



**Canada-Manitoba  
Infrastructure Program**

**Programme Infrastructures  
Canada-Manitoba**

**Canada**

**Manitoba** 



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 599-2010**

**2010 ACTIVE TRANSPORTATION – INFRASTRUCTURE STIMULUS PROGRAM:  
KILDONAN PARK GOLF COURSE PATHWAY**

## TABLE OF CONTENTS

### PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	4
Form G1: Bid Bond and Agreement to Bond	7
Form G2: Irrevocable Standby Letter of Credit and Undertaking	9

### PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Addenda	2
B6. Substitutes	2
B7. Bid Components	3
B8. Bid	4
B9. Prices	4
B10. Qualification	5
B11. Bid Security	6
B12. Opening of Bids and Release of Information	6
B13. Irrevocable Bid	7
B14. Withdrawal of Bids	7
B15. Evaluation of Bids	7
B16. Award of Contract	8

### PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

### PART D - SUPPLEMENTAL CONDITIONS

#### General

D1. General Conditions	1
D2. Scope of Work	1
D3. Definitions	2
D4. Contract Administrator	2
D5. Contractor's Supervisor	2
D6. Notices	2
D7. Furnishing of Documents	3

#### Submissions

D8. Authority to Carry on Business	3
D9. Safe Work Plan	3
D10. Insurance	3
D11. Performance Security	3
D12. Subcontractor List	4
D13. Equipment List	4
D14. Detailed Work Schedule	5

#### Schedule of Work

D15. Commencement	5
D16. Restricted Work Hours	5
D17. Sequence of Work	6
D18. Substantial Performance	6
D19. Total Performance	7
D20. Liquidated Damages	7
D21. Scheduled Maintenance	7

#### Control of Work

D22. Job Meetings	7
D23. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	8
<b>Warranty</b>	
D24. Warranty	8
Form H1: Performance Bond	9
Form H2: Irrevocable Standby Letter of Credit	11
Form J: Subcontractor List	13
Form K: Equipment	14

## **PART E - SPECIFICATIONS**

### **General**

E1. Applicable Specifications and Drawings	1
E2. Protection Of Existing Trees	1
E3. Traffic Control	2
E4. Pedestrian Safety	2
E5. Water Obtained From the City	2
E6. Surface Restorations	2
E7. Clearing and Grubbing	3
E8. Deadwood Disposal	4
E9. Pathway Earth Work	4
E10. Base Course and 6 mm Limestone for the Kildonan Park Golf Course Pathway	6
E11. Envirogrid	6
E12. Pruning of Trees	8
E13. Pump House Pipe Work	9
E14. Topsoil and Sodding	10
E15. Flood Plain Grass Seeding and Seed Protection	11
E16. Asphalt Accessible Bench Nodes	14
E17. Steel Bollard and Concrete Base	14
E18. Chain Link Fence	15

## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 2010 Active Transportation – Infrastructure Stimulus Program: Kildonan Park Golf Course Pathway

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, August 31, 2010.

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 Contract Administrator or an authorized representative will be available at the Site from 1:00 pm to 2:00 pm on August 23, 2010 to provide Bidders access to the Site.

B3.1.1 Access to the site will be from the existing asphalt pathway in Kildonan Park at the south limit of the project site.

B3.2 The Bidder is advised that during this site investigation the following issues will be discussed in detail:

- (a) pathway earthwork;
- (b) clearing and grubbing;
- (c) deadwood disposal limits
- (d) tree pruning and tree protection (envirogrid)
- (e) flood plain seeding and seed protection (erosion blankets)
- (f) limits of construction area and construction access and equipment restriction on the dike;

B3.3 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

### **B4. ENQUIRIES**

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

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 B3 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 Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

## **B6. SUBSTITUTES**

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

- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative 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 B15.
- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B6.10 Notwithstanding B6.2 to B6.9, in accordance with B7.6, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B15.1(a).

## **B7. BID COMPONENTS**

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
  - (b) Form B: Prices, hard copy;
  - (c) Bid Security;
    - (i) Form G1: Bid Bond and Agreement to Bond, or  
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or  
a certified cheque or draft;
- B7.2 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.
- B7.4.2 A hard copy of Form B: Prices must be submitted with the Bid. If there is any discrepancy between the Adobe PDF version of Form B: Prices and the Microsoft Excel version of Form B: Prices, the PDF version shall take precedence.
- 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, will be evaluated in accordance with B15.1(a).
- 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 Division  
185 King Street, Main Floor  
Winnipeg MB R3B 1J1

**B8. BID**

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 12 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
  - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
  - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, shall be affixed;
  - (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

**B9. PRICES**

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 For the convenience of Bidders, and pursuant to B7.4.2 and B15.4.3, an electronic spreadsheet Form B: Prices in Microsoft Excel (.xls) format is available along with the Adobe PDF documents for this Bid Opportunity on the Bid Opportunities page at the Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

- B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B9.5 Form B: Prices is organized into Parts: Part A, Part B, and Part C of the Work. Bidders shall provide a total price for each Part and, on the summary sheet, a Total Bid Price consisting of the sum of prices for Part A, Part B, and Part C.

## **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 Division website at <http://www.winnipeg.ca/matmgt/debar.stm>
- 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 Further to B10.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
  - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>)
- B10.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B10.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.



## **B11. BID SECURITY**

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

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

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

B11.1.2 All signatures on bid securities shall be original.

B11.1.3 The Bidder shall sign the Bid Bond.

B11.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.

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

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

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

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

## **B12. OPENING OF BIDS AND RELEASE OF INFORMATION**

B12.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.

B12.1.1 Bidders or their representatives may attend.

B12.1.2 Bids determined by the Manager of Materials, or his designate, to not include the bid security specified in B11 will not be read out.

B12.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>

B12.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page

at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>

- B12.4 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.

### **B13. IRREVOCABLE BID**

- B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B13.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

### **B14. WITHDRAWAL OF BIDS**

- B14.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B14.1.1 Notwithstanding 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.
- B14.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B14.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials 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 12 of Form A: Bid; and
  - (c) if the notice has been given by any one of the persons specified in B14.1.3(b), declare the Bid withdrawn.
- B14.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B13.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

### **B15. EVALUATION OF BIDS**

- B15.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
  - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
  - (c) Total Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B6.
- B15.2 Further to B15.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid 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.

- B15.2.1 Any bid with an apparent imbalance between the unit prices in Part A and Part B may be determined to be non-responsive and rejected by the Award Authority in its sole discretion, acting reasonably.
- B15.3 Further to B15.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B15.4 Further to B15.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B15.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B15.4.2 Further to B15.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B15.4.3 The electronic Form B: Prices and the formulas imbedded in that spreadsheet are only provided for the convenience of Bidders. The City makes no representations or warranties as to the correctness of the imbedded formulas. It is the Bidder's responsibility to ensure the extensions of the unit prices and the sum of Total Bid Price performed as a function of the formulas within the electronic Form B: Prices are correct.

## **B16. AWARD OF CONTRACT**

- B16.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B16.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B16.2.1 Without limiting the generality of B16.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
  - (b) the prices are materially in excess of the prices received for similar work in the past;
  - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
  - (d) only one Bid is received; or
  - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B16.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B15.
- B16.3.1 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.
- B16.4 As noted in D2 and identified in Form B: Prices, the Work of Part B will be contingent upon sufficient funding for the Work. If sufficient funding for Part B is not available, the City shall have the right to eliminate all or part of Part B in accordance with D2.
- B16.5 The Work in this Contract is contingent upon the results of a geotechnical investigation and slope stability analysis currently underway. The analysis is then required to obtain a Waterways

Permit. The City shall have the right to eliminate all or any portion of this Work in accordance with D2 if:

- (a) The geotechnical/slope stability analysis shows the Work requires slope stabilization, or;
- (b) A Waterways Permit cannot be obtained by September 20<sup>th</sup>, 2010.

## PART C - GENERAL CONDITIONS

### C0. GENERAL CONDITIONS

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

## **PART D - SUPPLEMENTAL CONDITIONS**

### **GENERAL**

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

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

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

D2.1 The Work to be done under the Contract shall consist of three parts:

- (a) Part A – Multi-Use Pathway (gravel) in Kildonan Park Golf Course
- (b) Part B – Multi-Use Pathway (asphalt) at Chief Peguis Trail
- (c) Part C – Chain Link Fence in Kildonan Park Golf Course

D2.2 Bidders are advised that the funding for Part B is under review, and the City is anticipating determining the ability to fund Part B by early September. Part B of the Work is contingent upon sufficient funding being available.

D2.2.1 Further to C7.1, if sufficient funding is not available, the City shall have the right to eliminate all or any portion of Part B, and the Contract Price will be reduced accordingly.

D2.2.2 Further to C7.5, C7.5.1, and C7.6, a reduction in the Contract Price pursuant to D2.2.1 shall not be considered in calculating the aggregate reduction in the Contract Price for purposes of C7.5.

D2.2.3 If all or any portion of Part B is eliminated pursuant to D2.2.1, the time periods stipulated in D18 for Substantial Performance of the Work and in D19 for Total Performance of the Work will be reduced proportionally by the Contract Administrator acting reasonably.

D2.3 The major components of the Work are as follows:

- (a) Part A – Multi-Use Pathway (gravel) in Kildonan Park Golf Course
  - (i) Snow fence installation along entire length of proposed path to prevent golfers from entering the construction area.
  - (ii) Tree Pruning as required
  - (iii) Clearing and grubbing as required, including tree removals
  - (iv) Chipping of stockpiled deadwood
  - (v) Pathway earthwork, including step cutting on south side of abandoned CP bridge and sub-grade compaction
  - (vi) Culvert installations
  - (vii) Construction of gravel surfaced pathway including Envirogrid structure
  - (viii) Construction of bench nodes
  - (ix) Installation of rip rap at new culverts
  - (x) Flood plain seeding and seed protection
  - (xi) Topsoil and sod
- (b) Part B – Multi-Use Pathway (asphalt) at Chief Peguis Trail
  - (i) Clearing and grubbing as required, including tree removals
  - (ii) Pathway earthwork, including step cutting and sub-grade compaction
  - (iii) Culvert installations
  - (iv) Construction of asphalt pathway
  - (v) Construction of bench nodes
  - (vi) Ditch re-grading, topsoil and sod

- (c) Part C – Chain Link Fence in Kildonan Park Golf Course:
  - (i) Installation of fence posts and mesh
  - (ii) Installation of gates

### **D3. DEFINITIONS**

D3.1 When used in this Bid Opportunity:

- (a) "**Envirogrid Structure**" means a more shallow pathway structure than typical that is strengthened with a geotextile product, and installed within the dripline of trees to minimize excavation disturbance/damage to tree roots. Refer to E11 for more information ;
- (b) "**Stock piled deadwood**" means the large quantity of tree trimmings that is piled along the east side of the Kildonan Park Golf Course dike. This pile of golf course deadwood is denoted on the construction plans and generally extends from Sta. 0+230 to 0+340. Refer to E8 for more information ;
- (c) "**Chipping**" means using a wood chipper to reuse the deadwood and pruned branches on site. The wood chips are to be spread along the east side of the dike. Refer to E8 for more information ;
- (d) "**Pathway earthwork**" means the excavation, shaping, compaction, cutting and filling associated with the construction of the pathways. Refer to E9 for more information. .

### **D4. CONTRACT ADMINISTRATOR**

D4.1 The Contract Administrator is Dillon Consulting Limited, represented by:

David Wiebe, P. Eng. LEED AP  
Project Manager  
200 – 895 Waverley Street  
Telephone No. (204) 453-2301  
Facsimile No. (204) 452-4412

D4.2 At the pre-construction meeting, David Wiebe, P. Eng. LEED AP will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

### **D5. CONTRACTOR'S SUPERVISOR**

D5.1 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.

D5.2 At least two (2) business days prior to the commencement of any Work on the site, the Contractor shall provide the Contract Administrator with a phone number where the supervisor identified in D5.1 or an alternate can be contacted twenty-four (24) hours a day to respond to an emergency.

### **D6. NOTICES**

D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.

- D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:

The City of Winnipeg  
Chief Financial Officer

Facsimile No.: (204) 949-1174

- D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

Facsimile No.: (204) 947-9155

## **D7. FURNISHING OF DOCUMENTS**

- D7.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him at cost.

## **SUBMISSIONS**

### **D8. AUTHORITY TO CARRY ON BUSINESS**

- D8.1 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.

### **D9. SAFE WORK PLAN**

- D9.1 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.
- D9.2 The Safe Work Plan shall be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/safety/default.stm>

### **D10. INSURANCE**

- D10.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) 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, broad form property damage cover 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.

D10.2 Deductibles shall be borne by the Contractor.

D10.3 The Contractor shall provide the City Solicitor 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 the date specified in the C4.1 for the return of the executed Contract.

D10.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

## **D11. PERFORMANCE SECURITY**

D11.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

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

D11.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D11.2 If the bid security provided in his Bid was not a certified cheque or draft pursuant to B11.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site and in no event later than the date specified in the C4.1 for the return of the executed Contract.

## **D12. SUBCONTRACTOR LIST**

D12.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at or prior to a pre-construction meeting, or at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the C4.1 for the return of the executed Contract.

## **D13. EQUIPMENT LIST**

D13.1 The Contractor shall provide the Contract Administrator with a complete list of the equipment which the Contractor proposes to utilize (Form K: Equipment List) at or prior to a pre-construction meeting, or at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the C4.1 for the return of the executed Contract.

D13.2 The Contractor is to note that the size of equipment may need to be limited to navigate the project area without damaging trees, grass, or other existing features. Note that the Contractor is responsible for site restoration over and above that defined in E6

#### **D14. DETAILED WORK SCHEDULE**

- D14.1 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 the General Conditions for the return of the executed Contract.
- D14.2 The detailed work schedule shall consist of the following:
- (a) a Gantt chart for the Work acceptable to the Contract Administrator.
- .
- D14.3 Further to D14.2(a), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of Part A, Part B, and Part C. The time shall be on the horizontal axis, and the Part of Work shall be on the vertical axis.

#### **SCHEDULE OF WORK**

#### **D15. COMMENCEMENT**

- D15.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D15.2 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 D8;
    - (ii) evidence of the workers compensation coverage specified in C6.15;
    - (iii) the twenty-four (24) hour emergency response phone number specified in D5.2.
    - (iv) the Safe Work Plan specified in D9;
    - (v) evidence of the insurance specified in D10;
    - (vi) the performance security specified in 0;
    - (vii) the Subcontractor list specified in D12;
    - (viii) the equipment list specified in D13; and
    - (ix) the detailed work schedule specified in D14.
  - (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.
- D15.3 The Contractor shall not commence the Work of Part B as described in D2 and identified in Form B: Prices, unless he has received notification from the Contract Administrator that the City has sufficient funding for this portion of the Work.
- D15.4 Further to B16.5, the Contractor shall not commence the Work unless he has received notification from the Contract Administrator that a Waterways Permit has been obtained.
- D15.5 The Contractor shall commence the Work on Part A and Part C within seven (7) Working Days of receipt of the letter of intent.
- D15.6 The City intends to award this Contract by September 13, 2010.
- D15.6.1 If the actual date of award is later than the intended date, the dates specified for Substantial Performance and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

#### **D16. RESTRICTED WORK HOURS**

- D16.1 Further to clause 3.10 of CW 1130, the Contractor shall require written permission forty-eight (48) hours in advance from the Contract Administrator for any Work to be performed between

2000 hours and 0700 hours, or on Saturdays, Sundays, Statutory Holidays and or Civic Holidays.

## **D17. SEQUENCE OF WORK**

D17.1 Further to C6.1, the sequence of Work shall be as follows:

D17.1.1 The Work shall be divided into three Parts . Each Part shall be subdivided into stages. Stages are further subdivided into major items of Work.

D17.1.2 **Part A** – Multi-Use Pathway (gravel) in Kildonan Park Golf Course

(a) **Stage I** – Preliminary Landscaping

- (i) Snow fence installation along entire length of proposed path to prevent golfers from entering the construction area.
- (ii) Tree pruning as required;
- (iii) Clearing and grubbing as required, including tree removals
- (iv) Chipping stockpiled deadwood;

(b) **Stage II** – Pathway Construction

- (i) Pathway earthwork;
- (ii) Step cutting on south side of abandoned CP bridge and sub-grade compaction;
- (iii) Culvert installations;
- (iv) Construction of gravel surfaced pathway including envirogrid structure;
- (v) Construction of bench nodes
- (vi) Installation of rip rap at new culverts.
- (vii) Topsoil and sod
- (viii) Seeding and seed protection

D17.1.3 **Part B** - Multi-Use Pathway (asphalt) at Chief Peguis Trail

(a) **Stage I** – Preliminary Landscaping

- (i) Clearing and grubbing as required, including tree removals;

(b) **Stage II** – Pathway Construction

- (i) Pathway earthwork;
- (ii) Step cutting of embankment and sub-grade compaction;
- (iii) Culvert installations;
- (iv) Construction of asphalt pathway;
- (v) Construction of bench nodes
- (vi) Topsoil and sod;

D17.1.4 **Part C** – Chain Link Fence in Kildonan Park Golf Course

(a) **Stage I** – Chain Link Fence Installation

D17.2 Immediately following the completion of the Works, the Contractor shall clean up the Site and remove all plant, surplus material, waste and debris, other than that left by the City or other Contractors.

## **D18. SUBSTANTIAL PERFORMANCE**

D18.1 The Contractor shall achieve Substantial Performance by October 15, 2010.

D18.2 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 re-inspected.

- D18.3 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.

#### **D19. TOTAL PERFORMANCE**

- D19.1 The Contractor shall achieve Total Performance by October 29, 2010 .
- D19.2 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 re-inspected.
- D19.3 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.

#### **D20. LIQUIDATED DAMAGES**

- D20.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City one thousand five hundred dollars (\$1,500) per Calendar Day for each and every Calendar Day following the day fixed herein for Total Performance during which such failure continues.
- D20.2 The amount specified for liquidated damages in D20.1 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.
- D20.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### **D21. SCHEDULED MAINTENANCE**

- D21.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Sod Maintenance as specified in CW 3510;
  - (b) Flood Plain Grass Seed Maintenance as specified in E15.9
  - (c) Reflective Crack Maintenance during warranty period as specified in CW 3250;
- D21.2 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**

##### **D22. JOB MEETINGS**

- D22.1 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.

D22.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

**D23. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

D23.1 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).

**WARRANTY**

**D24. WARRANTY**

D24.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter, except where longer warranty periods are specified in the respective Specification sections, unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

D24.1.1 For the purpose of Performance Security, the warranty period shall be two (2) years.

D24.2 Notwithstanding C13.2, 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 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.

D24.2.1 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 0)

KNOW ALL MEN BY THESE PRESENTS THAT

\_\_\_\_\_ ,  
(hereinafter called the "Principal"), and

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

\_\_\_\_\_ dollars (\$\_\_\_\_\_)

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

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

BID OPPORTUNITY NO. 599-2010

2010 Active Transportation – Infrastructure Stimulus Program: Kildonan Park Golf Course Pathway which is by reference made part hereof and is hereinafter referred to as the "Contract".

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

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

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

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

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

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**SIGNED AND SEALED**  
in the presence of:

\_\_\_\_\_  
(Witness as to Principal if no seal)

\_\_\_\_\_  
(Name of Principal)

Per: \_\_\_\_\_ (Seal)

Per: \_\_\_\_\_

\_\_\_\_\_  
(Name of Surety)

By: \_\_\_\_\_ (Seal)  
(Attorney-in-Fact)

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT  
(PERFORMANCE SECURITY)**  
(See 0)

\_\_\_\_\_  
(Date)

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

RE: PERFORMANCE SECURITY – BID OPPORTUNITY NO. 599-2010

2010 Active Transportation – Infrastructure Stimulus Program: Kildonan Park Golf Course Pathway

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)



**FORM K: EQUIPMENT**  
(See D13)

2010 Active Transportation – Infrastructure Stimulus Program: Kildonan Park Golf Course Pathway

<p><b>1. Category/type: Earthwork</b></p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>
<p><b>2. Category/type: Basework</b></p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>
<p><b>3. Category/type: Asphalt Paving</b></p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>

## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

E1.1 These Specifications shall apply to the Work.

E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.

E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>

E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.

E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.

E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
W-382-01	Cover Sheet	A-1
W-382-02	General Arrangement	A-1
W-382-03	Kildonan Park Golf Course Pathway (1 of 5)	A-1
W-382-04	Kildonan Park Golf Course Pathway (2 of 5)	A-1
W-382-05	Kildonan Park Golf Course Pathway (3 of 5)	A-1
W-382-06	Kildonan Park Golf Course Pathway (4 of 5)	A-1
W-382-07	Kildonan Park Golf Course Pathway (5 of 5)	A-1
W-382-08	Pathway South of Chief Peguis (1 of 2)	A-1
W-382-09	Pathway South of Chief Peguis (2 of 2)	A-1
W-382-10	Pathway North of Chief Peguis (1 of 3)	A-1
W-382-11	Pathway North of Chief Peguis (2 of 3)	A-1
W-382-12	Pathway North of Chief Peguis (3 of 3)	A-1
W-382-13	Pathway Details	A-1
W-382-14	Pathway Sections	A-1
W-382-15	Fence Details	A-1

#### E2. PROTECTION OF EXISTING TREES

E2.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:

- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within 2 metres of trees.
- (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
- (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
- (d) Operation of equipment within the 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.

E2.2 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.

E2.3 No separate measurement or payment will be made for the protection of trees.

E2.4 Except as required in clause E2.1(c) and E2.1(e), Elm trees shall not be pruned at any time between April 1 and July 31.

### **E3. TRAFFIC CONTROL**

E3.1 Further to clauses 3.6 and 3.7 of CW 1130:

- (a) In accordance with the Manual of Temporary Traffic Control in Work Areas on City Streets, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Branch of the City of Winnipeg in connection with the works undertaken by the Contractor.

### **E4. PEDESTRIAN SAFETY**

E4.1 During the project, , a temporary snow fence shall be installed along the west side of the construction area for the length of the Kildonan Park Golf Course Pathway. In general, the snow fence shall be installed within five (5) metres of the west side of the permanent fence to be constructed as part of Part C. However, the temporary snow fence should not impact golf greens, cart pathways, or other course features.

E4.2 The Contractor shall be responsible for maintaining the snow fence in a proper working condition. No measurement for payment shall be made for this work.

### **E5. WATER OBTAINED FROM THE CITY**

E5.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

### **E6. SURFACE RESTORATIONS**

E6.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed 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.

E6.2 The Contractor is responsible to restore the site, including but not limited to installation of topsoil, sod, or seed outside of the limits of the greater of:

- (a) 1.2 metres of the finished surface edge of the pathway, or;
- (b) 1.2 metres of the edge of a cut or fill slope.

- E6.2.1 The intention of E6.2 is to encourage the Contractor to minimize the disturbance to the site outside of the immediate project area. This may involve using smaller machinery, or avoiding driving machinery on the site during wet conditions.
- E6.2.2 The Contractor shall bear all costs associated with restoring the site to equal or better than original condition outside of the limits specified in E6.2

## **E7. CLEARING AND GRUBBING**

### DESCRIPTION

- E7.1 General
- E7.1.1 This specification shall cover the removal from the site of trees, stumps, roots, logs, brush, rubbish and all other surface litter within the full limits of the works, and the disposal of same in a manner herein after specified
- E7.1.2 Referenced Standard Construction Specifications  
(a) CW 3010-R4 – Clearing and Grubbing

### MATERIALS AND EQUIPMENT

- E7.2 Not specified.

### CONSTRUCTION METHODS

- E7.3 General
- E7.3.1 Before commencement of any work, the Contractor shall consult with the Contract Administrator as to which trees and /or shrubs shall remain on site and be protected. Those so designated shall be protected against damage from all construction activity.
- E7.3.2 The Contractor shall not complete a tree removal unless they receive authorization from the Contract Administrator.
- E7.3.3 The Contractor shall cut down designated trees and grub out the stumps and rootballs.
- E7.3.4 The Contractor shall remove trees and shrubs in a manner satisfactory to the Contract Administrator or designate and agrees that the Work may be inspected by City personnel.
- E7.3.5 To assist the Contractor in estimating the level of effort to clear and grub, the ,approximate quantity of trees to be removed and their size (measured in diameter at breast height) are included below:
- | (a) | Species        | Size          | Approximate Amount |
|-----|----------------|---------------|--------------------|
|     | Manitoba Maple | 50mm to 175mm | 19                 |
|     | American Elm   | 50mm to 175mm | 3                  |
|     | Green Ash      | 50mm to 175mm | 6                  |
- E7.3.6 The Contractor shall remove and/or dispose of all material resulting from the Work immediately by removing to a landfill site, or by chipping and spreading or stockpiling material in a location that is approved by the Contract Administrator.
- E7.3.7 The Contractor shall repair any damage resulting from the Work to adjacent trees and shall report all damage immediately to the Contract Administrator.

### MEASUREMENT AND PAYMENT

- E7.4 Clearing and Grubbing will be measured on a plan area basis and paid for at the Contract Unit Price for "Clearing and Grubbing". The area to be paid for will be the total number of hectares within the limits of the works that are cleared and grubbed in accordance with this specification and accepted by the Contract Administrator.

## **E8. DEADWOOD DISPOSAL**

### DESCRIPTION

#### E8.1 General

E8.1.1 This specification shall cover the disposal of stockpiled deadwood along the Kildonan Park Golf Course dike in the manner specified herein. The stockpiled deadwood includes dead stumps, branches, roots, logs, and brush.

E8.1.2 Referenced Standard Construction Specifications

- (a) CW 3010-R4 – Clearing and Grubbing

### MATERIALS AND EQUIPMENT

E8.2 Not specified.

### CONSTRUCTION METHODS

#### E8.3 General

E8.3.1 Before commencement of any work, the Contractor shall consult with the Contract Administrator as to the limits of the stockpiled deadwood to be disposed of in a manner herein after specified.

E8.3.2 There is approximately 750 square meters of deadwood and debris that is stockpiled on site. This material has been stockpiled by the golf course grounds keepers along the east side of the dike between sta. 0+230 to 0+335, and must be disposed of to clear space for the proposed pathway. This deadwood can be chipped and the wood chips can be spread on site or stockpiled on site, at locations designated by the Contract Administrator.

E8.3.3 Wood chips must be free of leaves, branches and other extraneous matter. Use mechanical equipment to chip the wood to within the following size restrictions:

- (a) not less than 15mm;
- (b) not larger than 75mm; and
- (c) not more than 20mm deep.

### MEASUREMENT AND PAYMENT

E8.4 Deadwood Disposal will be measured on an area basis and paid for at the Contract Unit Price for "Disposal of Deadwood". The amount to be paid for will be the total number of square meters within the limits of the works that are chipped and disposed of in accordance with this specification and accepted by the Contract Administrator.

## **E9. PATHWAY EARTH WORK**

### DESCRIPTION

#### E9.1 General

E9.1.1 This specification covers the earthwork related to the construction of the gravel pathway through Kildonan Park Golf Course, the asphalt pathway at Chief Peguis Trail and associated ditch re-grading along the multi-use pathway.

E9.1.2 Referenced Standard Construction Specifications

- (a) CW 1130-R1 – Site Requirements
- (b) CW 3110-R11 – Sub-Grade, Sub-Base and Base Course Construction
- (c) CW 3170-R3 – Earth Work and Grading

## MATERIALS AND EQUIPMENT

### E9.2 Materials

E9.2.1 Imported Fill Material supplied shall be as per CW 3110 Clause 2.5. Imported fill material must be approved by the Contract Administrator.

### E9.3 Equipment

E9.3.1 Equipment as per CW 3170 Clause 8.

## CONSTRUCTION METHODS

E9.4 Further to CW 1130 Clause 3.15, the Contract Administrator will mark out earthwork cut and fill alignment and elevations.

### E9.5 Pathway Earth Work

- (a) Strip existing topsoil and organic soils not removed during the clearing and grubbing process within the limits identified by the Contract Administrator.
- (b) Refer to the Contract Drawings for typical cut/fill elevations along the length of the pathway, limits of earthwork and where step cutting is required.
- (c) Refer to the Contract Drawings for sections
- (d) The Contractor is to note the following are estimated cut and fill volumes for the Work. This information is provided to assist bidders in estimation of level of effort for the Work only. Note these volumes include the existing topsoil. Actual earthwork volumes will not be measured by the Contract Administrator:

<u>Part</u>	<u>Cut</u> <u>(m3)</u>	<u>Fill</u> <u>(m3)</u>
A - Golf Course	430	260
B - Chief Peguis	300	650
<b>TOTAL</b>	<b>730</b>	<b>910</b>

- (e) The cut material will be considered unusable as fill material. Fill material for pathway construction shall be imported fill material.
- (f) Create flat bench cut areas as shown on the drawings large enough for mechanical compaction equipment to facilitate sub-grade compaction.
- (g) Bench cut steps to be no greater than 500 mm in height.
- (h) Compact benched area, including side slopes to a minimum of 90% Standard Proctor Density, except under pathway structure.
- (i) Place and compact sub-grade to 95% Standard Proctor Density under pathway alignment
- (j) Place and compact sub-grade in maximum lifts of 250 mm compacted depth.
- (k) Construct and shape ditch grades to 50 mm below final design grade to allow for topsoil placement.

## MEASUREMENT AND PAYMENT

### E9.6 Pathway Earth Work

E9.6.1 Pathway Earth Work will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Pathway Earth Work". The area to be paid for will be the total area of the pathway earthwork including where the sub-grade is excavated, bench-cut, imported fill is placed, compacted, graded, and shaped in accordance with this specification, accepted and measured by the Contract Administrator.

- (a) Note that the area for "Pathway Earth Work" will be measured on a slope (not plan view area) from the bottom toe of the slope to the top edge of the pathway or top of slope.



**E10. BASE COURSE AND 6 MM LIMESTONE FOR THE KILDONAN PARK GOLF COURSE PATHWAY**

DESCRIPTION

E10.1 Further to CW 3110-R12 the Work of this section comprises the furnishing of all labour, equipment and materials incidental and required to complete the installation of base course and 6mm crushed limestone in the structure of the Kildonan Park Golf Course Pathway as shown on the drawings.

MATERIALS

E10.2 Base course supplied as per CW 3110-R12, Clause 2.2.

E10.3 All Materials supplied under this Specification shall be of a type approved by the Contract Administrator and shall be subject to inspection and testing by the Contract Administrator;

E10.4 Crushed limestone fines-6mm down consisting of hard, durable, angular particles, free from clay lumps, cementation, organic material, frozen material and other deleterious materials.

E10.5 If materials have been tested by an independent testing laboratory within previous 2 months and have successfully passed tests equal to requirements of this specification, submit test certificates from testing laboratory showing suitability of materials for this project.

CONSTRUCTION METHODS

E10.6 Base course shall be placed as per CW 3110-R12, Clause 3.5.

E10.7 Crushed Limestone fines to a minimum compacted thickness of 25mm as finishing course. Compact to 95% standard proctor density.

E10.8 Finished surface to be within 5mm of specified grade, but not uniformly high or low. Ensure positive drainage in adjacent areas.

E10.9 Any Work not satisfactory as specified herein and as determined by the Contract Administrator for initial testing, shall be rectified by the Contractor. This process of inspection and correction shall continue until the Contract Administrator is satisfied that the Work is 100% complete and as per the construction drawings and specifications. All additional tests for failed or unacceptable results will be borne solely by the Contractor.

MEASUREMENT AND PAYMENT

E10.10 Base course and 6mm limestone shall be measured on a weight basis and will be paid for at the Contract Unit Price per tonne for "Supplying and Placing Base Course Material" and "Supplying and Placing 6mm Crushed Limestone Material," respectively. The weight to be paid for will be the total number of tonnes of base course and 6mm limestone placed and compacted in accordance with this specification and accepted by the Contract Administrator, as measured on a certified weigh scale.

**E11. ENVIROGRID**

DESCRIPTION

E11.1 General

E11.1.1 Further to CW 3110 and CW-3130, this specification shall cover sub-grade preparation and the supply and installation of EnvironGrid® to reduce the depth of the pathway structure in locations where full excavation of the pathway structure would cause damage to existing tree roots.

E11.1.2 Referenced Standard Construction Specifications

- (a) CW 3110-R12– Sub-grade, Sub-Base and Base Course Construction
- (b) CW3130-R2 – Supply and Installation of Geotextile Fabrics

## MATERIALS

### E11.2 Sub-Base Materials

E11.2.1 Sub-base material and base course material of the types shown on the drawings or indicated in the specification will be supplied in accordance with CW 3110-R12

### E11.3 Geotextile Fabrics

E11.3.1 Geotextile fabrics of the types shown on the drawings (non-woven) or indicated in the specification will be supplied in accordance with CW 3130-R2.

### E11.4 EnviroGrid® –EGA203P

E11.4.1 “3P” refers to three inch (75 mm) cell depth, and perforated cells.

E11.4.2 The sections are shipped to the jobsite in collapsed form.

E11.4.3 Expanded size is 2.56 m x 6.52 m by 75 mm depth

## EQUIPMENT

E11.5 Manual installation only. No specialized equipment is necessary.

## CONSTRUCTION METHODS

E11.6 Excavate and shape the sub-grade soil to the elevations, grades, and dimensions as shown on the drawings. Be sure to avoid any damage to tree roots and trunks during excavation. If tree roots are at the surface than little or no excavation is required. Limits of excavation will be marked out by the Contract Administrator.

E11.7 A separation non-woven geotextile fabric should be used as a separator between the sub-base and the sub-grade. Unroll the geotextile directly on the sub-grade, overlapping adjacent panels by 0.5m (minimum).

E11.8 Determine where the first section of EnviroGrid® is to be placed and put stakes at the four corners. Be sure to avoid damaging tree roots during stake installation.

E11.9 Stretch a section beyond its intended length and then allow it to relax. Place the section over the embedded stakes. Additional stakes may be needed along the perimeter in order to get full expansion of each cell. Adjacent sections are installed in a similar fashion and butted or stapled together to achieve continuous coverage.

E11.10 Install the Crushed Sub-base material (50mm Down Limestone) in the first rows of cells with a front-end loader or dump truck and push the rock into cells using shovels or a bulldozer blade. A “ramp” of fill material immediately adjacent to the EnviroGrid® will likely be necessary to allow equipment to climb onto the EnviroGrid®. Continue until all cells are filled. Never allow any equipment to drive over unfilled cells. Always overfill the cells slightly to allow for consolidation.

E11.11 Compact the EnviroGrid® system. The most common method of compacting is through multiple passes by the tracked equipment used to spread the infill to satisfaction of Contract Administrator. A vibrating roller and/or water may be required to achieve the specified level of compaction.

E11.12 6mm crushed limestone material should be spread over the EnviroGrid® structure and compacted to a final depth as shown on the drawings.

## MEASUREMENT AND PAYMENT

- E11.13 Supply and installation of EnviroGrid® will be paid for at the Contract Unit Price per square metre for " EnviroGrid", The area to be paid for will be the total number of square meters of EnviroGrid® that is installed in accordance with this specification, accepted and measured by the Contract Administrator.
- E11.14 Supply and installation of geotextile will be paid for at the Contract Unit Price per square metre for "Separation Geotextile Fabric", The area to be paid for will be the total number of square meters of geotextile that is installed in accordance with this specification, accepted and measured by the Contract Administrator.
- E11.15 Supply and installation of sub-base and base course material will be measured on a weight basis and paid for at the Contract Unit Price per tonne for the "Items of Work" listed below. The weight to be paid for will be the total number of tonnes installed and compacted in accordance with this specification and accepted by the Contract Administrator, as measured on a certified weigh scale.
- (a) Items of Work
- (i) Crushed Sub-base Material.
  - (ii) Supplying and Placing 6mm Crushed Limestone Material.

## E12. PRUNING OF TREES

### DESCRIPTION

- E12.1 General
- E12.1.1 This specification covers the pruning of existing trees necessary for the completion of the Contract.

### EQUIPMENT AND PERSONNEL

- E12.2 All pruning to be done by a qualified arbourist approved by the City of Winnipeg.
- E12.3 Employ clean sharp tools and make cuts flush with the main branch, smooth sloping as to prevent accumulation of water.

### CONSTRUCTION METHODS

- E12.4 General
- E12.4.1 Contractor shall prune designated trees as directed by the Contract Administrator prior to the commencement of major pathway work in accordance with the requirements hereinafter specified.
- E12.4.2 Contractor shall prune trees to the following specifications:
- (a) Prune branches to suitable clearance from ground: Approximately 2.4m to 3.65m (8-12 feet) depending on the size of the tree.
  - (b) Remove all significant deadwood over 0.025m (1 inch) diameter.
  - (c) Remove broken and weakly attached branches or limbs.
- E12.4.3 The Contractor shall not complete tree pruning unless they receive authorization from the Contract Administrator.
- E12.4.4 There is approximately five large cottonwoods (breast height diameter = 1m and larger) and 12 large Elms (breast height diameter = 0.5m to 1m).
- E12.4.5 The Contractor shall prune trees in a manner satisfactory to the Contract Administrator or designate and agrees that the Work may be inspected by City personnel.
- E12.4.6 Trees must be pruned in accordance with ANSI A-300 Pruning standards

- E12.4.7 Provincial law states Elms **cannot** be pruned between April 1 to August 1.
- E12.4.8 The Contractor shall remove and/or dispose of all material resulting from the Work immediately by removing to a landfill site, or by chipping and spreading or stockpiling wood chips in a location that is approved by the Contract Administrator.
- E12.4.9 The Contractor shall repair any damage resulting from the pruning to the trees being pruned or adjacent trees, and shall report all damage immediately to the Contract Administrator.

#### MEASUREMENT AND PAYMENT

- E12.5 Pruning of Trees will be measured on a unit basis and paid for at the Contract Unit Price for "Pruning of Trees". The number to be paid for will be the total number of trees pruned and disposed of in accordance with this specification and accepted by the Contract Administrator.

### **E13. PUMP HOUSE PIPE WORKDESCRIPTION**

#### E13.1 General

- E13.1.1 This specification covers all work associated with the golf course irrigation pump pipe that runs from the pump in the Red River to the pump house at sta. 0+380. The path alignment crosses the pipe
- E13.1.2 Referenced Standard Construction Specifications  
(a) CW 3610-R3– Installation of Culverts

#### MATERIALS

#### E13.2 Culvert

- E13.2.1 Culvert shall be 450 mm diameter, 1.6 guage corrugated steel pipe and shall conform to the standards outlined in CW 3610-R3, Clause 5.

#### CONSTRUCTION METHODS

#### E13.3 Culverts

- E13.3.1 The Contractor shall not commence culvert installation until the Contract Administrator has marked out culvert alignment and elevations.
- E13.3.2 Culvert work can not take place without disconnecting the pump house pipe, therefore please refer to "Pump House Pipe Work" Construction Methods below.
- E13.3.3 Culvert shall be installed perpendicular to the pathway as per the Construction Drawings and CW 3610-R, Clause 9.

#### E13.4 Pump House Pipe Work

- E13.4.1 The Contractor will contact the Kildonan Park Golf Course grounds keeper at least one week prior to commencing any work associated with the pump house pipe, as this work could disrupt the golf course irrigation schedule.
- E13.4.2 The Contractor shall contact Doug from Ful Flo (781-5961) at least 72 hrs prior to commencing any work associated with the pump house pipe.
- E13.4.3 Ful Flo will facilitate the disconnection of the 200mm pump house pipe at the pump house and at the pump in the river. Ful Flo will also supervise the work described below to insure that the pipe is not damaged.
- E13.4.4 The Contractor shall feed the disconnected pipe through the new culvert, taking care not to cause any damage to the pipe or the culvert. The Contractor is responsible for repairing any damage to the pump house, the pipe and/or the pump caused during construction.
- E13.4.5 Ful Flo will reconnect the pipe at the pump house and the pump in the river.

## MEASUREMENT AND PAYMENT

### E13.5 Culvert

E13.5.1 Measurement and Payment for the culvert as per CW 3610-R3, Clause 12 and 13.

### E13.6 Pump House Pipe Work

E13.6.1 Pump House Pipe Work will be measured on a unit basis and paid for at the Contract Unit Price for "Pump House Pipe Work". The number to be paid for will be the total number of units supplied and installed in accordance with this specification and accepted by the Contract Administrator.

## E14. TOPSOIL AND SODDING

### DESCRIPTION

#### E14.1 General

E14.1.1 Further to CW 3510-R9, and CW3540-R5, this specification covers supply and placement of topsoil and sod.

E14.1.2 Generally, topsoil and sod is placed adjacent to the path.

E14.1.3 Referenced Standard Construction Specifications

(a) CW 3510-R9– Sodding

(b) CW3540-R5 – Topsoil and Finish Grading for Establishment of Turf Areas

### MATERIALS

#### E14.2 Topsoil

E14.2.1 Topsoil for all areas adjacent to the pathway shall conform to the standards outlined in CW 3540-R5, Clause 5.

#### E14.3 Sod

E14.3.1 Sod shall conform to the standards outlined in CW 3510-R9, Clause 5.

### CONSTRUCTION METHODS

#### E14.4 Topsoil

E14.4.1 Prior to placing topsoil, all sub-grade areas except in areas within the edge of a tree canopy(or drip line) shall be scarified to a minimum depth of 50 mm. The Contractor shall use soil scarifying or pulverizing equipment suitable for the area involved and to the satisfaction of the Contract Administrator.

E14.4.2 The topsoil adjacent to the pathway shall be applied as per CW 3540-R5, Clause 9 to a minimum 100 mm compacted depth.

#### E14.5 Sod

E14.5.1 Sod shall be installed adjacent to the pathway as per CW 3510-R9, Clause 9.

E14.5.2 Sod placed on embankments with slopes of 1 vertical to 3 horizontal (18 degrees) or steeper shall be pegged to the subgrade as specified in CW 3510-R9, Clause 9.5.

### MEASUREMENT AND PAYMENT

#### E14.6 Topsoil

E14.6.1 Measurement and Payment for topsoil as per CW 3540-R5, Clause 12 and 13.

E14.7 Sod

E14.7.1 Measurement and Payment for sod as per CW 3510-R9, Clause 12 and 13.

**E15. FLOOD PLAIN GRASS SEEDING AND SEED PROTECTION**

DESCRIPTION

E15.1 General

E15.1.1 Further to CW 3520 and CW3540, this specification shall cover sub-grade preparation the supply and placement of Grass Seed along the path in the flood plain (sta. 0+260 to 0+425), and protection of seeding from spring flooding.

E15.1.2 Referenced Standard Construction Specifications

(a) CW 3520-R7– Seeding

(b) CW3540-R5 – Topsoil and Finish Grading for Establishment of Turf Areas

MATERIALS

E15.2 Flood Plain Grass Seed

E15.2.1 Flood Plain Grass Seed for along the path as it transitions from the top of the golf course dike down to the flood plain and back up again shall be a mixture composed of:

(a) Forty percent (40%) Canada Wild Rye, forty percent (40%) Slender Wheatgrass, and twenty percent (20%) Fowl Bluegrass.

E15.3 Erosion Control Blanket S32-BD

E15.3.1 Erosion control blanket S32-BD is a short-term 100% biodegradable double net straw fiber erosion control blanket designed for use on moderate slope and channel applications requiring erosion control for up to 12 months depending on moisture, light, and environmental conditions. The blanket is sewn together on 1.5 inch (38.1 mm) centers.

E15.3.2 Product can be sourced locally from Brock White and other suppliers.

EQUIPMENT

E15.4 Scarification equipment shall be suitable for the area being scarified, shall be capable of scarifying the sub-grade to the specified depth and shall be accepted by the Contract Administrator. For confined areas a toothed bucket may be acceptable. For larger areas tilling equipment may be required.

CONSTRUCTION METHODS

E15.5 Preparation of Existing Grade

E15.5.1 Prior to placing topsoil, in areas to be seeded greater in width than 600mm, prepare the existing sub-grade by scarifying to a minimum depth of 75mm and to a maximum depth of 100mm to the satisfaction of the Contract Administrator.

E15.5.2 Scarification shall consist of breaking up and loosening the sub-grade. No scarification shall occur within the edge of a tree canopy (or drip line).

E15.6 Topsoil Placement

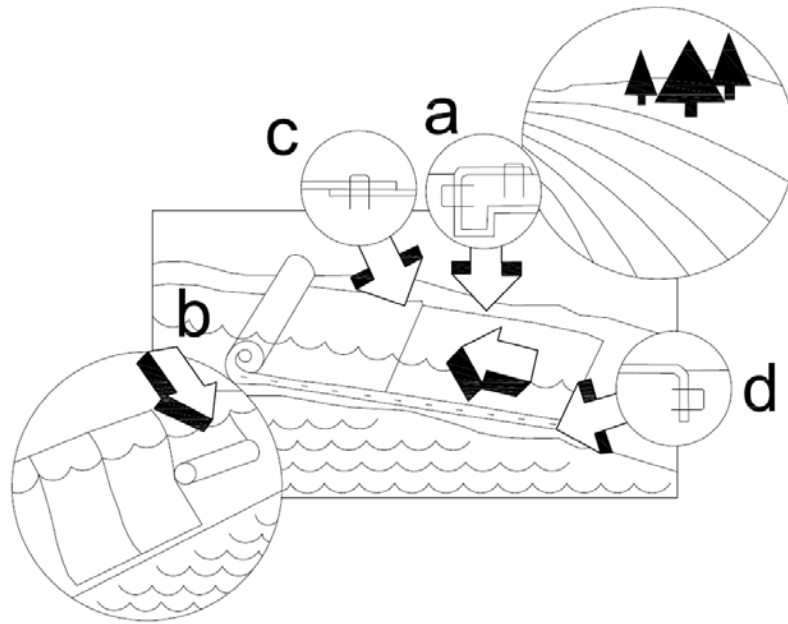
E15.6.1 Copy from topsoil and see section from CW3540

E15.7 Flood Plain Grass Seeding

E15.7.1 Flood Plain Grass Seed shall be sown at a rate of 2.2 kilograms per 100 square meters.

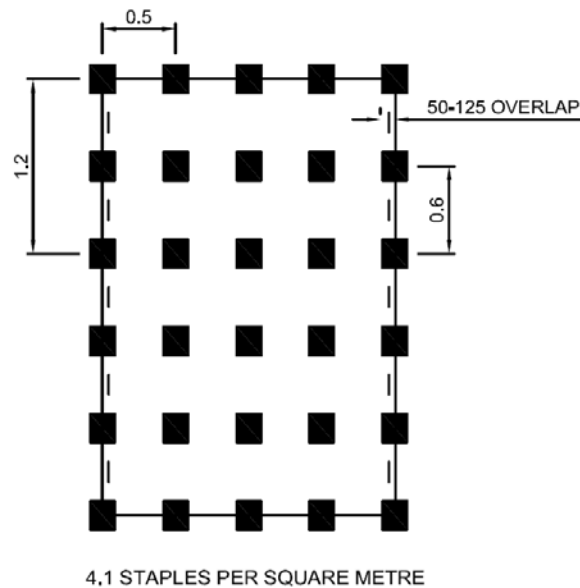
E15.8 Erosion Control Blanket Installation

- E15.8.1 Commence Erosion Control Blanket Installation after seeding has occurred.
- E15.8.2 Start by stapling the blanket at the top of the slope in a 150mm deep x 150mm wide trench. Backfill and compact the trench so that the water will flow evenly onto the blanket. See diagram below.
- E15.8.3 The blanket may be laid horizontally along the slope if the length of the slope is less than 16m, which is the case here. See diagram below.
- E15.8.4 Overlap the blanket 100mm, staple through both blankets of overlapped area every 300mm. See diagrams below.
- E15.8.5 The bottom end of the blanket that falls below the water level must be placed in a trench that is 300mm deep and 150mm wide, stapled, backfilled and compacted. See diagram below.



Erosion Control Blanket Installation

- E15.8.6 Since this area of the path is in the flood plain a dense staple pattern is required to insure that the erosion blanket is not washed away in the spring. The staple pattern is shown in the diagram below.



Erosion Control Blanket Staple Pattern.

E15.8.7 In general the staples once applied should not easily come out by hand. The standard 150mm two sided staple is the norm but in sandier soils 200-250mm double sided staples may be required.

E15.9 Maintenance of Seeded Area

E15.9.1 Commencement of Maintenance Period as per Clause 9.7 of CW 3520.

E15.9.2 As installation is expected in October 2010, no maintenance is expected until after May 15, 2011.

E15.9.3 Do not mow the seeded area.

E15.9.4 The Contractor shall water all seeded areas in sufficient quantities and frequencies to maintain seed germination and grass growth. All costs to provide water for seeded areas shall be borne by the Contractor.

E15.9.5 The Contract Administrator will terminate the maintenance period after the following criteria has been met:

- (a) The seeded area has established into a healthy, vigorously growing condition
- (b) The seeded area is free of bare and dead spots
- (c) The seeded area has sufficient shoot growth density that no surface soil or remaining erosion control blanket is visible.
- (d) The seeded area is accepted by the City of Winnipeg, Public Works Department.

E15.9.6 When the Contractor considers that the seeded area meets the criteria listed above, he shall arrange, attend and assist in the inspection of the Work with the Contract Administrator and a representative of the City of Winnipeg Public Works Department for purposes of verifying whether the Maintenance Period can be terminated. Any deficient, damaged or vandalized areas may have to be reseeded within three working days after receiving notification from the Contract Administrator and the area so reseeded, shall be further maintained by and at the expense of the Contractor in accordance with this specification.



## MEASUREMENT AND PAYMENT

E15.10 Supply, placement and maintenance of Flood Plain Grass Seed and Seed Protection will be paid for at the Contract Unit Price per square metre for "Flood Plain Grass Seeding and Seed Protection", measured as specified herein, which price shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification. Payment for Flood Plain Grass Seeding and Seed Protection shall be in accordance with the following:

- (a) Sixty five (65%) percent of quantity following supply and placement.
- (b) Remaining thirty five (35%) percent of quantity following termination of the Maintenance Period.

## E16. ASPHALT ACCESSIBLE BENCH NODES

### DESCRIPTION

E16.1 General

E16.1.1 This specification covers the construction of the asphalt bench nodes along the Multi-Use Pathway at Chief Peguis Trail.

E16.1.2 Referenced Standard Construction Specifications

- (a) CW 3410-R8 – Asphaltic Concrete Pavement Works

### MATERIALS AND EQUIPMENT

E16.2 Asphalt Materials

E16.2.1 Asphalt material supplied shall be as per CW 3410-R8 Clause 5, 6 and 7 for Type 1A asphalt.

E16.3 Equipment

E16.3.1 Equipment as per CW 3410-R8 Clause 8.

### CONSTRUCTION METHODS

E16.4 Construction Methods as per CW 3410-R8 Clause 9.

### MEASUREMENT AND PAYMENT

E16.5 Asphalt for Accessible Bench Nodes will be measured on a weight basis and paid for at the Contract Unit Price per tonne for "Asphalt Bench Nodes". The weight to be paid for will be the total number of tonnes of asphalt placed and compacted in accordance with this specification and accepted by the Contract Administrator, as measured on a certified weigh scale.

## E17. STEEL BOLLARD AND CONCRETE BASE

### DESCRIPTION

E17.1 General

E17.1.1 This specification covers the supply and installation of a removable steel bollard and concrete base at the north end of the pathway at John Black Avenue, to prevent vehicle access.

E17.1.2 Referenced Standard Construction Specifications

- (a) CW 2160-R6 – Concrete Underground Structures and Works.

## MATERIALS

### E17.2 Concrete

E17.2.1 Concrete base material in accordance with "Type A" in Table CW 2160.1 of CW 2160-R7. utilizing HS sulphate-resistant cement.

### E17.3 Steel

E17.3.1 All steel to be hot dipped galvanized to CSA G164.

## CONSTRUCTION METHODS

### E17.4 General

E17.4.1 Construction as per detail in Contract drawings.

E17.4.2 Place concrete base prior to pathway asphalt placement.

E17.4.3 Grade concrete base slightly away from bollard for drainage.

E17.4.4 Install bollard straight and true.

## MEASUREMENT AND PAYMENT

### E17.5 Steel Bollard and Concrete Base

E17.5.1 Supply and installation of Steel Bollard and Concrete Base will be measured on a unit basis and paid for at the Contract Unit Price for each "Steel Bollard and Concrete Base (hot dip galvanized)". The number to be paid for will be the total number of units supplied and installed in accordance with this specification, accepted and measured by the Contract Administrator.

## **E18. CHAIN LINK FENCE**

### DESCRIPTION

#### E18.1 General

E18.1.1 This specification covers the installation of chain link fencing which comes in the following configurations:

(a) A 3.66 m chain link fence having a 2.44 m vertical section and a 1.22 m angled extension.

(b) A vehicular access gate.

E18.1.2 Referenced Standard Construction Specifications

(a) CW 3550-R2 – Chain Link Fencing.

## MATERIALS

### E18.2 General

E18.2.1 All new materials as per CW 3550-R2.

E18.2.2 CW 3550-R2 will be followed with the exception of the 3.66 m angled fence configuration as delineated in the detailed drawings and;

E18.2.3 All fabric will be 9 gauge with black vinyl coating, with an inner core 11 gauge steel mesh. The mesh will be wire woven into a uniform 25.4 mm or 1" diamond patterned mesh. Fabric need not be zinc coated.

E18.2.4 All line rails, terminal rails, top and bottom rails shall be powder coated black.

E18.2.5 A galvanized backstop canopy angle shall join the vertical and angled section of fence and shall be welded to each post.

### E18.3 Gate

E18.3.1 Materials as per CW-3550-R2. Furnish as double gate with drop bolts, 5.0 m wide.

E18.3.2 The Contractor shall supply shop drawings of gate to be supplied prior to manufacture for the Contract Administrator's approval.

### CONSTRUCTION METHODS

#### E18.4 General

E18.4.1 New fence and gate construction as per detail in Contract Drawings and as per CW 3550-R2.

E18.4.2 Contractor shall construct fence after path surface has been completed.

E18.4.3 Contractor shall repair any damage done during construction.

### MEASUREMENT AND PAYMENT

E18.5 Supply and installation of 3.66 m height Chain Link Fencing, with a 2.44 m vertical portion and 1.22 m angled extension, will be measured on a length basis and paid for at the Contract Unit Price per lineal metre for the "Items of Work" listed below. The length to be paid for will be the total length of the fencing that is installed in accordance with this specification, accepted and measured by the Contract Administrator.

E18.6 Supply and installation of gates will be measured on a length basis and paid for at the Contract Unit Price per lineal metre for the "Items of Work" listed below. The length to be paid for will be the total length of the gate that is installed in accordance with this specification, accepted and measured by the Contract Administrator.

#### (a) Items of Work

- (i) 3.66 m chain link fencing with 2.44 m vertical section and 1.22 m angled section.
- (ii) 2.44 m height, 5.0 m width Chain Link Fencing Gates