

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 729-2013

ARDEN SEVEN COMMEMORATION SITE DEVELOPMENT – JULES MAGER PARK

TABLE OF CONTENTS

PART A - BID SUBMISSION

	A: Bid B: Prices	1 3
PART B	- BIDDING PROCEDURES	
B2. B3. B4. B5. B6. B7. B8. B9. B10. B11. B12. B13. B14. B15.	Contract Title Submission Deadline Site Investigation Enquiries Confidentiality Addenda Substitutes Bid Components Bid Prices Qualification Opening of Bids and Release of Information Irrevocable Bid Withdrawal of Bids Evaluation of Bids Award of Contract	1 1 1 1 2 2 3 4 4 5 5 6 6 6 7
PART C	- GENERAL CONDITIONS	
C0.	General Conditions	1
PART D	- SUPPLEMENTAL CONDITIONS	
D2. D3. D4. D5.	General Conditions Scope of Work Contract Administrator Contractor's Supervisor Ownership of Information, Confidentiality and Non Disclosure Notices	1 1 1 1 1
D7. D8. D9. D10. D11.	nissions Authority to Carry on Business Safe Work Plan Insurance Performance Security Subcontractor List Detailed Work Schedule	2 2 3 3 3
D13. D14. D15. D16.	dule of Work Commencement Substantial Performance Total Performance Liquidated Damages Scheduled Maintenance	4 4 4 5 5
D18. D19. D20. D21.	rol of Work Job Meetings Drawings and Specifications Prime Contractor – The Workplace Safety and Health Act (Manitoba) The Workplace Safety and Health Act (Manitoba) – Qualifications	5 5 5 6
weas	surement and Payment	

D22. Payment

3

3

Warranty

D23.	Warranty	6
Form	n H1: Performance Bond n H2: Irrevocable Standby Letter of Credit n J: Subcontractor List	7 9 11
PART E	- SPECIFICATIONS	
Gene	eral	
E1.	Applicable Specifications and Drawings	1
E2.	Hazardous Materials	1
Gene	eral Requirements	
	Site Access	1
E4.	Permits, Notices, Licenses, Certificates, Laws And Rules	1
E5.	Protection of Survey Infrastructure	2
E6.	Damage To Existing Structures And Property	2
E7.	Existing Services and Utilities	2
E8.	Protection of Existing Trees	2
E9.	Temporary Utilities	3
E10.	Site Enclosures	3

- E10. Site Enclosures
- E11. Layout
- E12. Site Restoration

Works

WUIKS	
E13. Removals and Relocations	3
E14. Site Preparation and Grading	4
E15. Rock Work	5
E16. Unit Paving	6
E17. Granular Paving	6
E18. Concrete Work	7
E19. Masonry	8
E20. Topsoil and Sodding	9
E21. Site Furniture	9

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 ARDEN SEVEN COMMEMORATION SITE DEVELOPMENT – JULES MAGER PARK

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, September 19, 2013.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

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

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

- B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:
 - (a) was known to the Bidder before receipt hereof; or
 - (b) becomes publicly known other than through the Bidder; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 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.
- B6.2 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.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/</u>
- B6.2.2 The Bidder is responsible for ensuring that he/she 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.
- B6.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 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.
- B7.4 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.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her 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.
- B7.6 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.

- B7.6.1 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/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his/her 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.
- B7.9 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.
- B7.10 Notwithstanding B7.2 to B7.9, and in accordance with B8.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B15.1(a).

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
 - (a) Form A: Bid;
 - (b) Form B: Prices.
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 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.
- B8.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B8.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:

The City of Winnipeg Corporate Finance Department Materials Management Division 185 King Street, Main Floor Winnipeg, MB R3B 1J1

- B8.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B8.6 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.7 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).
- B8.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204 949-1178.
- B8.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.

B8.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 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/her own name, his/her 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/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 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.
- B9.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
 - (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
 - (d) if the Bidder is carrying on business under a name other than his/her 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.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.4.2 All signatures shall be original.
- B9.5 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.

B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.2 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.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 The Bidder shall state a separate price in Canadian funds for each of the following items of Work on Form B: Prices:
 - (a) Separate Price Item No. 1 shall be the amount to be deducted from the total bid price if the Unit Paving is deleted and replaced with Red Shale paving and Topsoil and Sodding, in accordance with E16, E17, and E20 of the Specifications;

- (b) Separate Price Item No. 2 shall be the amount to be deducted from the total bid price if the High Rock Wall is deleted and replaced with Topsoil and Sodding, in accordance with E15 and E20 of the Specifications;
- B10.5 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. QUALIFICATION

- B11.1 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.
- B11.2 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 <u>http://www.winnipeg.ca/matmgt/debar.stm</u>
- B11.3 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).
- B11.4 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.
- B11.5 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.

B12. OPENING OF BIDS AND RELEASE OF INFORMATION

- B12.1 Bids will not be opened publicly.
- 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 <u>http://www.winnipeg.ca/matmgt/bidopp.asp</u>
- 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 9 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 for the time period specified in Paragraph 9 of Form A: Bid.

B14. WITHDRAWAL OF BIDS

- B14.1 A Bidder may withdraw his/her 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 10 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 10 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/her Bid after the Submission Deadline but before his/her 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.

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 there from (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B7.
- 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/her Bid or in other information required to be submitted, that he/she 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 adjusted, if necessary, as follows:
 - (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price; or
 - (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting separate prices in the order listed in B10.4 until a Total Bid Price within the budgetary provision is achieved, i.e., Total Bid Price = Total Bid Price - Separate Price No. 1 -Separate Price No. 2.
- B15.4.1 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/her Bid upon written request to the Contract Administrator.
- B16.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B16.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The General Conditions for Construction are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/gen_cond.stm</u>
- 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 site development work including site grading and sodding, rock retaining walls, unit paver and granular pathways, concrete piles and foundations, masonry work and site furniture.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is David Wagner Associates Inc., represented by:

David Wagner Landscape Architect

Telephone No. 204-452-2426 Email Address dwagner @dwla.ca

- D3.2 At the pre-construction meeting, David Wagner will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.
- D3.3 Bids Submissions must be submitted to the address in B8.5.

D4. CONTRACTOR'S SUPERVISOR

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

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.
- D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
 - (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

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 email address identified in D3.1.
- 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 facsimile number:

The City of Winnipeg Legal Services Department Attn: Director of Legal Services

Facsimile No.: 204 947-9155

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 website 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 and David Wagner Associates Inc. added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or

damage including personal injuries and death resulting from any one accident or occurrence;

- (c) 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 Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.
- 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 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
 - (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- 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 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

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 seven (7) Calendar Days from notification of the award of Contract.

D12. DETAILED WORK SCHEDULE

- D12.1 The Bidder shall provide 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 C4.1 for the return of the executed Contract..
- D12.2 The detailed work schedule shall consist of the following:
 - (a) Start of Work on Site;
 - (b) Excavation and site preparation;
 - (c) Masonry;

- (d) Site development and site restoration;
- (e) Completion.

SCHEDULE OF WORK

D13. COMMENCEMENT

- D13.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D13.2 The Contractor shall not commence any Work on the Site until:
 - (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence 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 inD8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10; and
 - (vi) the Subcontractor list specified in D11; and,
 - (vii) the Detailed Work Schedule specified in D12.
 - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D13.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order.
- D13.4 The City intends to award this Contract by October 1, 2013.
- D13.4.1 If the actual date of award is later than the intended date, the dates specified for Critical Stages, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D14. SUBSTANTIAL PERFORMANCE

- D14.1 The Contractor shall achieve Substantial Performance by November 4, 2013.
- D14.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D14.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D15. TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance by November 11, 2013.
- D15.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D15.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D16. LIQUIDATED DAMAGES

- D16.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City five hundred dollars (\$500) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D17. SCHEDULED MAINTENANCE

- D17.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
 - (a) Sodding as specified in E20.3.
- D17.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D18. JOB MEETINGS

- D18.1 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.
- D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D19. DRAWINGS AND SPECIFICATIONS

- D19.1 The Contractor shall maintain one full size set of Drawings and Specifications on Site at all times during construction.
- D19.2 The Contractor shall maintain a set of record drawings on Site marking all Changes in Work to be submitted to the Contract Administrator at Total Performance.

D20. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D20.1 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).

D21. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D21.1 Further to B11.3(c), the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance.

MEASUREMENT AND PAYMENT

D22. PAYMENT

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

WARRANTY

D23. WARRANTY

D23.1 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. 729-2013

ARDEN SEVEN COMMEMORATION SITE DEVELOPMENT – JULES MAGER PARK

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 729-2013

ARDEN SEVEN COMMEMORATION SITE DEVELOPMENT – JULES MAGER PARK

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 (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per:

(Authorized Signing Officer)

Per:

(Authorized Signing Officer)

FORM J: SUBCONTRACTOR LIST (See D11)

ARDEN SEVEN COMMEMORATION SITE DEVELOPMENT – JULES MAGER PARK

Name	Address
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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 <u>http://www.winnipeg.ca/matmgt/Spec/Default.stm</u>
- 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:

	Drawing No.	Drawing Name/Title
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- L0 Site Survey
- L1 Landscape Development Plan
- L2 Removals & Tree Protection Plan
- L3 Landscape Layout Plan
- L4 Grading Schematic
- L5 Details

E2. HAZARDOUS MATERIALS

E2.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

GENERAL REQUIREMENTS

E3. SITE ACCESS

- E3.1 Contractors are to work only within the Construction Boundary as shown on the Drawings or as directed by the Contract Administrator.
- E3.2 Access to the Sites will be determined at the pre-construction meeting. The access areas shall be maintained and restored by the Contractor at his own expense and approved by the Contract Administrator.
- E3.3 The Contractor shall be restricted to the Site access locations and routes only so that there is a minimum of disturbance to the existing ground surface. Damage to areas beyond the marked routes shall be repaired by and at the expense of the Contractor to the satisfaction of the Contract Administrator.

E4. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

E4.1 Further to C: 6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.

- E4.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- E4.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E4.4 All Work shall be performed in compliance with Manitoba Workplace Safety and Health.
- E4.5 All Work shall be performed in compliance with Manitoba Workplace Safety and Health Fall Protection guidelines.
- E4.6 The Contractor and Sub-contractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Safety and Health Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

E5. PROTECTION OF SURVEY INFRASTRUCTURE

- E5.1 Further to CW1130, the location of survey monuments are shown on the Drawings.
 - (i) Geomatics Job Number is 20130113.
 - (ii) Geomatics Branch is to be contacted at least 5 Working Days in advance of construction, at 204-918-1360, to schedule an appointment to provide the monument protection services required.

E6. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

E6.1 Further to C: 17, all necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, other existing facilities and equipment at the Sites of the Work. For all damage incurred thereto in the performance of the Work, the Contractor shall upon instructions from and to the satisfaction of the Contract Administrator and the owners thereof, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the Contract Administrator and the owners thereof. The cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City and David Wagner Associates Inc. from all claims made directly or indirectly against it in respect to any such damage.

E7. EXISTING SERVICES AND UTILITIES

E7.1 No responsibility will be assumed by the City of Winnipeg for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City of Winnipeg shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

E8. PROTECTION OF EXISTING TREES

- E8.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing trees within the limits of the construction area:
 - (a) Trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2440 mm wood planks, or other suitable protection as approved by the Contract Administrator. Do not use nails or other fasteners that penetrate the tree trunk. The width and length of strapping may be reduced to suit the tree being protected as approved by the Contract Administrator.
 - (b) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches) where 1

inch diameter equals 1 foot measured from the outside edge of the trunk of the tree at 6 inches above grade. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.

- (c) Equipment shall not be operated within the drip line without written permission from the Contract Administrator. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the drip lines of trees. The drip line of a tree shall be considered to be the entire ground surface located directly beneath the tree and radiating out to 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.
- (d) Repair, replace and maintain tree protection materials during construction until the Project completion.
- (e) Carefully remove safety fencing and strapping material without harming the trees as soon as the construction and restoration Work is complete.

E9. TEMPORARY UTILITIES

- E9.1 Further to C: 6.12, the Contractor shall make his own arrangements in connection with the temporary use of lighting, power, gas, sewer, water or other utilities, and pay all costs in connection therewith.
- E9.2 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

E10. SITE ENCLOSURES

- E10.1 Temporary Site enclosures, if determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.
- E10.2 Site enclosures shall be considered incidental to the Contract Work.

E11. LAYOUT

- E11.1 The Contractor is responsible for the layout of all Work.
- E11.2 The Contract Administrator shall be advised of the staking of the layout at least twenty-four (24) hours in advance in order that the layout may be inspected and adjusted as required prior to construction.

E12. SITE RESTORATION

E12.1 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified, the Contractor shall restore all areas of the Site beyond the established limit of Work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.

WORKS

E13. REMOVALS AND RELOCATIONS

- E13.1 General Description
 - (a) This specification shall cover the relocation of:
 - (i) Park Sign
 - (ii) Waste Receptacle

(b) This specification shall also cover any demolition and removals necessary to construct the project, which may be considered incidental to other items of Work.

E13.2 Removals

- (a) All materials, to be demolished and removed, are to be removed from the Site and disposed of in a safe and legal manner.
- E13.3 Relocations
 - (a) The sign and waste receptacle are to be removed and safely stored prior to construction.
 - (b) The sign and waste receptacle are to be reinstalled as shown on the Drawings.
 - (i) New posts may be supplied and installed to match existing and standard City details.
- E13.4 Site Restoration
 - (a) Any holes left by the removal of posts or foundations shall be filled with compacted clean clay fill to meet the adjacent grades and be restored to match surrounding conditions to the satisfaction of the Contract Administrator.
 - (b) Any site restoration required due to removals, and not shown on the Drawings as areas for new development, shall be considered incidental to the removal Work.
- E13.5 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price for the Items of Work listed below, which price shall include all costs of removal and reinstallation, and any associated Site restoration.
 - (b) Items of Work:
 - (i) Relocation of Sign and Waste Receptacle

E14. SITE PREPARATION AND GRADING

- E14.1 General Description
 - (a) Further to CW 3110 and CW 3170, this specification shall cover all aspects of:
 - (i) the removal of turf and other surface materials as necessary to construct the project.
 - (ii) the grading and preparation of areas for topsoil and sodding.

E14.2 Materials

- (a) Clean clay fill material shall be used in areas requiring non-aggregate backfill or to replace unacceptable material excavated from the Site.
- E14.3 Methods
 - (a) Excavations
 - (i) As per CW3110.
 - (ii) The existing turf is to be cut with a sod cutter to the outlines of the area to be excavated.
 - (iii) All rubble, stones, silt, rubbish and any surplus material shall be legally disposed of off-site.
 - (b) Site Grading for Areas to be Sodded
 - (i) The construction area is to be excavated or filled to achieve rough grade.
 - (ii) Rough grade is to be to levels, profiles and contours allowing for surface treatment as indicated on Drawings.
 - (iii) Wherever the proposed Site grading is to meet existing Site grades, the grades are to match and positive Site drainage is to be maintained. Where sloped areas meet

flat areas, at both top and bottom of slopes, the transition shall be rounded to the extent that future maintenance by turf mowing equipment can be easily done.

- (iv) In fill areas, the Contractor shall scarify the existing ground to a minimum depth of 150mm prior to the placement of any fill.
- (v) Compaction shall include the use of suitable compaction equipment as approved by the Contractor to achieve a minimum compaction of 95% Proctor Density.
- (vi) All surplus materials shall be disposed of off Site in a legal manner and as directed by the Contractor.
- (vii) Following rough grading and compaction, the Work area shall be fine graded to provide a maximum deviation of 25mm in 10m from the design grade with no low areas to hold water. The finished surface of all disturbed areas shall be dragged smooth in such a manner that there are no loose soil particles greater than 25mm in maximum dimensions.
- (viii) Site grading for areas to be sodded shall be considered incidental to the Topsoil and Sodding and no separate payment shall be made.
- E14.4 Basis of Payment
 - (a) All Work under this section shall be considered incidental to the Items of Work for the various surface treatments and no separate payment shall be made.

E15. ROCK WORK

- E15.1 General Description
 - (a) This specification shall cover the supply and installation of:
 - (i) High and Low Rock Retaining Walls
 - (ii) Memorial Stones for the future installation of plaques by others.
- E15.2 Materials Retaining Walls
 - (a) Rock: Rectangular limestone blocks from Mariash Quarry, Stonewall, or approved substitute in accordance with B7.
 - (b) Sizes to be 750 wide x 600 high x lengths ranging from 600 to 1400mm.
 - (i) Sharp edges and loose shards are to be removed.
 - (c) The rocks are to be inspected by the Contract Administrator prior to installation on the Site.
 - (d) Granular base: 50mm down crushed limestone.
 - (e) Non-woven geotextile to CW 3130.
- E15.3 Materials Memorial Stones
 - (a) Natural, direct from the quarry bed limestone block, dimensions as shown on the Drawings.
 - (b) A smooth face is to be cut on the slanted edge as shown on the Drawings.
 - (c) Granular base: 50mm down crushed limestone.
 - (d) Non-woven geotextile to CW 3130.
- E15.4 Methods
 - (a) Further to CW 3110 and CW 3130, the granular base is to be prepared for the retaining wall blocks and the memorial stone as shown on the Drawings. The base is to be placed over geotextile and compacted to minimum 95% Standard Proctor Density.
 - (b) The retaining wall stones are to be placed to form a smooth arc or straight line as shown on the Drawings and are to fit tight together.
 - (c) Where a second course of blocks are installed, the joins between rocks are to be offset from the joins below.

- (d) The layout and height of the wall, where it meets the Moon Gate, is to be determined and adjusted on site in consultation with the Contract Administrator.
- (e) The berms behind the retaining walls are to be as shown on the Drawings and as per E14.
- (f) The two (2) memorial stones shall be installed at the ends of the Low Rock Wall. They shall be set level with the smooth face facing outward as shown on the Drawings. They are to fit tight to the Low Rock Retaining Wall.
- E15.5 Basis of Payment
 - (a) Payment for Work, specified under this section, shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below. The price shall include all costs of excavation, material supply and proper material installation. Rough and final grading and Site restoration work shall be considered incidental to the Work.
 - (b) A Separate Price is to be provided for the deletion of the High Rock Wall, to be replaced by Topsoil and Sodding. The berm located behind the High Rock Wall is to remain but be shaped to have no wall.
 - (c) Items of Work:
 - (i) Low Rock Retaining Wall
 - (ii) High Rock Retaining Wall
 - (iii) Memorial Stones

E16. UNIT PAVING

- E16.1 General Description
 - (a) Further to CW 3110, CW 3130 and CW 3330, this specification shall cover the supply and installation of unit paving, including excavation, compaction, sub-base and base construction, edging and unit pavers.
- E16.2 Materials
 - (a) Unit paver: Barkman Grand Flagstone, colour to be "Fon du Lac".
 - (b) Plastic Edge Support: Snap Edge
 - (c) Granular base: 20mm down crushed limestone.
 - (d) Non-woven geotextile to CW 3130.
- E16.3 Methods
 - (a) Further to CW 3110 and CW 3330, unit paving to be installed as per Drawings and manufacturer's specifications.
 - (b) Snap Edge is to be installed as per manufacturer's specifications.
- E16.4 Basis of Payment
 - (a) Payment for Work, specified under this section, shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below. The price shall include all costs of excavation, material supply and proper material installation. Rough and final grading and Site restoration work shall be considered incidental to the Work.
 - (b) A Separate Price is to be provided for the deletion of the Unit Paving, to be replaced by Red Shale Paving at the path entrance and by Topsoil and Sodding between the Chairs and the High Rock Wall.
 - (c) Items of Work:
 - (i) Unit Paving

E17. GRANULAR PAVING

E17.1 General Description

(a) Further to CW 3110 and CW 3130, this specification shall cover the supply and installation of crushed red shale granular paving, including excavation, compaction, sub-base and base construction, and granular surfacing.

E17.2 Materials

- (a) Red shale: 6mm down
 - (i) Contractor is to submit a sample to the Contract Administrator for approval a minimum of two weeks before installation.
- (b) Granular base: 50mm down crushed limestone.
- (c) Non-woven geotextile to CW 3130.

E17.3 Methods

- (a) Further to CW 3110 and CW 3130, the granular paving is to be installed as shown on the Drawings.
- (b) Excavation and grades are to be reviewed by the Contract Administrator prior to installation of the geotextile and base material.
- (c) Minimal excavation is to be done in vicinity of existing trees and heavy equipment shall not be used on sections of path running close between trees.
- (d) The red shale is to be kept off the unit paving and other adjacent materials.
- E17.4 Basis of Payment
 - (a) Payment for Work, specified under this section, shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below. The price shall include all costs of excavation, material supply and proper material installation. Rough and final grading and Site restoration work shall be considered incidental to the Work.
 - (b) Items of Work:
 - (i) Red Shale Granular Paving

E18. CONCRETE WORK

- E18.1 General Description
 - (a) Further to CW 3110 and CW 3310, this specification shall cover the supply and installation of:
 - (i) Concrete foundation and piles for the Moon Gate
 - (ii) Concrete foundation and piles for the chairs
- E18.2 Materials and Methods
 - (a) Concrete piles and foundations to CW 3310 and as specified on the Drawings.
 - (b) Concrete foundation
 - (i) Light broom finish on the foundation slab for the chairs.
 - (ii) Layout and grades are to be as shown on the Drawings.
 - (iii) Granular base and formwork are to be reviewed on Site by the Contract Administrator prior to pouring of concrete.
- E18.3 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of base preparation, proper material installation, and any associated Site restoration.
 - (b) Items of Work
 - (i) Concrete Foundations and Piles for Moon Gate and Chairs

E19. MASONRY

- E19.1 General Description
 - (a) This specification shall cover the supply and installation of the masonry Moon Gate.
- E19.2 Quality Assurance
 - (a) The masonry contractor shall have a minimum of five years experience on projects of this type and magnitude, and shall provide continuous active supervision while masonry work is in progress.
 - (b) All masonry in accordance with CSA-A371.
 - (c) Design masonry connectors in accordance with CSA-A370.
 - (d) Mortar and grout in accordance with CSA-A179.

E19.3 Materials

- (a) Stone: Limestone, split face with split bed stone, no saw cuts. Random sizes.
- (b) Inside Fill: Bricks or concrete blocks as required
- (c) Formwork as required to construct the Moon Gate.
- (d) Anti graffiti coating.
- E19.4 Shop Drawings and Submittals
 - (a) Further to CW 1110, shop drawings shall be submitted to the Contract Administrator within fourteen (14) days of receipt of a Purchase Order.
 - (b) Shop drawings shall include, but not be limited to, structural formwork, masonry connectors and accessories, and any/all information necessary to convey the method of construction to create the structure shown on the Drawings and to provide a structurally sound masonry Moon Gate.
 - (c) Samples of the stone and grout shall be submitted to the Contract Administrator for approval a minimum of two weeks before installation. A mock-up may be required.
- E19.5 Methods
 - (a) Masonry work is to be coordinated with the construction of the concrete foundations. Commencement of installation constitutes acceptance of the foundations.
 - (b) Masonry work shall be done during optimal weather conditions and masonry shall be protected using waterproof, non-staining coverings during rains and when work is discontinued.
 - (c) Lines and levels shall be established and maintained.
 - (d) Masonry shall be constructed in accordance with CSA-A371.
 - (e) Adjacent surfaces shall be kept clean, dry and free of mortar droppings.
 - (f) A water repellent coating shall be applied in accordance with manufacturer's directions.
 - (g) An anti graffiti coating shall be applied in accordance with manufacturer's directions.
- E19.6 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of supply and proper material installation, formwork setup and removal, masonry protection and any associated Site restoration.
 - (b) Items of Work
 - (i) Moon Gate

E20. TOPSOIL AND SODDING

- E20.1 General Description
 - (a) This specification shall cover the supply and installation of topsoil and sod.

E20.2 Materials and Methods

- (a) Topsoil: As per CW 3540.
- (b) Sodding
 - (i) As per CW 3510 and SD 243.
 - (ii) Sod shall be mineral base.
- (c) Areas to be sodded shall be excavated and/or filled with clean fill to meet the grades required for the installation of topsoil and sod.
- (d) Where new sodding meets existing turf, the edges are to be cut neatly in straight lines and new sod is to be installed to match the existing grades of the surrounding turf. Seams between new and old turf are to be topdressed, seeded and rolled.
- (e) Sodding along pathways shall be a minimum width of one strip of sod. Excess granular base shall be removed along pathways to ensure proper topsoil depth.
- (f) Only those areas shown on the Drawings as requiring sodding shall be paid for under this section. All other Site restoration shall be considered incidental to other Works.
- E20.3 Maintenance Period
 - (a) The Contractor shall maintain the sod for 30 Calendar Days after the completion of the installation or until such a time as the turf is established in accordance with CW 3510.
- E20.4 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, proper material installation, maintenance and all other items incidental to the Work.
 - (b) Items of Work
 - (i) Topsoil and Sodding

E21. SITE FURNITURE

- E21.1 General Description
 - (a) This specification shall cover the supply and installation of the chairs as shown on the Drawings.
- E21.2 Materials
 - (a) Chairs: Silla by Landscapeforms (1-800-521-2546) as shown on the Drawings, or approved substitute in accordance with B7.
- E21.3 Methods
 - (a) Chairs are to be installed according to Drawings and manufacturer's specifications, using approved non-rusting, vandal resistant fasteners to ensure solid, durable, finished work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work.
 - (b) Foundations as per E18.
 - (c) The chairs are to be set in a smooth arc and rotated along the radii of the arc. They are to be equally spaced.
 - (d) All furnishings are to be installed plumb and true to correct elevations. The Contractor shall confirm proposed locations with the Contract Administrator prior to installation.

- (e) Chairs are to be kept clean of any granular, concrete, asphalt or other materials. Any damaged surfaces shall be touched-up to the satisfaction of the Contract Administrator.
- E21.4 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per unit basis, for the Items of Work listed below, which price shall include all costs of proper material installation. Site restoration work and required foundations shall be considered incidental to the Work.
 - (b) Items of Work:
 - (i) Chairs