No. (204) 947-3800

### **E27.3 Construction Methods**

E27.3.1 All Work is to be located and installed in accordance with the drawings using approved non-rusting, vandal resistant fasteners to ensure solid, durable, finished Work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work.

E27.3.2 All furnishings and fixtures to be installed plumb and true to correct elevations and location, as directed the Contract Administrator. The Contractor shall confirm proposed locations of all Site furnishings with Contract Administrator prior to installation.

- E27.3.3 All furnishings and fixtures to be carefully handled so that no parts will be bent, broken or otherwise damaged. Hammering, which will injure or distort fixture, is prohibited.
- E27.3.4 Install Benches as per SCD 120\_A
- E27.3.5 Install Waste Receptacles as per SCD 119
- E27.3.6 Install Game Tables as per manufacturer's drawings and specifications
- E27.4 Method of Measurement and Basis of Payment
- E27.4.1 Method of Measurement shall be as follows:
- (a) Site Furnishings will be measured on a per unit basis for the supply and installation of the following Items as noted on Form B: Prices:
    - (i) Composite Tache Bench (B.5, C.6 and D.9)
    - (ii) Metal Slat Waste Receptacle (B.6, C.7 and D.10)
    - (iii) Recycled Plastic Game Table (4 Seat) (D.11)
- E27.4.2 Basis of Payment shall be as follows:
- (a) Site Furnishings will be paid for at the Contract Unit Prices as indicated on Form B: Prices. The amount to be paid for shall be the total number of units on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

## **E28. CHAIN LINK FENCING**

- E28.1 Description
- E28.1.1 The specification shall supplement City of Winnipeg specification CW 3550-R2.
- E28.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:
- (a) Supply and Installation of Commercial Grade Chain Link Fencing for Furby Street Playground
- E28.2 Material
- E28.2.1 1200 mm height chain link fencing.
- E28.2.2 Fence posts, rails, stretcher bars and mesh are as per manufacturer's specifications.
- E28.2.3 Cast in Place Concrete Bases as per manufacturer's specifications.
- E28.3 Construction Methods
- E28.3.1 Measure length of fencing to be installed prior to construction. Prefabricate chain link mesh as shown of Drawings. Install post as per manufacturer's specifications Install manufacturer's standard fittings, fasteners and hardware as required. Install gates in locations shown on Drawings. Fence posts to be installed in concrete footing as per manufacturer's specifications.
- E28.4 Method of Measurement
- E28.4.1 Measurement of 1200mm Ht. Chain Link Fencing shall be made on a linear metre basis. The numbers to be paid shall be the total number of linear metres constructed in accordance with the Drawings and Specifications and as measure and accepted by the Contract Administrator.

**E28.5 Basis of Payment**

E28.5.1 Payment of 1200mm Ht. Chain Link Fencing will be paid for at the Contract Unit Price which price shall be payment in full for supply and installation of all chain link fencing, posts, associated hardware, concrete footings herein described and for all of the items incidental to the Work included in the specification and shown on the drawings.

**E29. PLANTING BED PREPARATION AND MULCH**

**E29.1 Description**

E29.1.1 The Work to be done by the Contractor under this Specification shall cover planting bed preparation, include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and herein specified.

**E29.2 Materials**

Planting Soil

E29.2.1 Planting Soil shall consist of black top soil, a fertile friable natural loam containing by volume not less than 4% and no more than 25% of organic matter for clay loams, and not less than 2% and no more than 25% for sandy loams, with an acidity value ranging from pH 6.0 to 8.0 and capable of sustaining vigorous plant growth. Topsoil is to be free of any mixture of subsoil, clay lumps and free of stones and other extraneous matter. It is not to contain couch or crab grass rhizomes.

Mulch

E29.2.2 Mulch shall be locally available clean bark or wood chip mulch free of leaves, branches and other extraneous matter. The recommended mulch shall consist of chips not less than 15mm not larger than 75mm in size and not more than 20mm thick.

Water

E29.2.3 Water shall be potable and free of minerals which may be detrimental to plant growth.

Fertilizer

E29.2.4 Fertilizer shall be complete synthetic slow release fertilizer with maximum 35% water-soluble nitrogen.

**E29.3 Construction Methods**

General

E29.3.1 Contractor shall visit the Site and verify all data and dimensions and report any errors, omissions or discrepancies to the Contract Administrator prior to any installation.

Existing Planting Bed Preparation

E29.3.2 Contractor shall remove and dispose of existing plant material as directed by contract Administrator. Plants to be salvaged shall be stockpiled in shady location (as determined by Contract Administrator) in pots or temporary mulch bed. Contractor to ensure rootballs of salvaged plants are kept intact and protected from dessication.

E29.3.3 Contractor to cultivate existing Shrub Bed areas to a depth of 300mm. This work shall be considered incidental to the Work in this specification and no separate payment will be made.

New Planting Bed Preparation

- E29.3.4 Contractor shall co-ordinate Site excavation Works with landscaping to ensure minimal additional excavation for shrub beds. All remaining areas to be excavated shall be to the shape shown on the Drawings. Planting Beds shall be excavated with vertical sides and material removed to a minimum depth of 300 mm in area as shown on Drawings.
- E29.3.5 Upon excavation of the planting bed, the excavation shall be backfilled with a topsoil mixture to a depth to permit adequate installation and stabilization of the plant material. Topsoil shall be placed in accordance with City of Winnipeg Standard Construction Specification CW 3540-R5 to a 300mm depth.
- E29.3.6 All areas and locations provided for planting shall be staked according to layout shown on the Drawings. Excavation shall not proceed until the layout has been inspected and approved by the Contract Administrator. Excavation shall not be undertaken until all underground utilities have been located and protected.

#### Supply and Installation of Mulch

- E29.3.7 Contractor to supply and stockpile bark mulch on site in a location as determined by Contract Administrator. Mulch supplied shall cover entire planting area to a consistent depth of 75mm. Installation of bark mulch to be done by others.

#### E29.4 Method of Measurement

- E29.4.1 Existing Planting Bed Preparation, Cultivation of existing shrub bed area shall be considered incidental to this specification and no separate payment will be made. Mulch supplied for use in existing shrub bed areas shall be measured on an area basis. The area to be paid for shall be the total number of square meters of Additional Bark Mulch.
- E29.4.2 New Shrub Bed Preparation, including mulch, shall be measured on an area basis. The area to be paid for shall be the total number of square meters of Shrub Bed Preparation, acceptably constructed in accordance with this Specification and the Construction Drawings, and as acceptable to the Contract Administrator.

#### E29.5 Basis of Payment

- E29.5.1 Additional Bark Mulch, will be paid for at the Contract Unit Prices per square meter for Item D.13 "Additional Bark Mulch (Supply Only)" measured as specified herein. This price shall be payment in full for supplying and stockpiling materials.
- E29.5.2 Shrub Bed Preparation, including mulch, will be paid for at the Contract Unit Prices per square meter for Item D.12: "Shrub Bed Preparation" measured as specified herein. This price shall be payment in full for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work included in this Specification.

### **E30. TOPSOIL AND SODDING**

#### E30.1 Description

- E30.1.1 The specification shall amend and supplement City of Winnipeg specification CW 3540-R5.
- E30.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:
- (a) Supply and Installation of imported topsoil, to a minimum 75mm compacted thickness, for areas to be sodded.
  - (b) Supply and Installation of mineral sod as required.

#### E30.2 Materials and Construction Methods

- E30.2.1 The Contractor shall install topsoil and sod in any existing play areas where material is removed and not re-established as play area, or where play surfacing is not proposed.
- E30.2.2 Play equipment areas: The Contractor shall install topsoil and seed around the perimeter of newly cribbed areas to clean up turf disturbed by the Work. Seed and topsoil shall be installed as shown on Drawings a distance of a maximum of 500mm from the timber edging as per Detail Drawings.
- E30.2.3 The Contractor shall install topsoil and sod in any existing pathway area where material is removed and not re-established as pathway.
- E30.2.4 Damaged areas: Restoration of damaged areas other than as outlined above shall be incidental to the Work. No separate payment shall be made. Restoration shall be achieved using seed and topsoil unless otherwise directed by the Contract Administrator.
- E30.3 Method of Measurement
- E30.3.1 Supply, placement and maintenance of topsoil and sod will be measured on an area basis. The area to be paid for shall be the total number of square meters placed and maintained in accordance with this Specification and accepted by the Contract Administrator.
- E30.3.2 Quantities of units will be dependant on the proposed design as submitted by the Play Equipment Contractor.
- E30.4 Basis of Payment
- E30.4.1 Supply, placement and maintenance of topsoil and sod will be paid for at the Contract Unit Price per square meter for Items A.5, B.7, C.8 and D.14 noted as: "Sod, as required, includes 75mm topsoil and measured as specified herein. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

### **E31. SITE CLEAN UP**

- E31.1 The Contractor shall upon the completion of Work each day, load and dispose of all excess asphalt cuttings, spoiled concrete, reinforcing steel, granular and other material associated with the Works from the Work Site. The Contractor shall secure or remove all of his machinery and equipment at the end of each day from the immediate work site. The Contractor will not be permitted to store machinery, equipment, or materials on public roads overnight. Any costs in connection with the above mentioned Works are incidental.
- E31.2 Unless otherwise specified the Contractor shall restore all areas which have been disturbed by his operations to as good as or better than original condition including removal of all construction debris, repair all vegetation, sod, concrete pavement, concrete curbs, concrete sidewalk and asphalt paving to remain etc. to the satisfaction of the Contract Administrator. Any costs incurred in connection with the above mentioned Work are incidental to unit prices bid under this contract.
- E31.3 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified, the Contractor shall restore all areas of the Site beyond the established limit of Work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.
- E31.4 Sod and Topsoil (repair to damaged areas). The Contractor shall install mineral sod and a minimum 75mm compacted thickness of topsoil, as required, and in accordance with CW 3510-R9 and CW 3540-R5.