



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 490-2008**

**SEINE RIVER WALKWAY RE-CONSTRUCTION AT DESAUTELS STREET**

**WINNIPEG, MANITOBA**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 SEINE RIVER WALKWAY RE-CONSTRUCTION AT DESAUTELS STREET  
WINNIPEG, MANITOBA

### **B2. SUBMISSION DEADLINE**

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

### **B3. SITE INVESTIGATION**

- B3.1 Further to C3.1, the Bidder may make an appointment to view the Site by contacting the Contract Administrator.
- B3.2 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 D3.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3.1 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 internet site at <http://www.winnipeg.ca/matmgt>.

B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Division internet site 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.

**B7. BID COMPONENTS**

B7.1 The Bid shall consist of the following components:

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

B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.

B7.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.

B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B7.8 Bids shall be submitted to:

The City of Winnipeg  
Corporate Finance Department  
Materials Management 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, should be affixed;
- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid 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.

B9.2 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 Prices from Non-Resident Bidders are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

## **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 internet site 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 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B10.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

## **B11. 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 internet site at <http://www.winnipeg.ca/matmgt>.

B12.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site 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 (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.

B15.3 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.

## **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.

## 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 internet site 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 the restoration of the Seine River walkway by the installation of retaining walls along the walkway and primary failure zone, sediment guards, and chain link fence.

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

- (a) Supply and placement of retaining walls along the walkway and at the primary failure zone using gabion baskets.
- (b) Supply and placement of sediment guard blocks (Durahold II) along sections of the walkway.
- (c) The placement of rip-rap erosion protection and drainage rock.
- (d) Construction of a chain link fence.

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

D3.1 The Contract Administrator is ENG-TECH Consulting Limited, represented by:

Clark Hryhoruk, M.Sc., P.Eng.  
Principal, Geotechnical Engineer  
# 6 -854 Marion Street, Winnipeg, MB

Telephone No. (204) 233-1694  
Facsimile No. (204)-235-1579  
e-mail: [eng\\_tech@mts.net](mailto:eng_tech@mts.net)

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

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

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

#### **D5. NOTICES**

D5.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

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

- D5.3 Notwithstanding C21.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

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

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

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

#### **D6. FURNISHING OF DOCUMENTS**

- D6.1 Upon award of the Contract, the Contractor will be provided with 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**

#### **D7. AUTHORITY TO CARRY ON BUSINESS**

- D7.1 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.

#### **D8. SAFE WORK PLAN**

- D8.1 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.
- D8.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt/safety/default.stm> .

#### **D9. INSURANCE**

- D9.1 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.

D9.2 Deductibles shall be borne by the Contractor.

D9.3 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 C4.1 for the return of the executed Contract.

D9.4 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.

#### **D10. PERFORMANCE SECURITY**

D10.1 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.

D10.1.1 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.

D10.2 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 but in no event later than the date specified in C4.1 for the return of the executed Contract.

#### **D11. SUBCONTRACTOR LIST**

D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract.

#### **SCHEDULE OF WORK**

##### **D12. COMMENCEMENT**

D12.1 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.

- D12.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
    - (i) evidence of authority to carry on business specified in D7;
    - (ii) evidence of the workers compensation coverage specified in C6.15;
    - (iii) the Safe Work Plan specified in D8;
    - (iv) evidence of the insurance specified in D9;
    - (v) the performance security specified in D10;
    - (vi) the Subcontractor list specified in D11; and
  - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D12.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

### **D13. SUBSTANTIAL PERFORMANCE**

D13.1 The Contractor shall achieve Substantial Performance within twenty (20) consecutive Working Days of the commencement of the Work as specified in D12.

D13.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D13.3 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.

### **D14. TOTAL PERFORMANCE**

D14.1 The Contractor shall achieve Total Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D12.

D14.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D14.3 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.

### **D15. LIQUIDATED DAMAGES**

D15.1 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 five hundred dollars (\$500) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.

D15.2 The amount specified for liquidated damages in D15.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.

D15.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.



## **CONTROL OF WORK**

### **D16. JOB MEETINGS**

- D16.1 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.
- D16.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

### **D17. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

- D17.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

## **MEASUREMENT AND PAYMENT**

### **D18. MEASUREMENT**

- D18.1 Measurement will be based on a per item basis as follows:
- (a) Mob-Demobilization and Site preparation will be based on visual observation or any other method deemed acceptable by the Contract Administrator.
  - (b) The supply and placement of the Gabion baskets along the walkway will be measured on a linear meter basis, but will be lump sum for the retaining wall in the primary failure zone.
  - (c) The supply and placement of the sediment guard will be based on a per linear meter length.
  - (d) The supply and placement of the Rip-Rap (Rockfill 4) and Drainage rock (Rockfill 5) will be measured on a weight basis. The weight shall be by a certified weight scale and accepted by the Contract Administrator. The Bidder shall provide the weight tickets to the Contract Administrator for the material supplied. No payment will be made if any of the weight tickets are not supplied to the Contract Administrator or a person appointed by the Contract Administrator upon arrival of the material to the Site.
  - (e) Installation of the fence will be based on a linear meter of fence installed.
  - (f) Walkway re-grading and re-surfacing will be based on visual observation and the weight tickets of the materials hauled to the Site or any other method deemed acceptable by the Contract Administrator.
  - (g) Site clean-up will be based on visual observation or any other method deemed acceptable by the Contract Administrator.

### **D19. PAYMENT**

- D19.1 Payment is as stated in C12, and will be based on a per item basis as described in D19.
- D19.2 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

**WARRANTY**

**D20. WARRANTY**

D20.1 Warranty is as stated in C13.

**FORM H1: PERFORMANCE BOND**  
(See D10)

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. 490-2008

SEINE RIVER WALKWAY RE-CONSTRUCTION AT DESAUTELS STREET WINNIPEG,  
MANITOBA

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 D10)

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

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 490-2008

SEINE RIVER WALKWAY RE-CONSTRUCTION AT DESAUTELS STREET WINNIPEG,  
MANITOBA

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

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

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

\_\_\_\_\_  
Canadian dollars.

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

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

Partial drawings are permitted.

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

\_\_\_\_\_  
(Address)

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

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

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

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

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

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

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

\_\_\_\_\_  
(Name of bank or financial institution)

Per: \_\_\_\_\_  
(Authorized Signing Officer)

Per: \_\_\_\_\_  
(Authorized Signing Officer)



## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
1	Site Contour Plan and Photograph Index
2	Photographs 1-8
3	Photographs 9-16
4	Construction Plan
5	Front Profile of Walkway
6	Gabion Basket Retaining Wall and Fence Details
7	Walkway Retaining Wall and Sediment Guard Details

#### E2. MOB-DEMobilIZATION AND SITE PREPARATION

##### DESCRIPTION

- E2.1 This specification shall cover the Work required under the heading Mob-Demobilization and Site Preparation, as shown in Form B: Schedule of Unit Prices, and shall include:
- (a) mobilization and demobilization of all equipment.
  - (b) minor modification to the existing Site access.
  - (c) minor cutting or trimming of the lower bank at the primary failure zone.
  - (d) erect a safety barrier and signage at the entrance and exits of the Work area.
- E2.2 The Work to be done by the Contractor under this specification shall include superintendence, labour, materials, and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified.
- E2.3 Item No. 1 from Form B, Mob-Demobilization and Site Preparation can not exceed 5 % of the Total Bid Price.

##### EQUIPMENT

- E2.4 All equipment, implements, tools and facilities used shall be of a size and type as required to complete the Work in a reasonable time. The Contractor shall keep all equipment in good working order, and have sufficient equipment for replacement at all times, as required.



## MATERIALS

- E2.5 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this specification.

## CONSTRUCTION METHODS

### E2.6 Site Access

- E2.6.1 The existing Site access is limited to smaller construction equipment. Care should be taken to minimize the amount of damage to existing trees and shrub growth. Under no circumstance will significant modifications to the existing Site access be allowed. All cut material must be removed from the Site or to fill areas on Site designed by Contract Administrator. A Site visit should be completed to properly access the existing Site access.

- E2.6.2 Tree removal along the Site will not be required, but some minor brush cutting will be allowed and must be kept to a minimum. Any tree which may need to be cut over 50 mm in diameter will have to be approved by the Contract Administrator prior to cutting. The Contractor will be held liable for excessive damage to existing live trees beyond what is required to develop Site access.

### E2.7 Soil Removal

- E2.7.1 All soil cut to modify the existing Site access shall be removed from the Site unless otherwise stated by the Contract Administrator in writing, and under no circumstance shall any soil be stock piled at the top of bank. Some soil may be stock piled at the mid area of this Site for restoration/reshaping of the cut upon completion of the placement of rip-rap. Care must be taken to ensure living trees are not damaged.

### E2.8 Tree Protection

- E2.8.1 The Contractor should be fully responsible to assess the Work area in order to determine if any of the existing live trees will need to be protected. The Contractor will be responsible for protection and damage caused during construction to all live trees. The cost of any assessments, repairs and/or replacements will be the responsibility of the Contractor.

## **E3. SUPPLY AND PLACEMENT OF GABION BASKET RETAINING WALL ALONG THE WALKWAY AND PRIMARY FAILURE ZONE**

### DESCRIPTION

#### E3.1 General

- E3.1.1 This specification shall cover the supply and placement of a gabion basket retaining wall along approximately 110 m of the walkway and in the primary failure zone of approximately 10 m as shown on Drawings 4, 5, 6 and 7.
- E3.1.2 The retaining wall along the walkway consists of a single row of gabion baskets in designated areas. Where as in the primary failure zone the retaining wall will be 2.5 m in height.
- E3.1.3 The Work to be done by the Contractor shall include superintendence, labour, materials, and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified and shown on the drawings.

## MATERIALS

- E3.2 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this specification.

E3.3 Two sizes of rock will be required as discussed below.

(a) Gabion Basket Retaining Walls

- (i) Rockfill 2 consist of limestone, and contain no organic, roots, silts, clay or any other deleterious material that would detract from the strength. It will be used for the basket base material and fill support behind the baskets. The rock shall be durable, comprised of high quality durable white quarried limestone/dolomite. The Contract Administrator shall examine the rock for approval prior to placement. Rockfill 2 shall have an average size of 50 mm in diameter and shall have a maximum absorption of 2.5% (ASTM C 127).
- (ii) Rockfill 3 is to be used in the Gabion baskets and shall consist of clean free draining material, and contain no organic, roots, silts, clay or any other deleterious material that would detract from the strength and drainage characteristics of clean rockfill. The rock shall be durable, comprised of high quality durable white quarried limestone/dolomite. The Contract Administrator shall examine the rock for approval prior to placement. Rockfill 3 shall have a maximum size of 150 mm in diameter, a minimum diameter of 75 mm, and an average size (D50) 125 mm. The rockfill shall have a maximum absorption of 2.5% (ASTM C 127).
- (iii) No rockfill will be permitted without providing the source and supplier. Acceptance of the rock will be provided upon completion of an inspection by the Contract Administrator. At the discretion of the Contract Administrator, testing will be performed on samples. The cost of the tests will be paid for by the The City, unless more than two (2) tests are required due to poor rock quality, then the cost will be borne by the Contractor.

EQUIPMENT

E3.4 All equipment, implements, tools and facilities used shall be of a size and type as required to complete the Work in a reasonable time. The Contractor shall keep all equipment in good working order, and have sufficient equipment for replacement at all times, as required.

CONSTRUCTION METHODS

E3.5 Soil Removal

E3.5.1 The bank shall be cut at a 2.4H:1V (Horizontal:Vertical) behind the primary failure zone between station 1+89 to station 1+99 and cut 0.6H:1V behind the walkway retaining wall along the designated lengths as shown on Drawings 6 and 7, respectively. Under no circumstances shall any soil be stockpiled in the area along the walkway for more than one day.

E3.5.2 The installation of a silt fence will be required in the area of the primary failure zone to prevent the migration of soil materials into the Seine River during construction.

E3.6 Gabion Basket Rockfill and Placement

E3.6.1 A Geofabric, Layfield LP8 or equivalent in accordance with B6, shall be placed over the cut line and shall abut to the Gabion baskets.

E3.6.2 The walkway retaining wall shall consist of a single row of Gabion baskets along the eastern edge of the walkway between designated stations as shown on Drawing 4. The primary failure retaining wall shall be placed along 10 m of the eastern edge of the walkway starting at Station 1+89; this section shall consist of 2½ baskets in height with an additional row 0.5 m high abutting the base baskets as shown on Drawing 6. The final elevations of the Gabion baskets will be determined at the time of construction by the Contract Administrator. All Gabion baskets are to be clipped together with 2 clips per Gabion basket face (8 clips). The final elevations of the baskets will be determined at the time of construction by the Contract Administrator or a person assigned by the Contract Administrator and will be field fit as required.

- E3.6.3 Rockfill 2 is to be used for base material and fill for behind the baskets and shall be compacted, whereas the Rockfill 3 is the Gabion basket rockfill should be mildly compacted with the base of the bucket. In each case, the rockfill shall be placed in such a manner that segregation does not occur, and that the larger rocks are uniformly distributed with the smaller rocks. Hand placing and leveling may be required and shall be done on an as required basis in order to produce a uniform surface. The shape and dimensions of Rockfill 2 and Rockfill 3 are given on Drawing 6 or 7 and the final approval of the above will be provided by the Contract Administrator.

#### QUALITY CONTROL

- E3.7 All workmanship and materials furnished and supplied under this Specification will be subject to inspection by the Contract Administrator, including all operations from the selection and production of materials through the final acceptance of the specific Work. The Contractor shall be responsible for the control of all operations to complete the Work, except the inspections or approvals that have been previously given.
- E3.8 The Contract Administrator shall have full access for inspection and control of testing of materials at the Site to determine whether the material is being selected and placed or Work being conducted in accordance with this Specification.

### **E4. SUPPLY AND PLACEMENT OF SEDIMENT GUARD – DURAHOLD II**

#### DESCRIPTION

- E4.1 This specification shall cover the supply and placement of approximately 75 m of sediment guard along of four (4) sections of the walkway.
- E4.2 The Work to be done by the Contractor shall include superintendence, labour, materials, and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified and shown on the drawings.

#### MATERIALS

- E4.3 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this specification.
- E4.4 Sediment Guard – Durahold II
- E4.4.1 Durahold II blocks shall be used as the sediment guard and the Contract Administrator shall examine the blocks for approval prior to placement.
- E4.4.2 Standard Durahold II (coping) blocks are supplied in 1.829 m lengths by Barkman Concrete.

#### EQUIPMENT

- E4.5 All equipment, implements, tools and facilities used shall be of a size and type as required to complete the Work in a reasonable time. The Contractor shall keep all equipment in good working order, and have sufficient equipment for replacement at all times, as required.

#### CONSTRUCTION METHODS

- E4.6 Sediment Guard – Durahold II Placement
- E4.6.1 At the toe of the bank all roots, silt and other deleterious material shall be removed prior to placement of the blocks. The blocks shall be placed between the designated stations as shown on Drawings 4 and 5, and placed as shown on Drawing 7. The blocks are to be cut and field fit as required.

## QUALITY CONTROL

- E4.7 All workmanship and materials furnished and supplied under this Specification will be subject to inspection by the Contract Administrator, including all operations from the selection and production of materials through the final acceptance of the specific Work. The Contractor shall be responsible for the control of all operations to complete the Work, except the inspections or approvals that have been previously given.
- E4.8 The Contract Administrator shall have full access for inspection and control of testing of materials at the Site to determine whether the material is being selected and placed or Work being conducted in accordance with this Specification.

## **E5. SUPPLY AND PLACEMENT OF RIP-RAP EROSION PROTECTION AND DRAINAGE ROCK**

### DESCRIPTION

- E5.1 General
- E5.1.1 This specification shall cover the supply and placement of Rip-Rap (Rockfill 4) in the area of the primary failure zone and the Drainage Rock (Rockfill 5) at the exit of four (4) culverts.
- (a) Rock specifications are given on Drawings 6 and 7 for Rockfill 4 and 5, respectively.
- E5.1.2 The Work to be done by the Contractor shall include superintendence, labour, materials, and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified and shown on the drawings.

### MATERIALS

- E5.2 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this specification.
- E5.3 Rockfill 4 and Rockfill 5
- E5.3.1 The rock to be used as rip-rap (Rockfill 4) shall consist of clean free draining material, and contain no organic, roots, silts, clay or any other deleterious material that would detract from the strength and drainage characteristics of clean rockfill. The rock shall be durable, comprised of high quality durable white quarried limestone/dolomite. The Contract Administrator shall examine the rock for approval prior to placement. Rockfill 4 shall have a maximum size of 450 mm in diameter, a minimum diameter of 50 mm, and an average size (D50) 250 mm. Rockfill 5 shall have a maximum size of 150 mm in diameter, a minimum diameter of 100 mm, and an average size (D50) 125 mm. Both rockfills shall have a maximum absorption of 2.5% (ASTM C 127). The placement of both rockfill types will not be permitted without providing the source and supplier. Acceptance of the rock will be provided upon completion of an inspection by the Contract Administrator. At the discretion of the Contract Administrator, testing will be performed on samples. The cost of the tests will be paid for by the The City, unless more than two (2) tests are required due to poor rock quality, then the cost will be borne by the Contractor.

### EQUIPMENT

- E5.4 All equipment, implements, tools and facilities used shall be of a size and type as required to complete the Work in a reasonable time. The Contractor shall keep all equipment in good Working order, and have sufficient equipment for replacement at all times, as required.

### CONSTRUCTION METHODS

- E5.5 Rip Rap and Drainage Rock Placement
- E5.5.1 The rockfill for the rip-rap and the drainage rock shall be pushed or rolled into place in such a manner that segregation does not occur, and that the larger rocks are uniformly distributed with the smaller rocks. Hand placing and leveling may be required and shall be done on an as required basis in order to produce a uniform surface. The shape and

dimensions of the rip-rap (Rockfill 4) and drainage rock (Rockfill 5) are shown on Drawings 2, 4 and 6, respectively. Final elevations and thicknesses shall be within  $\pm 0.1$  m of the dimensions and thickness shown on the drawings, and final approval of the above will be provided by the Contract Administrator.

#### QUALITY CONTROL

- E5.6 All workmanship and materials furnished and supplied under this Specification will be subject to inspection by the Contract Administrator, including all operations from the selection and production of materials through the final acceptance of the specific Work. The Contractor shall be responsible for the control of all operations to complete the Work, except the inspections or approvals that have been previously given.
- E5.7 The Contract Administrator shall have full access for inspection and control of testing of materials at the Site to determine whether the material is being selected and placed or Work being conducted in accordance with this Specification.

### **E6. SUPPLY AND PLACEMENT OF CHAIN LINK FENCING**

#### DESCRIPTION

- E6.1 General
- E6.1.1 This specification shall cover the supply and placement of the chain link fence along approximately 110 m of walkway between Station 0+92 to Station 2+02 and between Station 2+47 to Station 2+51.
- E6.1.2 The Work to be done by the Contractor shall include superintendence, labour, materials, and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified and shown on the drawings.

#### MATERIALS

- E6.2 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this specification.
- E6.3 Chain Link Fencing
- E6.3.1 All components of the chain link fence are to be galvanized, which include but are not limited to the parts, clamps, tops and mesh.

#### EQUIPMENT

- E6.4 All equipment, implements, tools and facilities used shall be of a size and type as required to complete the Work in a reasonable time. The Contractor shall keep all equipment in good working order, and have sufficient equipment for replacement at all times, as required.

#### CONSTRUCTION METHODS

- E6.5 The installation of the fence shall be located and have the shape and dimensions as specified on Drawings 6 and 7.
- E6.6 The galvanized fence posts shall be grouted or epoxied in place with the remaining cross braces and wire mesh constructed and fastened in accordance with the manufacturer's recommendations and the *The City of Winnipeg Standard Construction Specification CW 3550 Chain Link Fencing Specification*  
[http://www.winnipeg.ca/finance/findata/matmgt/std\\_const\\_spec/current/Docs/CW3550.pdf](http://www.winnipeg.ca/finance/findata/matmgt/std_const_spec/current/Docs/CW3550.pdf) .

## **E7. WALKWAY RE-GRADING & RE-SURFACING**

### **E7.1 General**

- E7.1.1 This specification shall cover the re-grading and re-surfacing along approximately 170 m of the walkway.
- E7.1.2 The Work to be done by the Contractor shall include superintendence, labour, materials, and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified and shown on the drawings.

### **MATERIALS**

- E7.2 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this specification.

### **E7.3 Walkway Re-surfacing – Rockfill 1**

- E7.3.1 Rockfill 1 shall consist of 6 mm ( ¼ ") limestone down, and contain no organic, roots, silts, clay or any other deleterious material that would detract from the strength. The rock shall be durable, comprised of high quality durable white quarried limestone. The Contract Administrator shall examine the rock for approval prior to placement. The grading and durability shall be in accordance with the typical City of Winnipeg standards. No placement will be permitted without providing the source and supplier, and acceptance of the rock will be provided upon completion of an inspection by the Contract Administrator. At the discretion of the Contract Administrator, testing will be performed on samples. The cost of the tests will be paid for by the The City, unless more than two (2) tests are required due to poor rock quality, then the cost will be borne by the Contractor.

### **EQUIPMENT**

- E7.4 All equipment, implements, tools and facilities used shall be of a size and type as required to complete the Work in a reasonable time. The Contractor shall keep all equipment in good working order, and have sufficient equipment for replacement at all times, as required.

### **CONSTRUCTION METHODS**

### **E7.5 Re-grading and Re-surfacing**

- E7.5.1 The walkway shall remain essentially unchanged in width throughout, except in the areas where sediment guards and the primary failure zone retaining wall are to be installed. The intent is to have the walkway kept at a 1.8 m width throughout, but realizing some zones may narrow to a 1.5 m width while other zones maybe as wide as 2.0 m.
- E7.5.2 Re-surfacing consists of the placement of a single 50 mm thick lift of Rockfill 1 along the entire length of the walkway as shown in Drawings 1 and 7. Upon completion of placement, the rockfill shall be hard compacted such that no soft spots or rutting exists. Hard compaction shall be taken as a minimum of 98% of the materials maximum dry density at optimum moisture content.

### **QUALITY CONTROL**

- E7.6 All workmanship and materials furnished and supplied under this Specification will be subject to inspection by the Contract Administrator, including all operations from the selection and production of materials through the final acceptance of the specific Work. The Contractor shall be responsible for the control of all operations to complete the Work, except the inspections or approvals that have been previously given.
- E7.7 The Contract Administrator shall have full access for inspection and control of testing of materials at the Site to determine whether the material is being selected and placed or Work being conducted in accordance with this Specification.

## **E8. SITE CLEAN-UP**

### **E8.1 General**

E8.1.1 This specification shall cover the Work required under the heading Site Clean-Up as shown in Form B: Schedule of Unit Prices, and shall include the removal of excess debris, and replacement or repair of any damage to the Site. The area used for Site access shall be reshaped to restore the original appearance prior to the Contractor arriving on Site.

The Work to be done by the Contractor under this specification shall include superintendence, labour, materials, and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified.

### **EQUIPMENT**

E8.2 All equipment, implements, tools and facilities used shall be of a size and type as required to complete the Work in a reasonable time. The Contractor shall keep all equipment in good working order, and have sufficient supply or equipment for replacement at all times, as required.

### **CONSTRUCTION METHODS**

E8.3 The shoreline along the Site shall be left in a neat manner, and deemed acceptable to the Contract Administrator.

E8.4 The upper bank area used for Site access shall also be restored to its original appearance before construction and shall be left in a clean neat order. If required, any trees removed during construction shall be replaced. Surface soils on the Site east of the top of bank shall be bladed as required to ensure no ruts are left on the Site and any granular material placed for access is removed or compacted in place. The placement of topsoil and seed in damaged areas shall be completed on an as required basis and is considered incidental to the contract.