



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 736-2017

**KINGS PARK – DESIGN / BUILD FOR THE RE-ESTABLISHMENT OF THE
WATERFALL**

TABLE OF CONTENTS

PART A - PROPOSAL SUBMISSION

Form A: Proposal	1
Form B: Prices	4

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Confidentiality	1
B6. Addenda	2
B7. Substitutes	2
B8. Proposal Submission	3
B9. Proposal (Section A)	4
B10. Prices (Section B)	4
B11. Experience of Proponent and Subcontractors (Section C)	5
B12. Project Understanding and Methodology (Section D)	5
B13. Project Schedule (Section E)	6
B14. Disclosure	6
B15. Qualification	6
B16. Opening of Proposals and Release of Information	7
B17. Irrevocable Offer	8
B18. Withdrawal of Offers	8
B19. Interviews	8
B20. Negotiations	8
B21. Evaluation of Proposals	9
B22. Award of Contract	9

PART C - GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	1
D4. Contractor's Supervisor	1
D5. Ownership of Information, Confidentiality and Non Disclosure	2
D6. Notices	2

Submissions

D7. Authority to Carry on Business	2
D8. Safe Work Plan	2
D9. Insurance	3
D10. Performance Security	3
D11. Subcontractor List	4
D12. Detailed Work Schedule	4

Schedule of Work

D13. Commencement	4
D14. Critical Stages	5
D15. Substantial Performance	5
D16. Total Performance	5
D17. Liquidated Damages	5
D18. Scheduled Maintenance	6

Control of Work

D19. Job Meetings	6
D20. Drawings and Specifications	6
D21. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	6
D22. The Workplace Safety and Health Act (Manitoba) – Qualifications	6
D23. Safety	7
D24. Site Cleaning	7
D25. Deficiencies	7

Measurement and Payment

D26. Payment	7
--------------	---

Warranty

D27. Warranty	8
Form H1: Performance Bond	9
Form H2: Irrevocable Standby Letter of Credit	11
Form J: Subcontractor List	13

PART E - SPECIFICATIONS

General

E1. Applicable Specifications and Drawings	1
--	---

General Requirements

E2. Permits, Notices, Licenses, Certificates, Laws And Rules	1
E3. Protection of Survey Infrastructure	1
E4. Damage To Existing Structures And Property	2
E5. Existing Services and Utilities	2
E6. Temporary Utilities	2
E7. Site Access	2
E8. Site Enclosures	2
E9. Protection of Existing Trees	2
E10. Stakes and Marks	3
E11. Samples	4
E12. Test Reports	4

DESIGN / BUILD

E13. Complete Project	4
E14. Work Experience	4
E15. Design Services	4

Site Work

E16. Site Preparation	5
E17. Renovation of Waterfall Basins and Channel	6
E18. Site Restoration	9

Civil, Mechanical and Electrical

E19. Seasonal Water line	10
E20. Mechanical for Waterfall	11
E21. Electrical	12
E22. Commissioning	13

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 KINGS PARK – DESIGN / BUILD FOR THE RE-ESTABLISHMENT OF THE WATERFALL

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, September 14, 2017.

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

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

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the Contract Administrator or an authorized representative will be available at the Site from 3:30 PM to 4:30 PM on August 30, 2017 to provide Proponents access to the Site.

B3.2 The Proponent is advised that the extent of the Work and the existing electrical and water systems will be reviewed at this meeting.

B3.3 The Proponent shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Proponent'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 Proponent finds errors, discrepancies or omissions in the proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

B4.3 If the Proponent is unsure of the meaning or intent of any provision therein, the Proponent should request clarification as to the meaning or intent prior to the Submission Deadline.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator to all Proponents by issuing an addendum.

B4.5 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator only to the Proponent who made the enquiry.

B4.6 The Proponent 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 Proponent by the City or acquired by a Proponent 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 Proponent before receipt hereof; or
- (b) becomes publicly known other than through the Proponent; or

(c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Request for Proposal 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 Request for Proposal, 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 <http://www.winnipeg.ca/matmgt/bidopp.asp>.

B6.2.2 The Proponent 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.

B6.3 The Proponent shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B7. SUBSTITUTES

B7.1 The Work is based on the Plant, Materials and methods specified in the Request for Proposal.

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 Proponent 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, to the Proponent who requested approval of the substitute.
- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Proponents. The Proponent requesting and obtaining the approval of a substitute shall be 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 Proponent 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 Proponent 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 B21.
- 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.

B8. PROPOSAL SUBMISSION

- B8.1 The Proposal shall consist of the following components:
- (a) Form A: Proposal;
 - (b) Form B: Prices;
- B8.2 The Proposal should also consist of the following components:
- (a) Experience of Proponent and Subcontractors (Section C) in accordance with B11;
 - (b) Project Understanding and Methodology (Section D) in accordance with B12; and
 - (c) Project Schedule (Section E) in accordance with B13.
- B8.3 Further to B8.1, all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B8.4 Further to B8.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.
- B8.5 Proponents should submit one (1) unbound 8.5” x 11” original (marked “original”) including drawings and four (4) copies (copies can be in any size format) for sections identified in B8.1 and B8.2.
- B8.6 Proposal format, including type of binding, number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their team.
- B8.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B21.1(a).
- B8.8 The Proposal shall be submitted enclosed and sealed in an envelope/package clearly marked with the RFP number and the Proponent's name and address.

B8.9 Proposals submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B8.10 Proposals shall be submitted to:

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

B8.11 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B9. PROPOSAL (SECTION A)

B9.1 The Proponent shall complete Form A: Proposal, making all required entries.

B9.2 Paragraph 2 of Form A: Proposal shall be completed in accordance with the following requirements:

- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
- (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
- (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
- (d) if the Proponent 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 Proposal 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: Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.

B9.4 Paragraph 11 of Form A: Proposal shall be signed in accordance with the following requirements:

- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
- (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Proponent 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 Proponent is carrying on business under a name other than its 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: Proposal should be printed below such signatures.

B9.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B10. PRICES (SECTION B)

B10.1 The Proponent 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 Proposals.
- 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 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. EXPERIENCE OF PROPONENT AND SUBCONTRACTORS (SECTION C)

- B11.1 Proposals should include:
- (a) details demonstrating the history and experience of the Proponent and Subcontractors in providing design, construction and contract administration services on a minimum of three projects of similar complexity, scope and value, undertaken and completed in the last five years.
 - (b) examples are to be submitted for:
 - (i) Outdoor rock work, waterfall, and/or pond design and construction; and;
 - (ii) Civil, mechanical and electrical design and construction on outdoor waterfalls, ponds or other water features.
- B11.2 For each project listed in B11.1(a), the Proponent should submit:
- (a) description of the project;
 - (b) photographs of finished work for rock work, waterfall and/or pond design and construction projects;
 - (c) role of the proponent;
 - (d) project's original contracted construction cost and final construction cost;
 - (e) design and construction schedule (anticipated Project schedule and actual project delivery schedule);
 - (f) project owner;
 - (g) reference information (current names with telephone numbers per project).
- B11.2.1 Where applicable, information should be separated into Proponent and Subcontractor project listings.
- B11.3 The Proposal should include general firm profile information, including years in business, average volume of work, number of employees and other pertinent information for the Proponent and all Subcontractors.
- B11.3.1 Submit the names, experience and qualifications of the Key Personnel assigned to the Project.

B12. PROJECT UNDERSTANDING AND METHODOLOGY (SECTION D)

- B12.1 Describe your firm's proposed approach during the performance of Services, so that the evaluation committee has a clear understanding of the methods the Proponent will use in the delivery of this Project.
- B12.2 Methodology should be presented in accordance with the Scope of Services identified in D2.
- B12.3 Proposals should address:
- (a) the team's understanding of the broad functional and technical requirements;
 - (b) the team's understanding of the design aesthetic required for the complete waterfall;
 - (c) the proposed Project construction budget; and,

(d) any other issue that conveys your team's understanding of the Project requirements.

B12.4 Proponents should submit drawings, schematics and descriptions that clearly show:

- (a) Civil, mechanical and electrical systems developed in sufficient detail to describe the systems integration and the intended operation of the waterfall.
- (b) Basin sizes, water flow calculations, aesthetics of the water flow, and any other information relevant to the functioning waterfall.
- (c) The proposed construction methods for the renovation of the complete waterfall including site access, site protection, equipment sizes and types, materials and other relevant information.

B13. PROJECT SCHEDULE (SECTION E)

B13.1 Proponents should present a Critical Path Method schedule using Microsoft Project or similar project management software, complete with resource assignments (personnel and equipment), durations (weekly timescale) and milestone dates or events. The schedule should address each requirement of the Scope of Services.

B13.2 Proponents should identify any timing or seasonal issues, or other scheduling concerns they may have.

B14. DISCLOSURE

B14.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.

B14.2 The Persons are:

- (a) Jason Hlatky, Ful Flo Industries Ltd. – consulted on mechanical for preliminary concepts

B15. QUALIFICATION

B15.1 The Proponent 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, or if the Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; 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.

B15.2 The Proponent and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B15.3 The Proponent 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).
- B15.4 The Proponent 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 Proponent and of any proposed Subcontractor.
- B15.5 The Proponent shall provide, on the request of the Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Work.
- B15.6 Further to B15.3(c), the Proponent shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Proponent /Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) or
 - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program or
 - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).
- B15.7 The Proponent 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 Proponent and of any proposed Subcontractor.
- B15.8 The Proponent shall provide, on the request of the Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Work.

B16. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B16.1 Proposals will not be opened publicly.
- B16.2 After award of Contract, the names of the Proponents and the Contract amount of the successful Proponent 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/> .
- B16.3 The Proponent is advised that any information contained in any Proposal Submission may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B16.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of his/her submission upon written request to the Contract Administrator.

B17. IRREVOCABLE OFFER

- B17.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 10 of Form A: Proposal.
- B17.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any offer shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 10 of Form A: Proposal.

B18. WITHDRAWAL OF OFFERS

- B18.1 A Proponent may withdraw his/her Proposal without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B18.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Proposal shall be the time and date of receipt as determined by the Manager of Materials.
- B18.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Proposal or the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.
- B18.1.3 If a Proponent gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Proposal until after the Submission Deadline has elapsed;
 - (b) open the Proposal to identify the contact person named in Paragraph 3 of Form A: Proposal and the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal; and
 - (c) if the notice has been given by any one of the persons specified in B18.1.3(b), declare the Proposal withdrawn.
- B18.2 A Proponent who withdraws his/her Proposal after the Submission Deadline but before his/her offer has been released or has lapsed as provided for in B17.2 shall be liable for such damages as are imposed upon the Proponent 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.

B19. INTERVIEWS

- B19.1 The Contract Administrator may, in his/her sole discretion, interview Proponents during the evaluation process.

B20. NEGOTIATIONS

- B20.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.
- B20.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.
- B20.3 If, in the course of negotiations pursuant to B20.2 or otherwise, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B21. EVALUATION OF PROPOSALS

- B21.1 Award of the Contract shall be based on the following evaluation criteria:
- | | |
|--|-------------|
| (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: | (pass/fail) |
| (b) qualifications of the Proponent and the Subcontractors, if any, pursuant to B15: | (pass/fail) |
| (c) Total Bid Price; | 20% |
| (d) Experience of Proponent and Subcontractors; (Section C) | 30% |
| (e) Project Understanding and Methodology (Section D) | 40% |
| (f) Project Schedule. (Section E) | 10% |
- B21.2 Further to B21.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B21.3 Further to B21.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is responsible and qualified.
- B21.4 Further to B21.1(c), the Total Bid Price will be evaluated with a weighting 20 points out of a possible 100 points. As such, the lowest Bidder shall receive a full 20 points, the second lowest Bidder and subsequent Bidders shall be prorated accordingly. A Bidder who exceeds the budget shown on Form B: Prices will receive zero points.
- B21.5 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B21.1(a) and B21.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B21.6 Further to B21.1(d), Experience of Proponent and Subcontractors will be evaluated considering the experience of the organization on projects of similar size and complexity as well as other information requested.
- B21.7 Further to B21.1(e), Project Understanding and Methodology will be evaluated considering your firm's understanding of the Project and the design and construction approach for the waterfall and the civil/mechanical/electrical systems.
- B21.8 Further to B21.1(f), Project Schedule will be evaluated considering the Proponent's ability to comply with the requirements of the Project.
- B21.9 Notwithstanding B21.1(d) to B21.1(f), where Proponents fail to provide a response to B8.2(a) to B8.2(c), the score of zero may be assigned to the incomplete part of the response.
- B21.10 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B19.

B22. AWARD OF CONTRACT

- B22.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B22.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be responsible and qualified, and the Proposals are determined to be responsive.

- B22.2.1 Without limiting the generality of B22.2, 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 Proposal 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.
- B22.3 Notwithstanding Paragraph 6 of Form A: Proposal and C4, the City will issue a Letter of Intent to the successful Proponent in lieu of execution of a Contract.
- B22.3.1 The Contract documents as defined in C1.1(n)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the Letter of Intent notwithstanding that they are not necessarily attached to or accompany said Letter of Intent.
- B22.4 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(n).
- B22.5 Following the award of Contract, a Proponent will be provided with information related to the evaluation of its Proposal upon written request to the Contract Administrator.
- B22.6 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Proponent will be paid for all Services rendered up to time of termination.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Request for Proposal 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.

D1.1 In addition to the *General Conditions*, 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 design and construction for the re-establishment of the waterfall at Kings Park.

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

- (a) Removal of rocks, silt and debris from the existing waterfall;
- (b) Design and development of new holding basin at bottom of waterfall;
- (c) Design and development of the waterfall renovation including supply and installation of waterproofing or rubber pond liner to basins and waterfall channel, renovation of weirs and pathway crossing, re-installation of existing rocks and supply and installation of new rocks;
- (d) Design, supply and installation of a new water circulation system for the waterfall;
- (e) Design, supply and installation of electrical systems;
- (f) Design, supply and installation of water service from the maintenance building to the waterfall; and,
- (g) Site restoration.

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.

D4. CONTRACTOR'S SUPERVISOR

D4.1 Further to C6, the Contractor shall employ and keep on the Work, at all times during the performance of the Work, a competent supervisor and assistants, if necessary, acceptable to the Contract Administrator. The supervisor shall represent the Contractor on the Site. The supervisor shall not be replaced without the prior consent of the Contract Administrator unless the supervisor proves to be unsatisfactory to the Contractor and ceases to be in his/her employ.

D4.2 Before commencement of Work, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D4.2.1 Further to C5, Contract Administrator may give instructions or orders to the Contractor's supervisor and such instructions or orders shall be deemed to have been given to the Contractor.

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 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.2 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the email address identified in D3.1.

D6.2 Notwithstanding C23.2.2, 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

D6.3 Bids Submissions must not be submitted to this facsimile number. Bids must be submitted in accordance with B8.

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; such liability policy to also contain a cross-liability clause, non-owned automobile liability and products and completed operations cover, to remain in place at all times during the performance of the Work;
 - (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 covers 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 on the Site 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 the policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.
- D9.5 The City shall have the right to alter the limits and/or coverages as reasonably required from time to time during the continuance of this agreement.

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 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award 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 the date specified in C4.1 for the return of the executed Contract.

D12. DETAILED WORK SCHEDULE

D12.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site.

D12.2 The detailed work schedule shall consist of the following:

- (a) a critical path method (C.P.M.) schedule for the Work;
 - (b) a Gantt chart for the Work based on the C.P.M. schedule; and
- all acceptable to the Contract Administrator.

D12.3 Further to D12.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:

- (a) Submission of design shop drawings for the waterfall and the mechanical systems
- (b) Start of Work on Site
- (c) Removals
- (d) Work on new basin at bottom of waterfall
- (e) Mechanical Work
- (f) Rock Work
- (g) Substantial and Total Performance

D12.4 Further to D12.2(b), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

SCHEDULE OF WORK

D13. COMMENCEMENT

D13.1 The Contractor shall not commence any Work until he/she is in receipt of a notice of award from the City 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 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,
 - (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 letter of intent.

D13.4 The City intends to award this Contract by October 2, 2017.

D13.4.1 If the actual date of award is later than the intended date, the dates specified for Commencement, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D14. CRITICAL STAGES

D14.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:

- (a) Design and Shop Drawings, to be submitted within 15 Calendar Days of the commencement of the Work as specified in D13.

D15. SUBSTANTIAL PERFORMANCE

D15.1 The Contractor shall achieve Substantial Performance within forty (40) consecutive Working Days of the commencement of the Work as specified in D13.

D15.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.

D15.3 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.

D16. TOTAL PERFORMANCE

D16.1 The Contractor shall achieve Total Performance within fifty (50) consecutive Working Days of the commencement of the Work as specified in D13.

D16.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.

D16.3 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.

D17. LIQUIDATED DAMAGES

D17.1 If the Contractor fails to achieve Critical Stages, Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:

- (a) Critical Stages as per D14.1 - five hundred dollars (\$500);
- (b) Substantial Performance - five hundred dollars (\$500);
- (c) Total Performance - five hundred dollars (\$500).

- D17.2 The amounts specified for liquidated damages in D17.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages, Substantial Performance or Total Performance by the days fixed herein for same.
- D17.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D18. SCHEDULED MAINTENANCE

- D18.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Sod maintenance as specified in E18.5(b).
- D18.2 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

D19. JOB MEETINGS

- D19.1 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.
- D19.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D20. DRAWINGS AND SPECIFICATIONS

- D20.1 The Contractor shall maintain one full size set of Drawings and Specifications on Site at all times during construction. This shall include the shop drawings, complete construction details, change orders and any other information pertinent to the construction of the project. The drawings shall be printed in colour if colour is used to convey information.
- D20.2 The Contractor shall maintain a set of Record Drawings on Site marking all Changes in Work. The information shall be transferred to an autocad drawing and submitted to the Contract Administrator at Total Performance. There shall be no separate payment for Record Drawings.

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

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

D22. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

- D22.1 Further to B15.6, 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, as set out in B15.6.

D23. SAFETY

- D23.1 Further to C6, the Contractor shall be solely responsible for safety at the Site and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.
- D23.2 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.
- D23.3 The Contractor shall do whatever is necessary to ensure that:
- (a) no person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
 - (b) the health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of its performance;
 - (c) adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;
 - (d) adequate sanitation measures are taken and facilities provided with respect to the Work;
 - (e) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work or Plant;
 - (f) fire hazards in or about the Work are eliminated.

D24. SITE CLEANING

- D24.1 The Contractor shall maintain the Site and the Work in a tidy condition and free from the accumulation of waste and debris, other than that caused by the City or by other contractors.
- D24.1.1 As the Work progresses, the Contractor shall remove any Plant and Material not required for the performance of the remaining Work. He shall also remove waste and debris other than that caused by the City or other contractors, and leave the Site and the Work clean and suitable for occupancy by the City unless otherwise specified.
- D24.1.2 Total Performance shall not be considered to have been achieved until the Contractor has cleaned up the Site and has removed all Plant, surplus Material, waste and debris, other than that left by the City or other contractors.

D25. DEFICIENCIES

- D25.1 Further to C11, the Contract Administrator may order the Contractor to alter or improve his methods, to increase or improve his Plant, to furnish additional or more suitable Material, or to employ additional or more qualified labour if, at any time, the Contract Administrator determines that:
- (a) the Work is not being, or will likely not be, performed satisfactorily; or
 - (b) progress is not being, or will likely not be, maintained in accordance with the work schedule.

MEASUREMENT AND PAYMENT

D26. PAYMENT

- D26.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D27. WARRANTY

D27.1 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

RFP NO. 736-2017

KINGS PARK – DESIGN / BUILD FOR THE RE-ESTABLISHMENT OF THE WATERFALL

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 – RFP NO. 736-2017

KINGS PARK – DESIGN / BUILD FOR THE RE-ESTABLISHMENT OF THE WATERFALL

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)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at: <http://www.winnipeg.ca/matmgt/Spec/Default.stm>.
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Request for Proposal 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>
L1	Context and Existing Conditions
L2	Development Plan and Conceptual Details
M-1	Mechanical Site Plan and Mechanical Schematic

GENERAL REQUIREMENTS

E2. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E2.1 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.
- E2.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- E2.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E2.4 All Work shall be performed in compliance with Manitoba Workplace Safety and Health.
- E2.5 All Work shall be performed in compliance with Manitoba Workplace Safety and Health Fall Protection guidelines.
- E2.6 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.

E3. PROTECTION OF SURVEY INFRASTRUCTURE

- E3.1 Further to CW1130, Section 3.14, the Contractor is responsible for having the Site cleared for survey monuments.
- (i) 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.

E4. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

E4.1 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.

E5. EXISTING SERVICES AND UTILITIES

E5.1 No responsibility will be assumed by the Owner 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 Owner 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.

E6. TEMPORARY UTILITIES

E6.1 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.

E6.2 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.

E7. SITE ACCESS

E7.1 Contractors are to work only within the Construction Boundaries as shown on the Drawings or as directed by the Contract Administrator.

E7.2 Access to the Site will be determined at the pre-construction meeting. The access area(s) shall be maintained and restored by the Contractor at his own expense and approved by the Contract Administrator.

E7.3 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.

E8. SITE ENCLOSURES

E8.1 Temporary Site enclosures, as determined at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.

E8.2 Site enclosures shall be considered incidental to the Work.

E9. PROTECTION OF EXISTING TREES

E9.1 The Contractor shall investigate the Site with the Contract Administrator and identify any plant material within the Construction Boundary that is to be protected during construction. This may include trees and specimen shrubs.

- E9.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing trees within the limits of the Construction Boundary and the Site access area(s):
- (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.
- E9.3 Obtain approval from the Contract Administrator to excavate within 2.0 M of a tree.
- (a) Certain trees, identified to be at risk by the Contract Administrator, shall require a tree protection strategy to be determined in consultation with the Contract Administrator.
- E9.4 All damage or pruning required to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the Forestry Branch. Damages must be repaired by an Individual with a Manitoba Arborist Licence or by the Forestry Branch.
- E10. STAKES AND MARKS**
- E10.1 The Contractor is responsible for the identification and staking of the property lines and the establishment of the layout of all Work. Key grade stakes shall be identified at the pre-construction meeting.
- E10.2 The Contract Administrator shall be advised of the staking of the layout and site grades at least twenty-four (24) hours in advance in order that the layout and site grades may be inspected and adjusted as required prior to construction.
- E10.3 The Contractor is responsible for the establishment and maintenance of the fixed bench mark, layout and grade stakes throughout the construction process.
- E10.4 The Contractor shall determine the meaning and correctness of the stakes and marks before starting the Work. If an error is suspected in the Drawings, Specifications or directions of the Contract Administrator, Work will be discontinued until the error is rectified. No claim will be made due to alleged inaccuracies in the stakes and marks and for delay in the Work to rectify an error.

E11. SAMPLES

- E11.1 Samples called for in the Specification or requested by the Contract Administrator shall be submitted within fifteen (15) Calendar Days of request.
- (a) Identify samples with name of project, date, name of Contractor, name of supplier/manufacturer and use of material represented by sample.
 - (b) Do not proceed with delivery of materials until samples are reviewed by the Contract Administrator. No deviation is permitted after approval of sample.
 - (c) Approval of samples does not imply acceptance of finished Work.
 - (d) Where required, submit a range of samples, as may be reasonable.

E12. TEST REPORTS

- E12.1 Where required by the Contract Administrator, the Contractor shall provide certified copies of tests upon materials to be used in construction of the Work, indicating that the materials comply with the Specifications.
- E12.2 Submit test results to the Contract Administrator within ten (10) Calendar Days of request.
- E12.3 All testing costs shall be the responsibility of the Contractor.

DESIGN / BUILD

E13. COMPLETE PROJECT

- E13.1 The intent of the Work is to design and renovate/construct a fully functioning, recirculating waterfall.
- E13.2 The Work is to meet the Performance Criteria specified in the following sections.

E14. WORK EXPERIENCE

- E14.1 Further to B15.3, the Contractor shall have a minimum of 5 years of experience in the construction of rock work, waterfalls and pond/waterfall mechanical systems.

E15. DESIGN SERVICES

- E15.1 The Contractor's consultants shall meet the following qualifications:
- (a) Utilize professionals where required by legislation;
 - (b) A Professional Engineer registered to practice in the Province of Manitoba shall seal mechanical, civil and electrical design drawings, if required.
- E15.2 The Contractor shall provide consulting services as required in order to:
- (a) Obtain approvals and permitting from the necessary authorities including but not limited to:
 - (i) City of Winnipeg Zoning Permits Branch,
 - (ii) Water and Waste Dept., and
 - (iii) Other agencies as required.
 - (b) Prepare shop drawings, specifications, documentation and instructions required for the completion of the Work.
 - (c) Design to the minimum standards set out in *The City of Winnipeg Standard Construction Specifications*. The Contractor shall obtain the Contract Administrator's approval if the design will deviate from *The City of Winnipeg Standard Construction Specifications*.

- E15.3 Further to D14, the Contractor shall submit final design drawings and specifications to the Contract Administrator for review prior to construction. They shall include, but not be limited to:
- (a) Site Servicing Plan
 - (b) Mechanical and Electrical Systems
 - (c) Detail drawings for the construction of the Bottom Basin, weirs, water channel, waterfall crossing, and any other waterfall elements requiring explanation.
- E15.4 All consultant services are to be considered incidental to the Work.

SITE WORK

E16. SITE PREPARATION

E16.1 General Description

- (a) Site Preparation shall include but not be limited to:
 - (i) Further to E9, the identification and protection of specific plant material;
 - (ii) Further to E9 and E7, the identification and creation of Site access areas and stockpiling areas for Work on the waterfall;
 - (iii) The removal of identified plant material adjacent to the waterfall;
 - (iv) The removal and salvage of rocks within the waterfall basins and waterfall channels;
 - (v) The removal of silt and other debris from the waterfall basins and waterfall channels;
 - (vi) The excavation and removal of vegetation and silt from the area where the Bottom Basin is to be constructed; and,
 - (vii) The preparation of sub-grade for the installation of new base materials for Bottom Basin.
- (b) It shall also cover any other demolition and removals necessary to construct the project, which may be considered incidental to other items of Work.

E16.2 Plant Material Protection

- (a) Further to E9, plant material, identified for protection within the Construction Boundary, shall be fenced in to the satisfaction of the Contract Administrator.
 - (i) Pruning may be required and is to be approved by the Contract Administrator prior to being done.

E16.3 Site Access

- (a) Access to various parts of the waterfall and lake are to be determined in consultation with the Contract Administrator.
- (b) Access will be determined by the requirements of the Contractor and the need to protect certain parts of the surrounding landscape. Construction methods and machinery are to be determined in order to limit Site damage.
- (c) Contractor is to limit his activities to those identified areas.

E16.4 Removals

- (a) Removal of Rocks
 - (i) Large rocks at the top of the waterfall are to remain in place. Other large rocks in the vicinity of the waterfall channel may be identified by the Contract Administrator as remaining in place.
 - (ii) Rocks within all the concrete basins are to be removed and stockpiled on Site in a location(s) selected with the Contract Administrator.
 - (iii) Stones grouted to the vertical concrete walls of the weirs are to be inspected. Loose stones are to be removed and stockpiled for re-use. Solid rock work may be left in place.

- (b) Removal of Silt and Debris
 - (i) The concrete basins shall be excavated, vacuumed, washed, pressure washed or otherwise cleaned to remove all soil, silt, dislocated stones and debris. Method of removal is to be determined by the Contractor and approved by the Contract Administrator prior to commencement of Work on Site.
- (c) Bottom Basin
 - (i) The new Bottom Basin is to be located within or adjacent to the existing lake, which is often dry and heavily vegetated. The water level of the lake may rise during spring run-off and the Bottom Basin is to be set high enough that lake water does not flow into the new Basin.
 - (ii) The size of the Bottom Basin shall be determined by the designer of the mechanical system and as per E20.3(b). The shape is to be determined on Site by the Contractor and approved by the Contract Administrator prior to commencement of Work.
 - (iii) The area is to be excavated for the new Bottom Basin and all vegetation, silt and other unsuitable materials are to be removed.
- (d) The integrity of the existing concrete structure (basins) of the waterfall shall be maintained throughout the Work.
- (e) All materials, to be demolished and removed, are to be removed from the Site and disposed of in a safe and legal manner. Excavated materials shall be recycled or legally disposed of off-site.

E16.5 Site Restoration

- (a) Any site restoration required due to removals, and not shown on the Drawings as areas for restoration or new development, shall be considered incidental to the removal Work.

E16.6 Basis of Payment

- (a) Payment for Work specified under this section shall be for complete site preparation. It shall be paid for at the Unit Price, measured on a lump sum basis, which price shall include all costs of plant protection, site access, rock removal and salvage, excavation, removals and proper disposal, rough grading, and any associated Site restoration.
- (b) Items of Work:
 - (i) Site Preparation

E17. RENOVATION OF WATERFALL BASINS AND CHANNEL

E17.1 General Description

- (a) This specification shall cover the complete renovation of the waterfall basins and channel, that are to accept the recirculating water system.
 - (i) The waterfall is to be water tight so that the flow of water remains within the closed system.
 - (ii) The waterfall is to have a "natural" appearance with a flow of water that is visible to the park visitor.

E17.2 Existing Waterfall

- (a) The existing waterfall has a concrete structure, as shown on the Drawings, and it shall be used as the foundation for the renovated waterfall.
- (b) Existing rocks may be used in the renovation.

E17.3 Performance Criteria

- (a) Work shall include:
 - (i) The shaping and construction of the new Bottom Basin as per the approved design;

- (ii) The inspection of the existing basins and waterfall channel, and the supply and installation of base materials as required to form the designed water channel;
 - (iii) The supply and installation of waterproofing and/or pond liner for the basins and waterfall channel;
 - (iv) The supply and installation of stainless steel plates on the waterfall weirs;
 - (v) The restoration of the grouted stone faces of the weirs;
 - (vi) The replacement of existing rocks around the basins and along the waterfall channel;
 - (vii) The supply and installation of new rocks for the basins and waterfall channel; and
 - (viii) The construction of a pathway crossing (stepping stone) as shown on the Drawings.
- (b) The Contractor shall supply an experienced supervisor for the Work under this Section.
- (i) The supervisor shall have the vision and experience to construct an attractive and “natural” appearing waterfall with a visible flow of water.
 - (ii) The supervisor shall communicate the design intent with the Contract Administrator and follow through to construction.
 - (iii) The supervisor shall be on site at all times during the construction of the waterfall.

E17.4 Materials

- (a) Basin and Channel Base Materials
- (i) Materials for the construction of the bottom and sides of the Bottom Basin shall be determined by the Contractor and approved by the Contract Administrator prior to commencement of Work on Site.
 - (ii) Base material for the channels shall be “Pool pad”, “lean mix concrete”, or other suitable material as determined by the Contractor and approved by the Contract Administrator prior to commencement of Work on Site.
- (b) Pond Liner
- (i) 45 mil EPDM Rubber Liner, or alternate approved by the Contract Administrator prior to commencement of Work on Site.
- (c) Geotextile Fabric
- (i) Non-woven type, Needle-punched Underlayment to CW 3130
- (d) Metal Plates for Weirs
- (i) 6.35mm (1/4”) Stainless Steel plate, design to be approved.
 - (ii) Approved fasteners.
- (e) Rock
- (i) New rock shall be Shoal Lake Granite to match the existing rock.
 - (ii) New rock for weir face shall match existing.
 - (iii) Rock for bottom of waterfall channel shall be 100 to 300mm diameter round, clean field stone, samples required.
- (f) Adhesives and grouts shall be approved by the Contract Administrator.

E17.5 Methods

- (a) Bottom Basin
- (i) The Contractor shall examine the area for the Bottom Basin after it has been excavated and prepared, with the Contract Administrator.
 - (ii) The Contractor shall submit shop drawings showing the materials and construction methods proposed for the Bottom Basin.
 - (iii) The shape of the Bottom Basin is to be irregular and is to fit to the existing lake in a “natural” manner. The size of the Bottom Basin shall be determined by the designer of the mechanical system and as per E20.3(b). The shape is to be determined on Site by the Contractor and approved by the Contract Administrator prior to commencement of Work.

- (iv) Pond liners and geotextile fabrics are to be installed as shown on the approved Drawings.
 - (v) All mechanical piping and appurtenances are to be installed as per E20 and the liner is to be inspected for leaks and made water tight.
 - (vi) The edges of the liner are to be buried and covered with rock as shown on the Drawings.
- (b) Waterfall Upper Basin and Channel
- (i) The Upper Basin shall be made water tight using pond liner or other methods to ensure all water is directed to the waterfall channel.
 - (ii) The waterfall channel is to be shaped as shown on the Drawings using approved base materials.
 - (iii) The route of the waterfall channel is to be determined by the Contractor utilizing existing weir locations and taking into account the desired water flow appearance.
 - (iv) The waterfall channel is to contain all the water flow within the channel and is to be watertight.
 - (v) Pond liners and geotextile fabrics are to be installed as shown on the Drawings.
- (c) Weirs
- (i) The intent is that the flow of water be concentrated and highly visible as it goes over each weir.
 - (ii) The construction of the basin/channel, as it meets the weir, is to be watertight so that the water flows over the weir and not through it.
 - (iii) Metal plates are to be designed and sized for each weir and as shown on the Drawings.
 - (iv) Metal plates are to be installed according to approved designs.
 - (v) Face stones on the concrete foundations are to be restored to match existing, grouting in place.
 - (vi) New granite rocks are to be set on top of the weirs to each side of the metal plate and water flow channel. Rocks shall be fixed in place using industrial bonding agent and grout.
 - (vii) All concrete work is to be covered.
- (d) Waterfall Rock Work
- (i) The intent is to create a "natural" looking waterfall.
 - (ii) Rock Work is to be done once the water flow for the waterfall has been established.
 - (iii) New round rock is to be installed over the liner in the areas of the intended water flow, in a layer deep enough to cover the liner completely. Care is to be taken so as not to puncture the liner.
 - (iv) New larger granite rocks are to be randomly placed along the edges of the waterfall basins and channel in a natural appearing manner. Rocks are to be blended with the existing rock walls of the adjacent gardens. Large rocks are to be located wherever pathways come close to the waterfall to discourage people from entering the waterfall channel and basins.
 - (v) Large new or salvaged rocks are to be placed across the water channel to create a stable stepping stone crossing as shown on the Drawings. Water is to flow through or under the crossing.
 - (vi) Salvaged rock from the waterfall is to be used along the edges of the waterfall to hold down and cover the liner edges as shown on the Drawings.

E17.6 Basis of Payment

- (a) Payment for Work specified under this section shall be for the complete construction of the Bottom Basin and renovation of the existing waterfall basins and channel. It shall be paid for at the Unit Price, measured on a lump sum basis for each Item listed below, which price

shall include material supply, proper material installation, site restoration, and all other items incidental to the Work.

- (b) Payment for each Item shall include:
 - (i) Bottom Basin: complete forming and construction of basin bottom and sides, base materials, liners, geotextile fabrics, rock work and any other items incidental to creating a water tight holding basin within the existing lake.
 - (ii) Waterfall Upper Basin and Channel: base materials, liners, geotextile fabrics, rock work and any other items incidental to creating a natural looking basin and waterfall.
 - (iii) Weirs (3): restoration of stone face, supply and installation of metal plates, rock work and any other items incidental to the renovation of the weirs.
 - (iv) Waterfall Crossing: supply and installation of rock work to create a stable stepping stone crossing.
- (c) Items of Work:
 - (i) Bottom Basin
 - (ii) Waterfall Upper Basin and Channel
 - (iii) Weirs (3)
 - (iv) Waterfall Crossing

E18. SITE RESTORATION

E18.1 General Description

- (a) This specification shall cover the restoration of the areas where:
 - (i) The waterfall Work meets the existing gardens and paths.
 - (ii) Access areas through the waterfall gardens.
 - (iii) Designated staging and stockpiling areas.
- (b) Site access through the park shall remain the responsibility of the Contractor.
- (c) Restoration for the trenching of water service line is included in E19.

E18.2 Materials

- (a) Topsoil to CW 3540.
- (b) Sodding to CW 3510.
- (c) Granular for paths to CW 3110:
 - (i) Sub-base: Existing granular path surface.
 - (ii) Base: Min. 75 mm depth of 19 mm down crushed limestone, compacted.
 - (iii) Top: 25 mm of 6mm down crushed limestone, compacted.

E18.3 Garden Areas

- (a) Where the waterfall Work meets existing gardens, all excess materials and debris are to be removed. Plant material which has been damaged is to be pruned back or removed.
- (b) Fencing is to be removed from the plant material which has been protected.
- (c) Restored planting bed areas are to be topped up with topsoil.
- (d) Edges of restored areas are to be blended with existing gardens. The grades at the edges are to be established such that finished surfaces are level with existing surfaces.

E18.4 Pathways

- (a) Pathway restoration shall include:
 - (i) Only those pathways disturbed by construction of this project.
 - (ii) Pathways that are to be removed as shown on the Drawings
- (b) Layout of pathway is to follow existing layout. Minimum path width is to be 1.2 M.

- (c) Rock edges are to be restored to original intent. Rocks and topsoil are to be installed where pathways are to be removed.
- (d) Soil, turf, weeds and other extraneous materials shall be removed from the existing path surface. The path surface is to be scarified.
- (e) Pathways are to be graded as required and topped up and compacted as required.

E18.5 Staging / Stockpile Areas

- (a) Disturbed areas located on existing turf, are to be scarified and repaired with topsoil and sod to CW 3540 and CW 3510.
- (b) Sodded areas are to be maintained for 30 days.

E18.6 Any other Work required to clean up and restore the areas within the Construction Boundaries shall be considered incidental to the Site Restoration Work.

E18.7 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the lump sum Unit Price for the Items of Work listed below, which price shall include all costs of restoration, topsoil, sodding, and maintenance.
- (b) Items of Work:
 - (i) Site Restoration

CIVIL, MECHANICAL AND ELECTRICAL

E19. SEASONAL WATER LINE

E19.1 General Description

- (a) This specification shall cover the supply and installation of a new seasonal water line from the existing water service at the maintenance building to the Bottom Basin of the waterfall.

E19.2 Materials

- (a) A seasonal supply line to the waterfall Bottom Basin is required complete with:
 - (i) 25mm double check valve,
 - (ii) 25mm flange fittings,
 - (iii) 25mm gate valve, and
 - (iv) blow-out valve.
- (b) All water supply lines shall be low pressure poly pipe approved for 100psi.
- (c) All seasonal line(s) to gravity drain.
- (d) The seasonal water supply line is to have appropriate compressed air valving and connections to allow end of season draining and blow down. A manual locking valve shall be provided within the maintenance building to prevent accidental winter operation.

E19.3 Methods

- (a) The layout of the water line is to be marked on Site and approved by the Contract Administrator prior to construction of this item.
- (b) Trenches are to be excavated with a trenching machine or by hand. Trenches are to be inspected by the Contract Administrator prior to backfilling. Locations, where the trench crosses existing utilities, irrigation pipes and all other sub-surface pipes or fixtures, are to be excavated by hand. The amount of trench excavated at any time shall not exceed the amount of drain that can be set and backfilled completely prior to the end of that Working Day. Trench width and depth shall be as specified on the Drawings.
- (c) The bottom surface of the trench is to be free of loose particles and is to have the slope shown on the Drawings. Over excavation in the bottom of the trench shall be backfilled to

the proper grade with the excavated material or granular prior to the placement of the drain. Where material is used to fill the trench to the proper elevation that material shall be compacted to 95% of standard proctor density using appropriate means. All excavated material shall be removed from the Site daily and disposed of legally.

- (d) The grades of the bottom of the trenches are to be reviewed by the Contract Administrator prior to installation of pipe.
- (e) Trench is to be backfilled according to CW 2030.
- (f) Trenches are to be restored to meet adjacent ground surfaces. Topsoil and sod are to be installed to CW 3540 and CW 3510 where trenches are located in manicured turf.

E19.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the lump sum Unit Price for the Items of Work listed below, which price shall include all costs of material supply, proper material installation, site restoration, and all other items incidental to the Work.
- (b) Items of Work
 - (i) Seasonal Water Service

E20. MECHANICAL FOR WATERFALL

E20.1 General Description

- (a) This specification shall cover the supply and installation of a recirculation type water system for the waterfall.

E20.2 Existing Waterfall System

- (a) There is an existing pump house and waterfall system in place. Renovations to those parts of the existing system, that are to be incorporated into the new working system, are to be considered incidental to this Work.
- (b) Any parts of the existing system, which are to be removed and not used, are to remain the property of the City and shall be collected by the City as coordinated by the Contract Administrator.

E20.3 Performance Criteria

- (a) The waterfall system shall be a recirculation type system and consist of a catch basin (Bottom Basin), submersible pump, variable speed pump controller, water level sensor, automatic water supply line, supply water piping, valving, etc.
- (b) The catch basin (Bottom Basin) located at the base of the waterfall feature shall contain the submersible pump, water level sensor, valves, and piping. The minimum recommended catch basin volume is 10,000 USG, to be confirmed by successful proponent. Refer to provided schematic.
- (c) The pump shall be 500 GPM at 75' total head, complete with controller and variable frequency drive (adjustable to 250 GPM). Pump shall be submersible, and easily removable for end of season storage. A rail mounted submersible pump is acceptable.
- (d) The pump controller and automatic water supply valve shall be located in an above grade enclosure. Refer to Drawings.
- (e) The pump shall circulate water from the catch basin (Bottom Basin) to the top of the waterfall feature. The approximate change in elevation from bottom to top is shown on the Drawings. The system is to operate 24 hours per day, 7 days per week during the summer months. Schedule of operation to be coordinated with City of Winnipeg.
- (f) The pump shall start on manual activation from the above grade enclosure. Pump flow rate shall be user adjustable between 250 GPM and 500 GPM to achieve desired waterfall aesthetics.
- (g) The waterfall supply line shall connect to the pump within the catch basin, and be routed to the top of the waterfall feature adjacent to the existing structure. The line shall be buried at

a suitable depth to allow adequate protection, and match the slope of the existing structure. Refer to mechanical details.

- (h) A seasonal water supply line, as specified in E19, from the maintenance building is to be provided complete with back flow prevention and actuated supply valve. The line shall be buried appropriately and routed for discharge to the catch basin. A water level sensor in the catch basin will be interlocked with the actuated water supply valve. The intent of this system is to maintain an appropriate water level in the catch basin and recover evaporative and other water system losses. Refer to mechanical plans.
- (i) The installation must comply with current codes and City of Winnipeg bylaws.
- (j) All reasonable steps are to be taken to make the equipment vandal resistant.

E20.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the lump sum Unit Price for the Items of Work listed below, which price shall include all costs of material supply, proper material installation, site restoration, and all other items incidental to the Work.
- (b) Items of Work
 - (i) Mechanical for Waterfall

E21. ELECTRICAL

E21.1 General Description

- (a) This specification shall cover the supply and installation of an electrical service from the existing pump house to the new water pump location. Provide trenching and backfilling as required.
- (b) Wire & connect new water pump as required including VFD control (VFD supplied by others). Co-ordinate installation with pump installer.

E21.2 Existing Waterfall System

- (a) There is an existing pump house and waterfall system in place. Renovations to those parts of the existing system, that are to be incorporated into the new working system, are to be considered incidental to this Work.
- (b) There is a 600V-3ph electrical service in place in the existing pump house.
- (c) Any parts of the existing system, which are to be removed and not used, are to remain the property of the City and shall be collected by the City as coordinated by the Contract Administrator.

E21.3 Materials

- (a) Wire and cable shall be copper of standard AWG sizes with 600V (90 Degree C) insulation. Insulation shall be X-Link Polyethylene unless otherwise noted on drawings or prohibited by regulations.
- (b) Circuit breaker(s) shall match existing if installed in existing panel.

E21.4 Electrical

- (i) All electrical equipment must new and be C.S.A. approved.
- (ii) All components shall be grounded and bonded in accordance with Electrical code.
- (iii) All electrical controls and equipment are to be in a free-standing weather proof enclosure.
- (iv) Electrical installation shall be in accordance with the current edition of the Winnipeg Electrical By-law.
- (v) The contract shall include the furnishing of labor, new material, equipment and services necessary and reasonably implied and/or incidental to the complete installation of the electrical work as shown on the plans and or specified. Supply and

install all devices required for the complete approved system, operating to the complete satisfaction of the Contract Administrator.

- (vi) Prepare and submit to the proper authorities all necessary permits and pay all fees.
- (vii) Final connection to pump is to be flexible. Obtain and refer to pump shop drawings for circuit breaker and wire size.

E21.5 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the lump sum Unit Price for the Items of Work listed below, which price shall include all costs of material supply, proper material installation, site restoration, and all other items incidental to the Work.
- (b) Items of Work
 - (i) Electrical

E22. COMMISSIONING

E22.1 System Testing and Start-up

- (a) All equipment and circuits are to be tested in the presence of the Contract Administrator.
- (b) Once the system is functioning as intended, the Contractor shall proceed with the restoration of the waterfall. The water flow shall be adjusted as required to the satisfaction of the Contract Administrator.
- (c) The Contractor is to perform the system start-up in accordance with the information contained in the operations and maintenance manuals in order to have the Work fully operational by the date of Substantial Performance.

E22.2 Staff Training

- (a) On Site training shall be provided to the City maintenance personnel in proper operation and maintenance procedures for the system.
- (b) Trainers shall be qualified trades persons or consultants knowledgeable of the equipment and familiar with the installation.
- (c) Training shall be a minimum of one half day duration.

E22.3 Operation and Maintenance Manuals

- (a) The Contractor shall supply in a format acceptable to the Contract Administrator three (3) bound copies of the manuals, as well as one electronic copy (in pdf format) detailing the operations and maintenance instructions for all elements of the project including:
 - (i) Manufacturers' written instructions, warranties, shop drawings, schedules, wiring diagrams and a listing of persons to contact for repairs during warranty period.
 - (ii) Descriptions of day to day operations, preventative maintenance, annual and periodic maintenance, and procedures for seasonal shutdown and start-up.

E22.4 First Year Winterization and Spring Start-up

- (a) After the operation of the waterfall for one season, the Contractor shall perform the first year winterization of the Work and the subsequent start-up the following spring.
- (b) The Contractor shall provide the Contract Administrator with 48 hours notice prior to commencing the start-up and winterization procedures in order that City staff may attend.

E22.5 Record Drawings

- (a) Further to D20, the Contractor shall submit the set of Record Drawings to the Contract Administrator at Total Performance.

E22.6 Basis of Payment

- (a) Payment for Commissioning Work specified under this section shall be paid for at the lump sum Unit Price, which price shall include all manuals, training, Record Drawings and start-up.
- (b) Payment for Winterization and Spring Start-up shall be paid for on a yearly basis at the Unit Price shown on Form B: Prices, and shall include both a fall winterization and a spring start-up.
- (c) Items of Work:
 - (i) Commissioning
 - (ii) Winterization and Spring Start-up