



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 456-2021

**PROFESSIONAL CONSULTING SERVICES FOR THE RIVERBEND LIFT STATION
UPGRADES**

TABLE OF CONTENTS

PART A - BID SUBMISSION

- Form A: Bid/Proposal
- Form B: Prices

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Confidentiality	2
B6. Addenda	2
B7. Proposal Submission	2
B8. Proposal (Section A)	3
B9. Fees (Section B)	4
B10. Experience of Proponent and Subconsultants (Section C)	4
B11. Experience of Key Personnel Assigned to the Project (Section D)	5
B12. Project Understanding and Methodology (Section E)	5
B13. Management Proposal (Section F)	5
B14. Project Schedule (Section G)	6
B15. Disclosure	6
B16. Conflict of Interest and Good Faith	6
B17. Qualification	7
B18. Opening of Proposals and Release of Information	8
B19. Irrevocable Offer	8
B20. Withdrawal of Offers	8
B21. Interviews	9
B22. Negotiations	9
B23. Evaluation of Proposals	9
B24. Award of Contract	10

PART C - GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Project Manager	1
D3. Background	1
D4. Scope of Services	3
D5. Definitions	3

Submissions

D6. Authority to Carry on Business	4
D7. Safe Work Plan	4
D8. Insurance	4

Schedule of Services

D9. Commencement	5
D10. Critical Stages	5
D11. COVID-19 Schedule Delays	6

Third Party Agreements

D12. Funding and/or Contribution Agreement Obligations	6
--	---

PART E - SCOPE OF SERVICES

E1. Design Services	1
E2. Contract Administration Services	10

**APPENDIX A – RIVERBEND WASTEWATER PUMPING STATION HISTORICAL RECORD
DRAWINGS**

**APPENDIX B – WASTEWATER LIFT STATION CONDITION ASSESSMENT PHASE II - DOCUMENT
VIII: RIVERBEND LIFT STATION ASSESSMENT**

APPENDIX C – RIVERBEND LIFT STATION HOIST DEVICES AND LIFTING CAPACITIES REPORT

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 PROFESSIONAL CONSULTING SERVICES FOR THE RIVERBEND LIFT STATION UPGRADES

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, October 15, 2021.

B2.2 The Project Manager 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 The Project Manager or an authorized representative will conduct a site investigation tour of the facility located at 1740 Portage Avenue, on the south side of Portage Avenue, just west of the west leg of Riverbend Crescent on **October 1, 2021**, beginning at 1:30 pm:

- (a) Proponents are required to bring their own PPE (safety vest, boots, hard hat, safety glasses and gloves) to the Site Investigation. Proponents without appropriate PPE will not be allowed access inside the Station.
- (b) Due to COVID-19 pandemic, all Proponents are advised to maintain social distancing and face masks are mandatory during the Site Investigation.

B3.1.1 Proponents are requested to register for the site investigation by contacting the Project Manager identified in D2.

B3.2 Although attendance at the Site Investigations is not mandatory, the City strongly suggests that Proponents attend.

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 Project Manager in writing.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Project Manager identified in D2.

B4.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Project Manager of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Project Manager, require a correction to or a clarification of the Request for Proposal will be provided by the Project Manager to all Proponents by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Project Manager, do not require a correction to or a clarification of the Request for Proposal will be provided by the Project Manager only to the Proponent who made the enquiry.

B4.5 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the City's Project Manager. Failure to restrict correspondence and contact to the Project Manager may result in the rejection of the Proponents Proposal Submission.

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 Project Manager in writing.

B4.7 Any enquiries concerning submitting through MERX should be addressed to:
MERX Customer Support
Phone: 1-800-964-6379
Email: merx@merx.com

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 Project Manager. 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 Proposals to the media or any member of the public without the prior written authorization of the Project Manager.

B6. ADDENDA

B6.1 The Project Manager 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 Project Manager 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.

B6.3 Addenda will be available on the MERX website at www.merx.com.

B6.4 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B6.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Project Manager indicated in D2.

B7. PROPOSAL SUBMISSION

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

- (a) Form A: Bid/Proposal (Section A) in accordance with B8;
- (b) Form B: Fees (Section B) in accordance with B9.

B7.2 The Proposal should also consist of the following components:

- (a) Experience of Proponent, and Subconsultants (Section C) in accordance with B10;
- (b) Experience of Key Personnel Assigned to the Project (Section D), in accordance with B11;
- (c) Project Understanding and Methodology (Section E) in accordance with B12;
- (d) Management Proposal (Section F) in accordance with B13; and
- (e) Project Schedule (Section G) in accordance with B14.

- B7.3 Further to B7.1 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.
- B7.4 Further to B7.2, 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.
- B7.5 Proposal format, including 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 proposed solution.
- B7.6 The Proposal shall be submitted electronically through MERX at www.merx.com.
- B7.6.1 Proposals will **only** be accepted electronically through MERX.
- B7.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B23.1(a).
- B7.8 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B8. PROPOSAL (SECTION A)

- B8.1 The Proponent shall complete Form A: Bid/Proposal, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid/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.
- B8.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2
- B8.3 In Paragraph 3 of Form A: Bid/Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.
- B8.4 Paragraph 13 of Form A: Bid/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;
 - (d) if the Proponent is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

B8.5 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.

B9. FEES (SECTION B)

B9.1 The Proposal shall include a Fixed Fee for all disciplines and/or phases identified in D4 Scope of Services.

B9.2 Adjustments to Fees will only be considered based on increases to the Scope of Services.

B9.2.1 The City will not consider an adjustment to the Fees based on changes in the Project budget or the Final Total Construction Cost.

B9.3 Notwithstanding C1.1(b), Fees shall include costs for out of town travel, related meals and accommodations for the duration of the Project and shall not be considered an Allowable Disbursement.

B9.4 The Fee Proposal shall also include an allowance for Allowable Disbursements as defined in C1.1(b), but shall exclude the costs of any materials testing, soils and hazardous materials investigation during construction.

B9.5 Notwithstanding C11.1, Fees submitted shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

B9.6 Payments to Non-Resident Consultants are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B9.6.1 Fees stated shall not include any costs which may be incurred by the Consultant with respect to any applicable funding agreement obligations as outlined in D12. Any such costs shall be determined in accordance with D12.

B10. EXPERIENCE OF PROPONENT AND SUBCONSULTANTS (SECTION C)

B10.1 Proposals should include:

- (a) details demonstrating the history and experience of the Proponent and Subconsultants in providing programming; design, management of the project and contract administration services on three projects of similar complexity, scope and value.

B10.2 For each project listed in B10.1(a), the Proponent should submit:

- (a) description of the project;
- (b) role of the consultant;
- (c) project's original contracted cost and final cost;
- (d) design and schedule (anticipated Project schedule and actual project delivery schedule, showing design separately);
- (e) project owner;
- (f) reference information (two current names with telephone numbers per project).

B10.2.1 Where applicable, information should be separated into Proponent and Subconsultant project listings.

B10.3 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 Subconsultants.

B11. EXPERIENCE OF KEY PERSONNEL ASSIGNED TO THE PROJECT (SECTION D)

B11.1 Proposals should describe the experience and qualifications of the Key Personnel assigned to the project including:

- (a) comparable projects and their roles in those projects;
- (b) educational background and degrees;
- (c) professional recognitions;
- (d) job title
- (e) years of experience in current position;
- (f) years of experience in design and construction; and
- (g) years of experience with current employer.

B11.2 For each person identified, list at least two comparable projects in which they have played a primary role similar to that proposed for this Project. If a project selected for a key person is included in B10, provide only the project name and the role of the key person. For other projects provide the following:

- (a) Description of project;
- (b) Role of the person;
- (c) Project Owner;
- (d) Reference information (two current names with telephone numbers per project).

B11.3 Roles of each of the Key Personnel in the Project should be identified in the organizational chart referred to in B13.3(c).

B12. PROJECT UNDERSTANDING AND METHODOLOGY (SECTION E)

B12.1 Project understanding and methodology should address the deliverables and associated task requirements required by the Scope of work. It should clearly identify and explain work activities and identify all assumptions and interpretations.

B12.2 Methodology should be presented in accordance with the Scope of Services identified in D4.

B12.3 Proposals should describe:

- (a) the Proponents understanding of the Project;
- (b) the Proponents approach and methodology to complete the work;
- (c) any innovation to be used to perform the services;
- (d) any location specific issues;
- (e) any activities and services to be provided by the City;
- (f) the deliverables of the Project;
- (g) the City's Project methodology with respect to the information provided within this RFP and the City's Project Management Manual at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4> ; and;
- (h) any other issue that conveys your team's understanding of the Project requirements.

B13. MANAGEMENT PROPOSAL (SECTION F)

B13.1 Describe your firm's project management approach and team organization 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.

B13.2 Describe the collaborative process/method to be used by the Key Personnel of the team in the various phases of the Project.

B13.3 Proposals should address:

- (a) job function for each identified individual and group of individuals so identified;
- (b) time estimates by work activity and in total for each individual identified in B11; and
- (c) an organizational chart for the project.

B14. PROJECT SCHEDULE (SECTION G)

B14.1 Proponents should present a carefully considered Critical Path Method schedule using Microsoft Project or similar project management software, complete with resource assignments (key designers), durations (weekly timescale) and milestone dates or events. The schedule should address each requirement of the Scope of Services.

B14.2 The Proponent's schedule should include critical dates for review and approval processes by the City and other organizations anticipated during the design and tendering phases of the Project. Reasonable times should be allowed for completion of these processes.

B15. DISCLOSURE

B15.1 Various Persons provided information or services with respect to this RFP. 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.

B15.2 The Persons are:

- (a) N/A

B16. CONFLICT OF INTEREST AND GOOD FAITH

B16.1 Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B16.2 Conflict of Interest means any situation or circumstance where a Proponent or Key Personnel proposed for the Services has:

- (a) other commitments;
- (b) relationships;
- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Proposals or award of the Contract; or
 - (ii) compromise, impair or be incompatible with the effective performance of a Proponent's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the RFP process or the Project; or
- (f) has knowledge of confidential information (other than confidential information ~~disclosed~~ by the City in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other Proponents and that could or would be seen to give that Proponent an unfair competitive advantage.

- B16.3** In connection with its Proposal, each entity identified in B16.2 shall:
- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;
 - (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Project Manager; and
 - (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.
- B16.4** Without limiting B16.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.
- B16.5** Without limiting B16.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
- (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of its Key Personnel;
 - (b) require the removal or replacement of any Key Personnel proposed for the Services that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
 - (c) disqualify a Proponent or Key Personnel proposed for the Services that fails to comply with any requirements prescribed by the City pursuant to B16.4 to avoid or mitigate a Conflict of Interest; and
 - (d) disqualify a Proponent if the Proponent, or one of its Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B16.6** The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B17. QUALIFICATION

- B17.1** 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;
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Services in strict accordance with the terms and provisions of the Contract;
 - (d) have or establish and staff an office in Winnipeg for the duration of the Project.
- B17.2** The Proponent and any proposed Subconsultant (for the portion of the Services 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 <https://winnipeg.ca/finance/findata/matmgt/listing/debar.pdf>

- B17.3 The Proponent and/or any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:
- (a) have successfully carried out services for the programming; design, management of construction and contract administration for architectural and/or engineering projects of similar complexity, scope and value; and to those required for this Project; and
 - (b) be fully capable of performing the Services 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);
 - (d) have the knowledge and resources to administer the requirements of The Workplace Safety and Health Act (Manitoba) during the construction works associated with this Contract; and
 - (e) undertake to meet all licensing and regulatory requirements of the appropriate governing authorities and associations in the Province of Manitoba.
- B17.4 The Proponent shall submit, within three (3) Business Days of a request by the Project Manager, further proof satisfactory to the Project Manager of the qualifications of the Proponent and of any proposed Subconsultant.
- B17.5 The Proponent shall provide, on the request of the Project Manager, full access to any of the Proponent's equipment and facilities to confirm, to the Project Manager's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Services.

B18. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B18.1 Proposals will not be opened publicly.
- B18.2 After award of Contract, the Contract amount and the name of the successful Proponent and their address will be available on the MERX website at www.merx.com.
- B18.3 The Proponent is advised 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).
- B18.3.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Proposal Submission identified by the Proponent as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.
- B18.4 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 Project Manager.

B19. IRREVOCABLE OFFER

- B19.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.
- B19.2 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 Services for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B20. WITHDRAWAL OF OFFERS

- B20.1 A Proponent may withdraw his/her Proposal without penalty prior to the Submission Deadline.

B21. INTERVIEWS

B21.1 The Project Manager may, in his/her sole discretion, interview Proponents during the evaluation process.

B22. NEGOTIATIONS

B22.1 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.

B22.2 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.

B22.3 If, in the course of negotiations pursuant to B22.2, 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.

B23. EVALUATION OF PROPOSALS

B23.1 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 Subconsultants, if any, pursuant to B17: (pass/fail)
- (c) Fees; (Section B) 40%
- (d) Experience of Proponent and Subconsultant; (Section C) 10%
- (e) Experience of Key Personnel Assigned to the Project; (Section D) 25%
- (f) Project Understanding and Methodology (Section E) 15%
- (g) Management Proposal. (Section F) 5%
- (h) Project Schedule. (Section G) 5%

B23.2 Further to B23.1(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.

B23.3 Further to B23.1(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 qualified.

B23.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B23.1(a) and B23.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.

B23.5 Further to B23.1(c), Fees will be evaluated based on Fees submitted in accordance with B9.

B23.6 Further to B23.1(d), Experience of Proponent and Subconsultants will be evaluated considering the experience of the organization on projects of similar size and complexity as well as other information requested, in accordance with B10.

- B23.7 Further to B23.1(e), Experience of Key Personnel Assigned to the Project will be evaluated considering the experience and qualifications of the Key Personnel and Subconsultant personnel on Projects of comparable size and complexity, in accordance with B11.
- B23.8 Further to B23.1(f), Project Understanding and Methodology will be evaluated considering your firm's understanding of the City's Project, project management approach and team organization, in accordance with B12.
- B23.9 Further to B23.1(g), Management Proposal will be evaluated considering the Proponent's ability to comply with the requirements of the Project, in accordance with B13.
- B23.10 Further to B23.1(h), Project Schedule will be evaluated considering the Proponent's ability to comply with the requirements of the Project, in accordance with B14.
- B23.11 Notwithstanding B23.1(d) to B23.1(h), where Proponents fail to provide a response to B7.2(a) to B7.2(e), the score of zero may be assigned to the incomplete part of the response.
- B23.12 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B21.
- B23.13 Where references are requested, the reference checks to confirm information provided may not be restricted to only those submitted by the Proponent, and may include organizations representing Persons, known to have done business with the Proponent.

B24. AWARD OF CONTRACT

- B24.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B24.2 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 qualified, and the Proposals are determined to be responsive.
- B24.2.1 Without limiting the generality of B24.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Services;
 - (b) the prices are materially in excess of the prices received for similar services in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Services, 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.
- B24.3 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.
- B24.4 The City may, at its discretion, award the Contract in phases.
- B24.5 Further to B24.4 the City reserves the right to negotiate and award future phases to the successful Proponent.
- B24.6 Further to Paragraph 7 of Form A: Bid/Proposal and C4, the City may issue an award letter to the successful Proponent in lieu of execution of Contract Documents
- B24.6.1 The Contract documents as defined in C1.1(o)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the award letter notwithstanding that they are not necessarily attached to or accompany said award letter.

- B24.7 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(o).
- B24.8 If funding for the Services is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, Proponents are advised that the terms of D12 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B24.9 Following the award of Contract, a Proponent will be provided with information related to the evaluation of its Proposal upon written request to the Project Manager.
- B24.10 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 Consultant Services* (Revision 2017-03-24) are applicable to the Services of the Contract.
- C0.1.1 The *General Conditions for Consultant Services* 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 Consultant Services*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. PROJECT MANAGER

D2.1 The Project Manager is:

Stacy Cournoyer, P. Eng.

Telephone No. 204 986-2142

Email Address: SCournoyer@winnipeg.ca

D2.2 At the pre-commencement meeting, the Project Manager will identify additional personnel representing the Project Manager and their respective roles and responsibilities for the Services.

D3. BACKGROUND

D3.1 The Riverbend Lift Station, located at 1740 Portage Avenue, is a facility that conveys sewage collected from the Riverbend Sewer District and pumps this sewage via force main into an interceptor sewer on Portage Avenue where the sewage continues to flow to be treated at the North End Water Pollution Control Centre. The Station was constructed in the 1958 and consists of two dry pit solids handling pumps. The Station has had minor upgrades over time, but due to its age many of the mechanical, electrical and structural components are obsolete and no longer provide reliable service. Major upgrades of these components are now required to allow the Station to continue to provide dependable operational service for many years to come.

D3.2 Historical record drawings for the Riverbend Lift Station are included in Appendix "A" of this document.

(a) The record drawings provided herein are for informational purposes only and the City makes no claim or liability to the accuracy of the information provided.

D3.3 An assessment report of the existing lift station, prepared by MPE Engineering Ltd., is included in Appendix "B" of this document for information purposes only.

D3.4 An assessment report of the existing hoist devices and lifting capacities, prepared by WSP (formerly MMM Group), is included in Appendix "C" of this document for information purposes only.

D3.5 The detailed design stage for this project will largely involve upgrading the mechanical and electrical components, including instrumentation and ventilation, inside the Station along with some structural modifications to the building.

D3.6 The Riverbend Lift Station upgrading will generally consist of the following work:

(a) Replacement of two (2) existing wastewater sewage pumps and pump motors in the "dry-pit" section of the station with two (2) new pumping units.

(b) The two (2) wastewater sewage pumps shall be of the following:

(i) Each new pumping unit shall have a minimum capacity of 152 L/s (2409 USgpm) at 20.7m Total Dynamic Head as determined by the Consultant and shall review the system operating conditions of the Station to verify the appropriate operating point of the pumps.

- (ii) Provide review of Station capacity to utilize option for more and/or larger pumping units.
 - (iii) Each new pump motor will be operated from a 575 volt, 3 Phase, 60 cycle power supply and be capable of being operated by a variable frequency drive (VFD)..
 - (iv) The Consultant will be required to conduct a hydraulic review of the Station suction and discharge piping to determine the required capacity and HP rating of the pumps and motors can be increased in size to reduce pump cycle run time and without overwhelming the downstream interceptor sewer on Portage Avenue.
 - (v) The Consultant shall also review the hydraulics of the downstream interceptor sewer to determine maximum flow capacity.
 - (vi) Pumps must be capable of running in reverse mode for de-clogging and de-ragging purposes.
 - (vii) It is estimated the Peak Dry Weather Flow into this Station is 106.4 L/s (1686 USgpm). The Department is currently reviewing the flows to this Station and may provide a more updated Peak Dry Weather Flow value later in the year.
 - (viii) The Consultant will be required to develop and administer a separate Tender or *Tenders* after award of this contract to purchase the pumping units (includes pumps, motors, drive shafts, etc. plus any other materials and equipment required that may have long delivery times) as early as possible so that these goods will be manufactured and delivered in a timely fashion to be installed in the station by others during 2022–23.
 - (ix) The City will assist the Consultant with developing the specifications required for pumping unit procurement.
 - (x) The Consultant may also need to include other required goods with long delivery schedules under this separate Bid Opportunity such as, but not limited to electrical components, gate valves, pipe fittings, etc.
- (c) Determine if Installation of soft starters or VFD's should be used for all new pumps and motors.
 - (d) Replacement of existing RTU panel with new PLC panel.
 - (e) Installation of a minimum one (1) flow meter (one for each individual pumping unit may be considered if there is appropriate space in the Station process piping to do so) and associated instrumentation;
 - (f) Design and Specification Development for all new process piping;
 - (g) Development of new hydraulic system curve for Station with a recommended pump operating point;
 - (h) Replacement of existing MCC (motor control centre) and associated electrical work;
 - (i) Replacement of electrical distribution system including wall receptacles and lighting
 - (j) Replacement of HVAC System;
 - (k) Replacement of the existing 250mm diameter force main;
 - (l) Installation of a by-pass pumping “tee” connection on the force main, complete with MH assembly;
 - (m) Miscellaneous metal fixtures improvements.
 - (n) Miscellaneous structural improvements to existing building and building addition to house all new equipment complete with new roof and roof hatches.
 - (o) Provision of main floor hoisting/craning device;
 - (p) Provision of motor room and pump room hoisting/craning devices – preferably a suspended steel I-Beam design with a movable trolley hoist; and
 - (q) Provision of geotechnical and soil testing reports, if required.

D4. SCOPE OF SERVICES

D4.1 The Services required under this Contract shall consist of providing detailed design, tendering and contract administration services for work to upgrade the mechanical, electrical structural and civil components of the Station in accordance with the following:

- (a) Preliminary Engineering;
- (b) Design and Specification Development;
- (c) Mechanical modifications;
- (d) Electrical and Instrumentation modifications;
- (e) Structural modifications;
- (f) Architectural upgrades;
- (g) Ventilation upgrades;
- (h) Contract Document Preparation;
- (i) Procurement Process;
- (j) Contract Administration Services; and
- (k) Project Closeout Services.

D4.1.1 The Services required for all items under D4.1 shall be in accordance with the City's Project Management Manual <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4> . Notwithstanding the foregoing, the Consultant is being engaged by the City for its professional expertise; the Consultant shall bring to the Project Manager's attention any aspect of the City's Project Management Manual or templates which the Consultant is of the opinion is not consistent with good industry practice.

D4.2 The following shall apply to the Services:

- (a) The City of Winnipeg, Water and Waste Department - Electrical Design Guide, current revision:
<https://winnipeg.ca/waterandwaste/dept/manual.stm#wastewater>
- (b) The City of Winnipeg, Water and Waste Department – Identification Standard, current revision: <https://winnipeg.ca/waterandwaste/dept/manual.stm#wastewater>
- (c) Universal Design Policy
<http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeld=2&DocId=3604>

D5. DEFINITIONS

D5.1 When used in this Request for Proposal:

- (a) "**CSO**" means Combined Sewer Overflow;
- (b) "**DP**" means Displaced Pressure;
- (c) "**I/O**" means Input / Output;
- (d) "**MCC**" means Motor Control Centre;
- (e) "**O&M**" means Operations & Maintenance;
- (f) "**PLC**" means Programmable Logic Controller;
- (g) "**RTU**" means Remote Terminal Unit;
- (h) "**VFD**" means Variable Frequency Drive

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

D6.1 The Consultant 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 Consultant does not carry on business in Manitoba, in the jurisdiction where the Consultant does carry on business, throughout the term of the Contract, and shall provide the Project Manager with evidence thereof upon request.

D7. SAFE WORK PLAN

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

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

D8. INSURANCE

D8.1 The Consultant shall procure and maintain, at its own expense and cost, insurance policies with limits no less than those shown below.

D8.2 As a minimum, the Consultant shall, without limiting its obligations or liabilities under any other contract with the City, procure and maintain, at its own expense and cost, the following insurance policies:

- (a) Comprehensive or Commercial General Liability Insurance including:
 - (i) an inclusive limit of not less than \$2,000,000 for each occurrence or accident with a minimum \$2,000,000 Products and Completed Operations aggregate and \$5,000,000 general aggregate;
 - (ii) all sums which the Consultant shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting therefrom) sustained by any person or persons or because of damage to or destruction of property caused by an occurrence or accident arising out of or related to the Services or any operations carried on in connection with this Contract;
 - (iii) coverage for Products/Completed Operations, Blanket Contractual, Consultant's Protective, Personal Injury, Contingent Employer's Liability, Broad Form Property Damage, Employees as Additional Insureds, and Non-Owned Automobile Liability;
 - (iv) a Cross Liability clause and/or Severability of Interest clause providing that the inclusion of more than one Insured shall not in any way affect the rights of any other Insured hereunder in respect to any claim, demand, suit or judgment made against any other Insured.
- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Consultant directly or indirectly in the performance of the Service. 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) Professional Errors and Omissions Liability Insurance including:
 - (i) an amount not less than \$2,000,000.00 per claim and \$2,000,000.00 in the aggregate.

D8.2.1 The Consultant's Professional Errors and Omissions Liability Insurance shall remain in force for the duration of the Project and for twelve (12) months after Total Performance.

- D8.3 The policies required in D8.2(a) shall provide that the City is named as an Additional Insured thereunder and that said policies are primary without any right of contribution from any insurance otherwise maintained by the City.
- D8.4 The Consultant shall require any Consultants hired to perform geo technical drilling and sample collecting or closed-circuit television to procure and maintain, at its own expense and cost, comparable insurance to that set forth under D8.2(a) and D8.2(b).
- D8.5 The Consultant shall require each of its Subconsultants hired for design, architectural or engineering services as outlined in the Scope of Services to provide comparable insurance to that set forth under D8.2(a) and D8.2(c).
- D8.6 The Consultant shall provide the Project Manager 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 Services, but in no event later than the date specified in C4.1 for the return of the executed Contract. Such certificates shall state the exact description of the Services and provide for written notice in accordance with D8.9.
- D8.7 The Consultant may take out such additional insurance as it may consider necessary and desirable. All such additional insurance shall be at no expense to the City.
- D8.8 All insurance, which the Consultant is required to obtain with respect to this Contract, shall be with insurance companies registered in and licensed to underwrite such insurance in the Province of Manitoba.
- D8.9 The Consultant shall not cancel, materially alter, or cause any policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the City.

SCHEDULE OF SERVICES

D9. COMMENCEMENT

- D9.1 The Consultant shall not commence any Services until it is in receipt of a notice of award from the City authorizing the commencement of the Services.
- D9.2 The Consultant shall not commence any Services until:
- (a) the Project Manager has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D6;
 - (ii) evidence of the insurance specified in D8.
 - (b) the Consultant has attended a meeting with the Project Manager, or the Project Manager has waived the requirement for a meeting.
- D9.3 The City intends to award this Contract by November 12, 2021.

D10. CRITICAL STAGES

- D10.1 The Consultant shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
- (a) Tender for supply of goods and materials with long deliveries (pumps and motors, electrical components, large diameter valves; etc.) closing by February 11, 2022;
 - (b) Final design for Station upgrades completed and accepted by the City by June 24, 2022.
 - (c) Tender for Station upgrades closing by August 19, 2022.
 - (d) New Station pumps and pump motors (including all related components such as drive shafts, cabling, conduits, controls, etc.) must be installed and operational by March 1, 2023.
 - (e) Substantial Performance by May 15, 2023.

(f) Total Performance by June 30, 2023.

D11. COVID-19 SCHEDULE DELAYS

- D11.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Services shall be performed by the Consultant with due consideration to the health and safety of workers and the public, directives from health authorities and various levels of government and in close consultation with the Project Manager.
- D11.2 If the Consultant is delayed in the performance of the Services by reason of the COVID-19 pandemic, the Services schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D11.3 A minimum of seven (7) Calendar Days prior to the commencement of Services, the Consultant shall declare whether COVID-19 will affect the start date. The Consultant shall provide sufficient evidence that the delay is directly related to COVID-19, including but not limited to evidence related to availability of staff, availability of material or work by others.
- D11.4 For any delay related to COVID-19 and identified after Services have commenced, the Consultant shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D11.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D11.5 The Services schedule, including the durations identified in the Contract, will be adjusted to reflect delays accepted by the Project Manager.
- D11.6 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Project Manager, shall be documented in accordance with C8.

THIRD PARTY AGREEMENTS

D12. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D12.1 In the event that funding for the Services of the Contract is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, the following terms and conditions shall apply, as required by the applicable funding agreements.
- D12.2 Further to D12.1, in the event that the obligations in D12 apply, actual costs legitimately incurred by the Consultant as a direct result of these obligations ("Funding Costs") shall be determined by the actual cost to the Consultant and not by the valuation method(s) outlined in C7.4. In all other respects Funding Costs will be processed in accordance with Changes in Services under C7.
- D12.3 For the purposes of D12:
- (a) "**Government of Canada**" includes the authorized officials, auditors, and representatives of the Government of Canada; and
 - (b) "**Government of Manitoba**" includes the authorized officials, auditors, and representatives of the Government of Manitoba.
- D12.4 Modified Insurance Requirements
- D12.4.1 If not already required under the insurance requirements identified in D8, the Consultant will be required to obtain and maintain professional liability insurance in an amount of no less than one million dollars (\$1,000,000) inclusive per claim. Such policy shall be maintained for at least twenty four (24) months after Total Performance.
- D12.4.2 The Consultant shall obtain and maintain third party liability insurance with minimum coverage of two million dollars (\$2,000,000.00) per occurrence on all licensed vehicles operated at the Site. In the event that this requirement conflicts with another licensed

vehicle insurance requirement in this Contract, then the requirement that provides the higher level of insurance shall apply.

- D12.4.3 Further to D8.6 insurers shall provide satisfactory Certificates of Insurance to the Government of Manitoba prior to commencement of Services as written evidence of the insurance required. The Certificates of Insurance must provide for a minimum of thirty (30) days' prior written notice to the Government of Manitoba in case of insurance cancellation.
- D12.4.4 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D12.5 Indemnification By Consultant
- D12.5.1 In addition to the indemnity obligations outlined in C13 of the General Conditions for Consultant Services, the Consultant agrees to indemnify and save harmless the Government of Canada and the Government of Manitoba and each of their respective Ministers, officers, servants, employees, and agents from and against all claims and demands, losses, costs, damages, actions, suit or other proceedings brought or pursued in any manner in respect of any matter caused by the Consultant or arising from this Contract or the Services, or from the goods or services provided or required to be provided by the Consultant, except those resulting from the negligence of any of the Government of Canada's or the Government of Manitoba's Ministers, officers, servants, employees, or agents, as the case may be.
- D12.6 Records Retention and Audits
- D12.6.1 The Consultant shall maintain and preserve accurate and complete records in respect of this Contract and the Services, including all accounting records, financial documents, copies of contracts with other parties and other records relating to this Contract and the Services during the term of the Contract and for at least six (6) years after Total Performance. Those records bearing original signatures or professional seals or stamps must be preserved in paper form; other records may be retained in electronic form.
- D12.6.2 In addition to the record keeping and inspection obligations outlined in C7.16 of the General Conditions for Consultant Services, the Consultant shall keep available for inspection and audit at all reasonable times while this Contract is in effect and until at least six (6) years after Total Performance, all records, documents, and contracts referred to in D12.6.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.
- D12.7 Other Obligations
- D12.7.1 The Consultant consents to the City providing a copy of the Contract Documents to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D12.7.2 If the Lobbyists Registration Act (Manitoba) applies to the Consultant, the Consultant represents and warrants that it has filed a return and is registered and in full compliance with the obligations of that Act, and covenants that it will continue to comply for the duration of this Contract.
- D12.7.3 The Consultant shall comply with all applicable legislation and standards, whether federal, provincial, or municipal, including (without limitation) labour, environmental, and human rights laws, in the course of providing the Services.

D12.8 The Consultant shall properly account for the Services provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.

PART E - SCOPE OF SERVICES

E1. DESIGN SERVICES

E1.1 General

- E1.1.1 These Terms of Reference are supplemental to the Standard Terms and Conditions of Consultant Services and the "Definition of Standard Consulting Engineering Services" required by the City of Winnipeg.
- E1.1.2 The consulting services described herein are to be provided for the Water and Waste Department (the Department).
- E1.1.3 The Department will provide assistance towards the following services:
- (a) Site access to the Station.
 - (b) Provision of any available information on Riverbend Station operation records (i.e. pump cycle times, maintenance records, sewer flow gauging).
- E1.1.4 The following engineering services are required for the Riverbend Wastewater Pumping Station:
- (a) Miscellaneous structural engineering and architectural design.
 - (b) HVAC engineering design.
 - (c) Electrical and instrumentation engineering design, including Arc Flash Hazard study. The Arc Flash study shall consist of a separate sealed report including arc flash results, time current curves (TCCs) and short-circuit duty details. The final arc flash report shall be sealed by an Engineer.
 - (d) Design of the process piping (suction and discharge), including pumps, valves, fittings, flow meters and pump motor layout.
 - (e) Design of pump seal systems with separate systems for each pump.
 - (f) Development of temporary by-pass pumping operations specifications.
 - (g) Design of Civil and Municipal services outside the station, including a new force main.
 - (h) Design of force main by-pass pumping connections, to be located in a new manhole assembly(s) on the new force mains to allow for future access to the connections.
 - (i) Provision of any geotechnical and soil testing reports for use in design and obtaining required construction permits.
 - (j) Preparation of all Tender documents, including the development of separate Tender/Tenders for the procurement of goods and materials with long delivery schedules such as, but not limited to: pumps, pump motors, large diameter gate valves, pipe fittings, flow meters and electrical components. Station design for all pumps, motors and process piping to be completed and reviewed the department prior to tendering goods with long deliveries.
 - (k) Provision of resident and non-resident Contract Administration services.
 - (l) Project close-out service.
- E1.1.5 Orientation Meeting
- (a) Attend a mandatory meeting with the Design & Construction and Wastewater Services Branches of the Department to review project expectations and limits.
- E1.1.6 Design Services
- (a) General
 - (i) Allow for a minimum two (2) week review of each submission for review by City staff.
 - (ii) The Consultant shall ensure all equipment, instrument and PLC signal tags meet the City of Winnipeg Identification Standard.

- (iii) Preparation of a Preliminary Design Report complete with description of each discipline work to be performed. The report shall include high level drawings (such as electrical single line diagrams, plan drawings, elevation details, mechanical schedules, P&ID diagrams, etc.) along with instrument list to convey the design. Provide options for City staff to select anticipated designs.
 - (iv) Prepare a 66% design submission complete with drawings, specifications, instrument list, I/O DNP3 mapping list, control narrative and Class II estimate.
 - (v) Prepare a 99% design submission complete with drawings, specifications, instrument list, I/O DNP3 mapping list, control narrative and Class I, pre-tender estimate. The pre-tender estimate must be provided to the Department's contact person for review at least fifteen (15) calendar days prior to tendering. **The project shall not be tendered without this review.**
 - (vi) All required technical specifications complete with Form B: Unit Prices, to be included with all Tender documents and construction drawing packages.
 - (vii) Construction drawings are to have a Department drawing number assigned before the work is tendered. Drawing numbers shall be requested from the Department's contact person.
 - (viii) Review and approval of shop drawings submitted by the Contractor and/or Supplier(s).
 - (ix) Digital files of the construction drawings shall be provided to the Department's contact person when the work is tendered.
 - (x) Provision of appropriate response to bidders and advice to the Department during the periods of tender call and, subject to acceptance by the Department, issuing addenda to the Bid Opportunity documents.
 - (xi) Review Bid Submissions for completeness and prepare Bid Submission tabulations.
 - (xii) If required, arrange for a pre-award meeting(s) with the Department and the lowest qualified Bidder for which the purpose is:
 - To establish that the Contractor has received all the addenda.
 - To ascertain that the Contractor understands the scope of work in the Bid Opportunity.
 - To determine that the Contractor is capable of meeting the obligations detailed in the Bid Opportunity.
 - To secure advisement by the Contractor of intended methods, materials, stages, timelines or sequences of the Contract that are of interest to the Department.
 - To afford the opportunity for each participant to fulfil the obligation of disclosing any known obstacle(s) to the conduct of the Contract, or of any expectation of significant revision thereof, if known at that time.
 - (xiii) Preparation of reports containing recommendations regarding award of contract and identifying reasons thereof, including identifying and explaining any variations in cost from the original engineer's estimates to the submitted Contractor costs.
 - (xiv) Provision of any geotechnical reports and documents required to assist the Department with acquiring any Permits required prior to any construction activities.
 - (xv) Provide the Contractor with assistance in obtaining any required permits necessary for the commencement of construction.
 - (xvi) Coordinate with the Contractor, the Department and other relevant parties any commissioning activities required before any components of the Station can be put into active service.
- (b) Structural Engineering

- (i) Provide an overall structural review of the existing Station superstructure and substructure to determine condition, identify and scope any repair work required.
 - (ii) Provide repairs to existing brick exterior, if required. Strip paint from brick exterior.
 - (iii) Replace the existing interior insulation with an alternative insulation system that meets current building and fire code requirements along with new interior wall and ceiling panels/coverings.
 - (iv) Provide recommendation for roof repairs and/or replacement.
 - (v) Replace flashing as part of roof repairs/replacement.
 - (vi) Replace weather stripping and reseal all wall/roof penetrations.
 - (vii) Advise if any interior substructure surface repairs are required (i.e.: sand blasting, patching, painting) to floors, walls and ceilings.
 - (viii) Test to determine if lead paint and/or asbestos are present in the Station and if present, develop procedures for working around and safe handling of these materials.
 - (ix) Include all steel reinforcing requirements.
 - (x) Recommend replacement of lower level stairs and hand rail with a staircase or modified staircase such as a "Lapeyre" staircase.
 - (xi) Advise on any repairs/re-sizing or relocating existing access hatches and ladders/stairways/walkways (including elevated catwalk) inside the Station, also include replacing any existing access hatch covers with alternative non-corrosive and non-decaying material.
 - (xii) Provision of removable barriers that can be installed around interior floor hatches when hatches are opened.
 - (xiii) Repairs/replacement as required to wet well ladders, platforms and railings.
 - (xiv) All applicable forces and loadings (both during construction and post construction) shall be taken into consideration for the design of each component above and/or additional components included to this assignment.
 - (xv) All building code requirements to be satisfied.
 - (xvi) Recommendation for design and type of main floor main floor, motor room and pump room hoisting/crane devices capable of a minimum 1 tonne lifting capacity. Provide lifting devices capable of removing all pumping and piping materials with affecting operation of other pumping units.
 - (xvii) Provision for housekeeping pad(s) for MCC's and VFD's.
 - (xviii) Ensure that all building upgrades are in compliance with the Manitoba Building Code.
- (c) Architectural Design and Details
- (i) The existing building size is not sufficient to house all the equipment required for this project. The Consultant shall design a new structure of sufficient size to house all new equipment. The new building superstructure for the wastewater pumping station will generally consist of non-combustible brick and masonry construction, metal profile roof with steel double man-entry doors. The superstructure will be required to house the electrical distribution centre, equipment hoist, HVAC equipment and all other necessary components above grade. The superstructure should be aesthetically suitable for the location of the pumping station.
 - (ii) The existing building foundation is to be utilized in the footprint of the new superstructure.
- (d) Mechanical Engineering – Process Pumping and Piping
- (i) Determine if existing pump suction lines from Station wet well are adequate in condition and layout configuration to be re-used with new pump installation. If

- not adequate, provide detailed design for replacement of existing suction lines with new.
- (ii) Provide design recommendation for replacement of two (2) existing wastewater sewage pumps and pump motors in the “dry-pit” section of the Station with up to three (3) new pumping units (pumps, motors, driveshafts, guards, etc.)
 - ◆ The existing pump motors are sized as indicated below, the Consultant shall review the desired flow capacities and provide recommended pump motor sizing to achieve the desired flows in the system:
 - ◆ 60 HP
 - ◆ 575 Volt, 3 phase, 60 cycle
 - ◆ Include vibration and temperature analog instruments and tie into PLC Control Panel. Each pump vibration signal shall provide a high vibration alarm to SCADA and a high vibration alarm that locks the pump out in both the manual and automatic modes of pump operation. Temperature should be for alarming purposes only.
 - (iii) Pumps shall be of the same manufacturer and shall all be identical, non-clog sewage pumps capable of handling 75mm (3”) solids and suitable for vertical dry-pit installation and capable to run in reverse mode.
 - The Consultant shall conduct a hydraulic review of the wastewater pumping station system and determine what the maximum allowable flow volume would be without overwhelming the downstream interceptor sewer on Portage Avenue at Riverbend Crescent.
 - Consultant shall review peak wet weather flows and size maximum Station capacity accordingly.
 - The new pumps shall be sized as determined by the Consultant but shall have at least a minimum capacity in accordance with the following:
 - 152 L/s (2409 USgpm) at a Total Dynamic Head of 20.7m.
 - It is anticipated that one pump running shall provide firm Station capacity to handle Peak Dry Weather Flow (PDWF)
 - The PDWF rates identified are from historical sewer gauging records. This gauging data will be available to the Consultant.
 - Pumps must be able to rotate through the duty cycle so that the lead pump changes with every cycle.
 - Pumps must be capable of being run in reverse for unclogging/de-ragging purposes.
 - (iv) Replacement of all existing suction and discharge process piping inside the Station, including all valves and fittings.
 - (v) Shall include design for force main by-pass pumping connections, complete with MH assembly(s).
 - (vi) Development of temporary by-pass pumping specifications.
 - (vii) Provide 24 VDC flow meters on each pump force main piping and tie flow meters into the PLC Control Panel.
 - (viii) Provision to remove existing isolation valves and operators in the wet well of the Station and replace with new.
 - (ix) Relocation of water meter and backflow prevention device to the main floor elevation. Provide a new water pressure instrument and tie into PLC Control Panel.
 - (x) Review condition of sump pump and replace if required.
 - (xi) Shall include development of new hydraulic system curve for Station and shall provide recommendation for proper pump impeller size (based on pumping unit specifications) and pipe diameter size to provide maximum pumping efficiency.

- (xii) Provide new seal water systems, separate for each lift pump. Seal water shall automatically operate by a solenoid valve when lift pump is running and utilize a flow meter connected into the PLC Control Panel. Provide a manual bypass line for each seal water system.
 - (xiii) All building codes to be satisfied.
- (e) Mechanical Engineering– HVAC System
- (i) Review existing HVAC system and make recommendations for new system that should incorporate six (6) continuous Air Changes per Hour (ACH) of seasonally heated ventilation.
 - (ii) Review Station heat loading for possible Air Conditioning requirements.
 - (iii) The HVAC system should incorporate 75% recirculated air when unoccupied and 100% fresh air when occupied utilizing modulated 0-10V dampers. HVAC control shall be accomplished by standalone HVAC controllers. Electric heat is favoured over gas by the Department.
 - (iv) Propose and design the means to determine Station occupancy, such as consideration to integrate ventilation system with facility light switches.
 - (v) Determine the new HVAC system will adequately fit in the layout of the existing Station building structure.
 - (vi) Provide supplied air to the lower levels of the Station and install ducting and relief dampers as required.
 - (vii) Install dampers with electric actuators on the outdoor air, return and exhaust ducts. Damper status signals shall be designed to be sent to the PLC control panel.
 - (viii) Provide a P&ID diagram of the proposed ventilation system and associated controls for the existing building. Airflow requirements for each room in the Station must be included.
 - (ix) Provide a cooling fan complete with ON/OFF intake and exhaust dampers to remove excess heat generated from motor starters and VFDs. Dampers automatically open before cooling fan can run. Tie into fan statuses along with separate dampers fail to open alarms to PLC Control Panel
 - (x) All building code requirements to be satisfied.
- (f) Electrical and Instrumentation Engineering
- (i) Review existing service entrance to receive power supply from Manitoba Hydro and recommend required upgrades including renewing service conduit/overheads to the Station.
 - (ii) Review and provide analysis on historical pump start frequency data (supplied by the Department) to confirm the expected number of pump starts within various dry and wet weather flow conditions to determine if station operation meets expected requirements.
 - (iii) Provide a load assessment for the Station to determine the suitability of the existing common power supply.
 - (iv) Review the condition of the Customer Service Termination Equipment (CSTE) and advise regarding replacement.
 - (v) Provide design for the 3 ph/600 volt/60 Hz, 4-wire electrical distribution:
 - Propose and design the style of electrical distribution – Motor Control Centre (MCC), panelboard, etc.
 - Include provision for the following:
 - 1) main breaker complete with adjustable Long, Short and Instantaneous (LSI) settings. Main breaker shall be in a service entrance compartment,
 - 2) digital power metering and connected into PLC,
 - 3) pump motor starters complete with VFD's (Note: a hard start of the pump motors must be able in the event a VFD unit failure),

- 4) design power factor correction,
 - 5) provide starter for the 3 phase ventilation fan,
 - 6) Provide starter for the 3-phase cooling fan,
 - 7) provide separate breakers for the 3 phase heating loads,
 - 8) provide a breaker for the 120/240V transformer,
 - 9) Provide for the installation of a Transient Voltage Surge Suppressor (TVSS) with signal tied into the new PLC Control Panel,
 - 10) Provide for the installation of a power fail relay and tie into the new PLC Control Panel
 - 11) provide spare space for future expansion,
- (vi) Replace existing 120/240V transformer and panelboard.
- (vii) Provide for replacement of the entire station 120/240V wiring, including all lighting. Receptacles and conduits.
- (viii) Replace the existing RTU panel with new PLC control panel and in line with Department Standards. Redundant communication to Operation's SCADA system DNP3 communication protocol.
- (ix) Provide for 24VDC power for future flowmeter(s) installation.
- (x) Identify the electrical classification of all areas of the wastewater pumping station, considering the proposed ventilation design and currently accepted standards for wastewater facilities.
- (xi) Provide a design basis for the following electrical work, including:
- General and Environmental requirements,
 - Power Factor Correction,
 - Grounding,
 - 600V distribution,
 - Motor Starters/VFD's,
 - Transformers,
 - Panelboards,
 - Uninterruptible Power Supply for PLC Control Panel, minimum six (6) hour duration,
 - Lighting (interior and exterior) with exterior lighting to be controlled by a 0-10V dimming controller for manual adjustment of light output,
 - Receptacles,
 - Cables and Wiring,
 - Identification of Specific Implementation Requirements.
 - Provision for 24VDC panel,
 - All Electrical and Instrumentation designs must satisfy the criteria of installing three identical pump and motor units inside the Station.
 - Electrical and Instrumentation work the installation of flow metering device(s) with remote monitor.
 - Electrical and Instrumentation work for new Displaced Pressure Cells or Level Sensor Transmitters for Station level control. Two (2) separate transmitters are to be designed such that signals are averaged and lift pumps can still automatically run when one transmitter fails.
 - Provide redundant level control sensor in the event the primary pump control fails. Complete with isolation valves, flushing means, and selectable from the PLC panel.
- (xii) Provision of Station Arc Flash study:

- Arc Flash study to be completed using SKM software. SKM library files and single line drawings to be submitted to the City.
 - Arc flash energies to be kept as low as reasonable attainable.
 - Provide arc flash labels for all electrical equipment based upon the Arc Flash study, revised to as-constructed. Arc Flash labels are to be consistent with City Standards and are to be submitted to the City for review before printing.
 - Provide a sealed arc flash report including equipment incident energy, coordination of protective devices with time current curves (TCCs) along with equipment short-circuit duty results.
- (xiii) All electrical code requirements to be satisfied.
- (xiv) Provide provision to install digital metering inside the Station, alternately this could be installed inside a new CSTE enclosure; however, the new enclosure would require heating in this application.
- (xv) Identify the requirements for including a new battery-based emergency lighting system for the Station's interior. Emergency lighting shall turn on when there is a power failure at the station and/or individual lighting circuits lose power.
- (xvi) Model the proposed changes to identify approximate arc flash energy levels and ensure that the design provides for Category 2, or lower, arc flash energies within the Station.
- (xvii) Provide recommendations regarding the proposed facility wiring type (Teck cable, Aluminum conduit or PVC conduit).
- (xviii) Replace the existing grounding and identify upgrades as required to meet code requirements and good practice.
- (xix) Provision for a portable generator connection on the exterior of the Station building.
- (xx) In addition to the final design, the deliverables will include:
- Single Line Diagram with preliminary arc flash labels including working distance, incident energy and arc flash boundary,
 - Plan layout drawings of electrical distribution within the existing building. Include major automation control panels ensure that HVAC equipment interfaces are accommodated.
- (g) Automation Engineering
- (i) Review the existing automation system including pump controls and make design recommendations consistent with recent City of Winnipeg Wastewater Pumping Station upgrades.
- (ii) Provide for installation of a wastewater Flowmeters, ideally one (1) for each pump, to totalize all Station discharge and make recommendations regarding the type and configuration of the flowmeters.
- (iii) Make recommendations regarding all the I/O to be utilized.
- (iv) Design a new redundant level controller system for pump run operations such as a Displaced Pressure (DP) cell that come with an isolation valve, calibration port and sight glass with drain:
- Any sensors in the lower level will require a visual reference for maintenance purposes.
 - Identify and include in the design the required programmable pump controls to allow for level transmitter redundancy.
 - Two (2) level controllers are required for the redundant system. Utilize a contact switch on each level controller and tied into the PLC for high wet well level alarm.
- (v) Allow for the reuse of the existing DP cell system location for redundant back-up Station level control, however the DP cell components should be renewed.

- (vi) Remove existing Remote Terminal Unit (RTU) panel and provide recommendations for required upgrades to sufficiently run the Station functions. A new Schneider Electric M580 PLC Control Panel shall be designed by the Consultant complete with NOR cards for wireless and wired communications to SCADA operators.
 - (vii) HVAC shall have its own controller system separate from PLC control.
 - (viii) Provision to include all RTU/PLC programming and communication, set up DNP mapping and establish communication with SCADA.
 - (ix) Provide control narrative for the contractor to program the PLC and set up communication. The Consultant will be responsible for this and will need to submit to the Department during the design review process. The final control narrative shall be provided in a report format and sealed by an Engineer.
 - (x) Provide cleaning cycle function or auto de-ragging options of the pumps programmed into the PLC logic so that the pumps can run in reverse mode and be capable to run remote from the SCADA Operations Centre.
 - (xi) Provide pumping strategy control narrative that considers reducing clogging and ragging of the pumps.
 - (xii) Provide the SCADA Operations Centre the ability to remotely select pump run and cycling options. Control narrative shall include operation by HMI touchscreen and remote by SCADA to run the pumps in the reverse direction at low speeds.
 - (xiii) Provide recommendations for the type and location of a new room temperature transmitter. The transmitter will be tied into the PLC Control Panel.
 - (xiv) Provision for a local Human Machine Interface (HMI) touchscreen. The HMI touchscreen shall include the following individual windows, Operations (showing Wet Well level and lift pump status), HVAC Status (including all fans and damper statuses), Pump Details, Pump Trends along with Alarms Table.
 - (xv) Provide details regarding the type and configuration of the ventilation controls. At this time, it is anticipated that the ventilation controls will be integrated with the MCC controls.
 - (xvi) Provide in the design for 600 Volt and 120 Volt power fail monitoring inputs.
 - (xvii) Prepare P&ID drawings, following City of Winnipeg standards showing the process and instrumentation for all process, HVAC and miscellaneous services.
 - (xviii) Identify and propose other instrumentation as required. Coordinate with the Department regarding PLC and associated control instrumentation.
 - (xix) Provide a new wet well high-level instrument and tied into the PLC Control Panel. The level instrument will be required to tie into a separate intrinsically safe junction box.
 - (xx) The Consultant shall prepare and submit Instrument List for City review referencing the applicable specification sections along with drawings that each instrument can be found on.
 - (xxi) The Consultant shall prepare and submit an input/output (I/O) DNP3 Mapping List for City review including any PLC point locations and any internal PLC generated alarms.
- (h) Civil and Municipal Engineering
- (i) The existing force main is undersized for the peak flow and velocities. Provide design for new force main to be installed from the Station to the manhole the existing force main is connected to. Design to include a new manhole assembly to allow for a temporary bypass
 - (ii) Provide design for new manhole assembly on Station property to permanently house the temporary by-pass connections on the existing force main.
 - (iii) Provision to replace Station water supply line, if required.
 - (iv) Repairs to existing paved surfaces around the Station property, if required.
 - (v) Provision to expand paved surfaces to allow vehicles to turn around.

- (i) Cost Estimate
 - (i) Provide an AACE Class 4 cost estimate for the proposed work.

E1.2 Construction Drawings

- (a) All drawings are to be drawn in accordance with The City of Winnipeg Manual for Production of Construction Drawings and Departmental requirements.
- (b) Construction Drawings are to be prepared by the Consultant and will be included in the Bid Opportunity Documents. Provide digital PDF's of the Construction Drawings to be posted on the City of Winnipeg web site for the bidding period.
- (c) The Department's contact person will provide drawing numbers for the construction drawings prepared by the Consultant.
- (d) The following General Construction Drawings will be required to be produced by the Consultant and reviewed by the City prior to the project going to Tender:
 - (i) Cover sheet showing station location.
 - (ii) Drawing index.
- (e) The following Structural Construction Drawings will be required to be produced by the Consultant and reviewed by the City prior to the project going to Tender:
 - (i) Structural demolition plans and details.
 - (ii) Structural plans and elevations.
 - (iii) MCC and VFD housekeeping pad details.
- (f) The following Mechanical Construction Drawings will be required to be produced by the Consultant and reviewed by the City prior to the project going to Tender:
 - (i) Mechanical demolition plans
 - (ii) Mechanical plans, elevations including mechanical ventilation design details.
 - (iii) Seal water piping details.
 - (iv) Mechanical schedules (dampers, louvers, heaters, fans, fire extinguishers, etc.) including power requirements for equipment.
- (g) The following Electrical Construction Drawings and Documents will be required to be produced by the Consultant and reviewed by the City prior to the project going to Tender:
 - (i) Electrical demolition plan and single line
 - (ii) Single line diagram complete with breaker settings table. Single line diagram shall also be labelled for MCC bucket locations.
 - (iii) Hazardous location plan.
 - (iv) Grounding installation details
 - (v) Electrical plan layout showing all electrical instruments, lighting, receptacles, motors and HVAC loads. All lighting and receptacles shall show circuit numbers.
 - (vi) Motor Control Centre(s) elevation details including showing where all pilot devices (lights, push buttons, emergency stops, analog meters, etc.) are located.
 - (vii) Panel and luminaire schedules clearly showing outdoor lighting and emergency lighting control.
 - (viii) Separate motor schematics for each motor/pump. All motor schematic branches shall be clearly labelled to indicate what the branch control does. All signals tying into the PLC shall be clearly shown.
 - (ix) Separate motor connection diagrams clearly showing all control field wires for electrical instruments and PLC control panel. For HVAC equipment, it is acceptable to include cable connection details on the motor schematics.
 - (x) Setting Letters for Variable Frequency Drives and any other equipment on soft starters.
- (h) The following Automation Construction Drawings and Documents will be required to be produced by the Consultant and reviewed by the City prior to the project going to Tender:

- (i) Automation plan drawing showing all automation instruments
 - (ii) PLC control panel arrangement and bill of materials.
 - (iii) PLC power distribution schematic.
 - (iv) PLC networking block diagram.
 - (v) Separate PLC card schematic drawings for each PLC card is required including showing terminal connection points. All signals shall terminate on terminal blocks with pre-manufactured cabling connecting to the PLC cards.
 - (vi) Pump control schematic clearly showing PLC and Local modes of operation. The automatic pump control operation shall automatically switch to local mode when the PLC fails. Local mode pump control is done directly by relays on the level controller, PLC mode pump control is done through the PLC discrete output card.
 - (vii) HVAC control panel arrangement and bill of materials.
 - (viii) Intrinsically safe junction box arrangement and bill of materials.
 - (ix) Separate loop diagrams for each instrument. For instruments that utilize common controls such as dampers, it is acceptable to include on the same loop diagram.
 - (x) Control Narrative in report format for programming of the PLC.
 - (xi) Instrument List including reference to specification section and drawing(s).
 - (xii) Input/output DNP3 List including internal PLC generated signals including terminal numbers and DNP3 addresses.
- (i) The following Process Construction Drawings will be required to be produced by the Consultant and reviewed by the City prior to the project going to Tender:
- (i) Mechanical HVAC Flow P&ID.
 - (ii) Lift Pumping P&ID including pump duty control setpoints and key elevations (high wet well level, wet well bottom, etc.).

E2. CONTRACT ADMINISTRATION SERVICES

E2.1 Non-Resident Services

- (a) Personnel with demonstrated experience in the design and contract administration of the mechanical, electrical, structural, and civil components of the Works are to be assigned to this project.
- (b) Consultation with and advice to the Department during the course of construction.
- (c) Coordinate and conduct a pre-construction meeting with all other relevant parties in attendance and provide minutes of meeting to all in attendance and those to be copied.
- (d) Review and acceptance of shop drawings and manufacturers' drawings supplied by the Contactor or supplier to ensure to the Department that the shop drawings are in conformance to the contract Drawings and Specifications, without relieving the Contractor of his contractual and legal obligations in respect thereof.
- (e) Review and report to the Department upon laboratory, shop and other tests conducted upon materials and /or equipment placed or installed by the Contractor to ensure to the Department conformance to the contract Drawings and Specifications, without relieving the Contractor of his contractual and legal obligations in respect thereof.
- (f) Review and acceptance of O&M manual submissions.
- (g) Acceptance of alternate materials and methods, subject to prior acceptance by the Department, without relieving the Contractor of his contractual and legal obligations in respect thereof.
- (h) Submit monthly contract progress estimates to be processed in a timely fashion in accordance with the General Conditions of the City of Winnipeg Standard Construction Specifications.
- (i) Provide a detailed monthly "Cost to Complete" report. This report is to include the actual costs to date, plus projected costs to complete the project including allowances for any

unforeseen cost with explanation and justification. The report shall identify any expected budget overruns or surpluses.

- (j) Furnish copies to the Department of all significant correspondence relating directly or indirectly to the project by parties external to the Consultant's Contract Administrator (Contract Administrator).
- (k) Submit to the Department, prior to construction, a report documenting written and photographic records of, and assessments of the physical condition of adjacent buildings, facilities, surface conditions and other infrastructure sufficient to equip the Contract Administrator to provide valid evidence and relevant testimony in settlement of any claim involving the City by any court of law or by any other party thereto arising from the project.
- (l) Consultant billings are to indicate the fee breakdown for the submitted invoice as well as the total fees to date.
- (m) Billings are to be adjusted to indicate the 2% of the actual construction value holdback until as-constructed drawings have been submitted. Invoices submitted without this breakdown will be returned.
- (n) Approved allowable disbursements and laboratory testing costs are to be shown as separate sub-totals from the fee charges.
- (o) Assist the Contractor in obtaining applicable building permits (including electrical, mechanical, structural, etc.).

E2.2 Resident Services

- (a) Personnel with demonstrated experience in the design and contract administration of the mechanical, electrical, structural, and civil components the Works are to be assigned to this project.
- (b) Ensure that Quality Assurance/Quality Control (Qa/Qc) is undertaken to Building Code requirements and Departmental standards.
- (c) Arrange for regular job meetings at the worksite or near the worksite throughout the duration of the contract work. The meetings are to be attended by the Contract Administrator or his/her designate as well as the on-site Inspector, the Contractor and the Department's contact person.
- (d) Minutes of all site meetings shall be recorded and distributed to all in attendance and the copy list.
- (e) Without relieving the Contractor of his contractual and legal obligations in respect thereof, conduct detailed inspection of construction sufficient to ensure that the Work carried out by the Contractor is in conformance with the Drawings and Specifications.
- (f) Co-ordination and staging of other works by third parties on the site including, but not limited to, Hydro, Gas, Communications and other City forces.
- (g) Reports are to be promptly made the Department's contact person regarding unusual or changed site conditions which may or will result in extra work to the project.
- (h) All extra work to the project must be reviewed and approved by the Department's contact person prior to approval being given to the Contractor to undertake the Work.
- (i) Extra work to the project shall not exceed 20% of the awarded contract amount to a maximum of \$250,000.00. The Contract Administrator will be responsible to project final construction costs throughout the duration of the project to ensure the project remains with the budget allowance.
- (j) Keep a continuous and accurate record of working days and days lost due to inclement weather or other unforeseen circumstances during the course of construction.
- (k) In conjunction with the Department, provision of advance notice to adjacent residents and businesses who will have public services and/or access disruptions during construction.
- (l) Enforcement of contractor conformance with the City of Winnipeg Manual of Temporary Traffic Control in Work Areas on City streets in compliance with expected standards of

safety for motorists and pedestrians, without relieving the Contractor of his contractual and legal obligations in respect thereof.

- (m) Acting in the interest of the Department, provide responsible, sensitive and prompt reaction to the reasonable requests and complaints of citizens regarding the conduct of the project.
- (n) Arranging for and carrying out testing of materials to ensure conformance with the Drawings and Specifications, without relieving the Contractor of his contractual and legal obligations in respect thereof.
- (o) The Consultant will be required to attend commissioning site visits to ensure proper testing is performed. Prepare and submit commissioning reports including general scope, work completed, items requiring completion and/or changes and other items.
- (p) Ensure the Contractor fills out the required commissioning forms for each commissioning site visit to be incorporated into the O&M manual. City staff will be required to be on site during commissioning activities to witness commissioning.

E2.3 Final Inspections and Project Acceptance

- (a) As coordinated with the Department's contact person and the Contractor, provide inspection of the completed Works to establish the project milestones of Substantial Performance, Total Performance, and Final Acceptance of the completed project.
- (b) Complete and submit record drawings of the completed mechanical, electrical, structural, and civil works to the Department contact for review within two (2) months of the date of Substantial Performance of the Work.
- (c) Coordinate with the Installation Contractor and Equipment Supplier for all required site testing and commissioning services.
- (d) Coordinate with the Installation Contractor and Equipment Supplier to provide a minimum of four (4) on-site training sessions to provide instruction to City staff on the safe operation of all new equipment including recommended maintenance tasks and schedules.
- (e) Coordinate with the Installation Contractor and Equipment Supplier to provide five (5) full sets of all Operation & Maintenance manuals to the City for all newly installed equipment and devices.
- (f) Assist the Contractor in closing out the applicable building permits (electrical, mechanical, structural, etc.).
- (g) Provide sealed Arc Flash Study report including SKM model, incident energy, protective device coordination with time current curves (TCCs) and short-circuit duty information.
- (h) Perform a warranty inspection site visit approximately eleven (11) months after the date of Substantial Completion has been achieved with the Contractor and City staff. Prepare and submit a deficiency report and arrange for the Contractor to have the deficient items addressed.

E2.4 Record Drawings

- (a) The preliminary record drawing submission is to consist of a drawing transmittal letter to the Department's Supervisor of Drafting & Graphic Services, copied to the Department's contact person, and along with one (1) complete set of full-size (A1) drawings prints for the Works
- (b) Record drawings are to include all construction details and materials of the completed works, including the following:
 - (i) All construction details,
 - (ii) Complete materials list for each individual component installed,
 - (iii) Date of installation of Works (Substantial Performance),
 - (iv) Installation Contractor.
- (c) The reviewed record drawings will be returned with comments (if any) for completion. Once all revisions have been made, submit one (1) complete set of full size (A1) drawing mylars for the Works, complete with the preliminary prints with comments, and the digital file for

each as-constructed drawing to the Department's Supervisor of Drafting & Graphic Services. The digital drawing file must have the Water and Waste Department drawing number assigned to that drawing.

APPENDIX A – RIVERBEND WASTEWATER PUMPING STATION HISTORICAL RECORD DRAWINGS

DRAWINGS

- 1-0178-A-A0203-001 (Panel Layout)
- 1-0178-A-A0204-001 (Loop 1 of 2)
- 1-0178-A-A0204-002 (Loop 2 of 2)
- 1-0178L-G0001-001
- 1-0178L-M0001-001
- 74-FS-Q-1
- 312
- 313
- 313-A
- 314
- 315
- 316
- 1115
- L-S-35
- M-418
- M-419

APPENDIX B – WASTEWATER LIFT STATION CONDITION ASSESSMENT PHASE II - DOCUMENT VIII: RIVERBEND LIFT STATION ASSESSMENT

APPENDIX C – RIVERBEND LIFT STATION HOIST DEVICES AND LIFTING CAPACITIES REPORT