



**THE CITY OF WINNIPEG**

# **REQUEST FOR PROPOSAL**

**RFP NO. 133-2023**

**PROFESSIONAL CONSULTING SERVICES FOR PERIMETER ROAD PUMPING  
STATION PUMP REPLACEMENT AND ELECTRICAL 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)	5
B11. Experience of Key Personnel Assigned to the Project (Section D)	6
B12. Project Understanding and Methodology (Section E)	7
B13. Management Proposal (Section F)	7
B14. Project Schedule (Section G)	8
B15. Disclosure	8
B16. Conflict of Interest and Good Faith	9
B17. Qualification	10
B18. Opening of Proposals and Release of Information	11
B19. Irrevocable Offer	11
B20. Withdrawal of Offers	11
B21. Interviews	11
B22. Negotiations	11
B23. Evaluation of Proposals	12
B24. Award of Contract	13

### PART C - GENERAL CONDITIONS

C0. General Conditions	1
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### PART D - SUPPLEMENTAL CONDITIONS

#### General

D1. General Conditions	1
D2. Consulting Contract Administrator	1
D3. Background	1
D4. Scope of Services	3
D5. Definitions	4
D6. General Requirements	4
D7. Preliminary and Detailed Design Development	10
D8. Procurement	17
D9. Contract Administration Services – Non-Resident	18
D10. Contract Administration Services – Resident	20
D11. Commissioning	21
D12. Record Documents	23
D13. Project Closeout Services	24
D14. Additional Work Allowances	25
D15. Relevant Documents	26
D16. Accessible Customer Service Requirements	26
D17. Unfair Labour Practices	26

#### Submissions

D18. Authority to Carry on Business	27
D19. Safe Work Plan	27

D20. Insurance	27
<b>Schedule of Services</b>	
D21. Commencement	29
D22. Critical Stages	29
D23. COVID-19 Schedule Delays	29
<b>Measurement and Payment</b>	
D24. Invoices	30
D25. Payment	30
D26. Payment Schedule	30
<b>Dispute Resolution</b>	
D27. Dispute Resolution	31
<b>Third Party Agreements</b>	
D28. Funding and/or Contribution Agreement Obligations	32
<b>APPENDIX A – PERIMETER ROAD PUMPING STATION PUMP 1 INFORMATION</b>	
<b>APPENDIX B – PERIMETER ROAD PUMPING STATION PUMP 2 INFORMATION</b>	
<b>APPENDIX C – PERIMETER ROAD PUMPING STATION HISTORICAL DRAWINGS</b>	
<b>APPENDIX D – DEFINITION OF PROFESSIONAL SERVICES</b>	
<b>APPENDIX E – WWD ELECTRICAL DESIGN GUIDE</b>	
<b>APPENDIX F – WWD IDENTIFICATION STANDARD</b>	
<b>APPENDIX G – WWD WASTEWATER TREATMENT FACILITIES AUTOMATION DESIGN GUIDE</b>	
<b>APPENDIX H- WSTP E&amp;I STANDARDIZATION SUMMARY</b>	
<b>APPENDIX I – ASSET REGISTRY GUIDELINE</b>	
<b>APPENDIX J – CREATE SAFETY MANAGEMENT DOCUMENTS</b>	
<b>APPENDIX K – OPERATION AND MAINTENANCE INFORMATION</b>	
<b>APPENDIX L – TRAINING REQUIREMENTS</b>	
<b>APPENDIX M – EQUIPMENT LIST EXAMPLE</b>	
<b>APPENDIX N – COMMISSIONING REPORT EXAMPLE</b>	
<b>APPENDIX O – NON-DISCLOSURE AGREEMENT</b>	
<b>APPENDIX P – PG-RC-PC 05 PROJECT DOCUMENT NUMBERING STANDARD</b>	
<b>APPENDIX Q – PG-RC-PC-06 DRAWING CONTENT</b>	
<b>APPENDIX R_CAD-GIS STANDARDS MANUAL (MARCH 2023)</b>	
<b>APPENDIX S – (CONFIDENTIAL) PRPS CONTROL STRATEGY OPERATION MANUAL</b>	

## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 Professional Consulting Services for Perimeter Road Pumping Station Pump Replacement and Electrical Upgrades.

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, May 3, 2023.

B2.2 The Consulting Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

### **B3. SITE INVESTIGATION**

B3.1 The Consulting Contract Administrator or an authorized representative will conduct a site investigation tour of the Perimeter Road Pumping station located at 6821 Wilkes Avenue on the following dates:

- (a) April 12, 2023, beginning at 1:30 P.M.
- (b) April 13, 2023, beginning at 9:00 A.M.
- (c) 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.

B3.1.1 Proponents are requested to register and notify if unable to attend for the site investigation by contacting the Consulting Contract Administrator identified in D2.

B3.2 Attendance at one (1) of the Site Investigations is mandatory. Should a Proponents representative not attend at least one (1) of the site investigations, the Proponents Proposal will be determined to be non-responsive and will not be further evaluated.

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 Consulting Contract Administrator in writing.

B3.4 The Proponent is responsible for inspecting the Site, the nature of the Work to be done and all conditions that might affect their Proposal or their performance of the Work, and shall assume all risk for conditions existing or arising in the course of the Work which have been or could have been determined through such inspection

### **B4. ENQUIRIES**

B4.1 All enquiries shall be directed to the Consulting Contract Administrator 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 Consulting Contract Administrator 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 Consulting Contract Administrator, require a correction to or a clarification of the Request for Proposal will be provided by the Consulting Contract Administrator to all Proponents by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Consulting Contract Administrator, do not require a correction to or a clarification of the Request for Proposal will be provided by the Consulting Contract Administrator 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 Consulting Contract Administrator. Failure to restrict correspondence and contact to the Consulting Contract Administrator 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 Consulting Contract Administrator 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 Consulting Contract Administrator. The use and disclosure of the Confidential Information shall not apply to information which:
- (a) was known to the Proponent before receipt hereof; or
  - (b) becomes publicly known other than through the Proponent; or
  - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Request for Proposals to the media or any member of the public without the prior written authorization of the Consulting Contract Administrator.

## **B6. ADDENDA**

- B6.1 The Consulting Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 The Consulting Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the MERX website at [www.merx.com](http://www.merx.com).
- B6.4 The Proponent is responsible for ensuring that they have 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 Consulting Contract Administrator indicated in D2.

## **B7. PROPOSAL SUBMISSION**

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 and;
- (c) Form P: Person Hours in accordance with B9.2 and B9.3.

- B7.1 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;
  - (e) Project Schedule (Section G) in accordance with B14.
- B7.2 Further to 0 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.
- B7.3 Further to B7.1, 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.
- B7.4 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.
- B7.5 The Proposal shall be submitted electronically through MERX at [www.merx.com](http://www.merx.com).
- B7.5.1 Proposals will **only** be accepted electronically through MERX.
- B7.6 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B23.1(a).
- B7.7 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 their own name, their 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 their 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 their 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 their duly authorized officer or officers;
- (d) if the Proponent is carrying on business under a name other than their 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.

- (a) Preliminary Design (D7);
- (b) Detailed Design (D7);
- (c) Procurement (D8);
- (d) Contract Administration Services – Non-Resident (D9);
- (e) Contract Administration Services – Resident (D10);
- (f) Commissioning (D11);
- (g) Record Documents (D12);
- (h) Project Closeout (D13).

B9.2 The Proposal should include Form P: Person Hours showing the charge out rate for each project personnel, the total hourly breakdown for each task and assigned Key Personnel for each Fixed Fee item of Work identified in B9.1.

B9.3 The hourly rate schedule for Key Personnel in Form P: Person Hours will be utilized where required for the Work identified in Underground Structures Work Allowance, Material Testing Work Allowance, and Additional Work Allowance.

- (a) The Proponent shall include an Underground Structures Work Allowance, Materials Testing Work Allowance and Additional Work Allowances, which have been included on Form B: Fees and should be included in Form P: Person Hours;
- (b) The Underground Structures Work Allowance, Materials Testing Work Allowance and Additional Work Allowances shall only be used with written permission of the Consulting Contract Administrator;
- (c) There will be no fee escalation allowed for yearly adjustments, promotion, etc. The fee scale shall be fixed for the duration of the Project based on the rates set in Form P: Person Hours submitted in the Proposal Section F (B13.3(b)(ii)) and;
- (d) The Proponent shall submit a list of charge out rates for each generic project position (i.e. Lead Discipline Engineer, Discipline Drafter, etc).

B9.4 Adjustments to Fees will only be considered based on increases to the Scope of Services.

B9.4.1 The City will not consider an adjustment to the Fees based on changes in the Project budget or the Final Total Construction Cost.

- B9.5 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.
- B9.6 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.
- B9.7 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.
- B9.8 Payments to Non-Resident Consultants are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B9.8.1 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 D28. Any such costs shall be determined in accordance with D28.

## **B10. EXPERIENCE OF PROPONENT AND SUBCONSULTANTS (SECTION C)**

- B10.1 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 showing their ability to undertake the current Work.
- B10.2 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 (3) Projects of similar complexity, scope and value.
- B10.3 For each Project listed in B10.2(a), the Proponent should submit:
- (a) description of the Project, Project objectives, size and other relevant information;
  - (b) Location of the Project (street, city and province)
  - (c) role of the Consultant;
  - (d) Project's original contracted cost and final cost; shown separately for:
    - (i) Consultant
      - (i) where the original contracted consulting cost and the final contracted consulting cost differ, the Proponent should submit an explanation;
      - (ii) identify the amount of scope changes and the reasons for each of them.
    - (ii) Construction
      - (i) where the original construction cost and the final construction cost differ, the Proponent should submit an explanation;
      - (ii) identify the amount of scope changes and the reasons for each of them.
  - (e) design and construction schedule
    - (i) include anticipated Project duration and actual Project delivery duration, showing design and construction separately;
    - (ii) include key dates, Award of Contract, 100% Detailed Design, Award of Construction Contract, Substantial Performance, Total Performance and Project Close-Out.
    - (iii) where the anticipated Project schedule and the actual Project schedule differ, the Proponent should submit an explanation clearly identifying the deviation.
  - (f) Project owner;
  - (g) reference information (two current names with telephone numbers and email address per Project).
- B10.3.1 Where applicable, information should be separated into Proponent and Subconsultant Project listings.



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

B11.1 Describe your approach to overall team formation and coordination of team members.

B11.1.1 Include an organizational chart for the Project.

(a) Key personnel including:

- (i) Project Manager;
- (ii) Automation Lead Engineer;
- (iii) Civil Lead Engineer;
- (iv) Electrical Lead Engineer;
- (v) Process Lead Engineer;
- (vi) Structural Lead Engineer
- (vii) Contract Administrator

(a) Non-Resident

(b) Resident

(b) Clearly identify Subconsultants to be engaged by the Proponent on the organizational chart.

B11.1.2 Multiple Key Personnel positions may be filled by one individual, however for evaluation purposes, be sure to identify the experience and qualification for each role separately.

B11.2 Submit the experience and qualifications of the Key Personnel assigned to the Project for Projects of similar complexity, scope and value, including the principals-in-charge, the Consultants Representative, managers of the key disciplines and lead designers. Roles of each of the Key Personnel in the Project should be identified in the organizational chart. Descriptions should include:

- (a) planned role of key personnel intended for this Project and why they would be a good fit for planned role;
- (b) educational background and degrees;
- (c) professional recognitions;
- (d) current job title;
- (e) years of experience in current position;
- (f) previous job title(s) as applicable;
- (g) years of experience in previous role(s) as applicable;
- (h) years of experience in design and construction; and
- (i) years of experience with current employer.

B11.2.1 Roles of each of the Key Personnel in the Project should be identified in the organizational chart referred to in B11.1.1

B11.3 For each person identified, list at least two (2) 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 and email addresses per Project).

- (i) references should have Worked directly on the Projects described, such as Project Manager or Contract Administrator.
- (ii) references may be used to confirm the information provided in the Proposal.
- (iii) other sources not named in the references may be contacted to verify information provided.

## **B12. PROJECT UNDERSTANDING AND METHODOLOGY (SECTION E)**

- B12.1 Describe your firm's Project management approach and team organization during the performance of Services **using Project specific details**, so that the evaluation committee has a clear understanding of the methods the Proponent will use in the delivery of this Project. Clearly indicate how the tasks listed in the RFP will be performed.
- B12.2 Methodology should be presented in accordance with the Scope of Services identified in D4.
- B12.3 Describe the collaborative process/method to be used by the Key Personnel of the team in the various phases of the Project.
- B12.4 Proposals should address:
- (a) the team's understanding of the Project. Functional and technical requirements;
  - (b) The teams approach and methodology to complete the Work;
  - (c) Location specific issues;
    - (i) Facility operational requirement;
    - (ii) Management of outages;
  - (d) any perceived Project challenges and how they will be overcome;
  - (e) any activities and services to be provided by the City;
  - (f) the deliverables and the associated task requirements of the Project;
  - (g) all significant assumptions and interpretations related to the Scope of Services;
  - (h) City design requirements and adherence to City Design Guidelines, identifiers, drawing templates, descriptions, etc....;
  - (i) City standardized equipment agreements and adherence to City Electrical and Instrumentation Standardization;
  - (j) 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;
  - (k) 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/phase defined in D4.1 Scope of Services and in total for each individual identified in B11.1.1;

- (i) The Proposal should include Form P: Person Hours for all disciplines and/or phases identified in D4 Scope of Services and in accordance with B13.3(b);
  - (ii) The total Fees on Form P: Person Hours should match Fees submitted in response to B9;
  - (iii) Proponents may use Form P: Person Hours or a table of their own design provided it includes all information requested in accordance with B13.3 and;
  - (iv) A sample of Form P: Person Hours can be found at <https://winnipeg.ca/matmgt/templates/information.stm>.
- (c) Risk and Quality Management systems that will be used on the project.
- (d) Scheduling monitoring to ensure the Proponent and Contractor remains on schedule.
- B13.4 For each person identified in B11.1.1, list the percent of the person's time to be dedicated to the Project in accordance with the Scope of Services identified in D4.1.

#### **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.
- B14.3 Further to B14.1 and B14.2, the Proponent's shall include a key project schedule table indicating the following milestone dates:
- (a) Award of Contract;
  - (b) Kickoff Meeting;
  - (c) Tender Submission(s) for required deliverables;
  - (d) Tenders Closing Date;
  - (e) 100% Design Completion;
  - (f) Construction Tender Posted to MERX
  - (g) Construction Tender Closing Date
  - (h) New Pumps in Service;
  - (i) Substantial Performance;
  - (j) Total Performance;
  - (k) Record Drawings;
  - (l) Project Close-Out and;
  - (m) Other critical stages.

#### **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 Further to C3.2, 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 their 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 their 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 Consulting Contract Administrator; 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 their 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 their 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 their 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 their sole discretion:
- (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of their 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 their 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 their 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 their 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 design, management of construction and Contract Administration for 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;
- (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.
- (f) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B17.4 and D16).

B17.4 Further to B17.3(f), the Proponent acknowledges they and all Subconsultants have obtained training required by the Accessibility for Manitobans Act (AMA) available at <http://www.accessibilitymb.ca/training.html> for anyone that may have any interaction with the public on behalf of the City of Winnipeg.

B17.5 The Proponent shall submit, within three (3) Business Days of a request by the Consulting Contract Administrator, further proof satisfactory to the Consulting Contract Administrator of the qualifications of the Proponent and of any proposed Subconsultant.

B17.6 The Proponent shall provide, on the request of the Consulting Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Consulting Contract

Administrator'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](http://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 their submission upon written request to the Consulting Contract Administrator.

## **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 their Proposal without penalty prior to the Submission Deadline.

## **B21. INTERVIEWS**

- B21.1 The Consulting Contract Administrator may, in their 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) Proponent representative attended at least one (1) Site Investigation: (pass/fail)
  - (b) Compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: (pass/fail)
  - (c) Qualifications of the Proponent and the Subconsultants, if any, pursuant to B17: (pass/fail)
  - (d) Fees; (Section B) 40%
  - (e) Experience of Proponent and Subconsultant; (Section C) 20%
  - (f) Experience of Key Personnel Assigned to the Project; (Section D) 10%
  - (g) Project Understanding and Methodology (Section E) 20%
  - (h) Management Proposal; (Section F) 5%
  - (i) Project Schedule. (Section F) 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(c), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in their 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(c), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B23.5 Further to B23.1(d), Fees will be evaluated based on Fees submitted in accordance with B9.
- (a) If in the sole opinion of the City, the lowest qualified cost Proposal has considerably lower hours and/or missing items, the City may require the proponent to attend a pre-award meeting. Should the City come to conclusion that the submitted Proposal fees and Proposal be incomplete, the Proposal will be determined to be non-responsive and will not be further evaluated.
- B23.6 Further to B23.1(e), 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(f), 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(g), 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(h), Management Proposal will be evaluated considering your firm's understanding of the City's Project, Project management approach and team organization, in accordance with B13.
- B23.10 Further to B23.1(i), 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(e) to B23.1(i), where Proponents fail to provide a response to B7.1(a) to B7.1(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. The City intends to award this Contract by July 28, 2023
- 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 their 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 their 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(u) 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(v). Proponents shall refrain from providing their own General Conditions and Assumptions. Should a proponent provide their own Conditions and/or assumptions, their bid may be deemed as non-compliant.
- B24.8 Following the award of Contract, a Proponent will be provided with information related to the evaluation of their Proposal upon written request to the Consulting Contract Administrator.
- B24.9 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 2022-09-02) 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](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. CONSULTING CONTRACT ADMINISTRATOR

D2.1 The Consulting Contract Administrator is:

Brent Soloway, C.E.T.

Project Coordinator

Telephone No. 204-451-4521

Email Address: bsoloway@winnipeg.ca

D2.2 At the kickoff meeting, the Consulting Contract Administrator will identify additional personnel representing the Consulting Contract Administrator and their respective roles and responsibilities for the Services.

#### D3. BACKGROUND

D3.1 The Perimeter Road Pumping Station (PRPS) is located at 6821 Wilkes Avenue, just inside the Perimeter Highway on the western edge of the city. The PRPS pumps the raw wastewater generated in the collection area to the West End Water Pollution Control Centre (WEWPCC). The station was constructed in the 1960's and consists of four (4) dry pit solids handling pumps. The Station has had minor upgrades over time, but due to its age, additional mechanical and electrical components are obsolete and no longer provide reliable service. Replacement of Pumps 1 & 2 (pump, driveshaft, motor and VFD) components are now required. Upgrading the redundant electrical service (Headingley Line) from 450 kVA to 750 kVA (estimated) along with a replacement automatic transfer switch is also required to allow the Station to continue to provide dependable operational service for many years to come.

D3.2 Historical record drawings, shop drawings, manuals, etc.... for the PRPS are included in Appendices of this document.

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

D3.3 The detailed design stage for this Project will largely involve upgrading mechanical, electrical, automation, structural and process components, including instrumentation and monitoring.

D3.4 The Perimeter Road Pumping Station upgrading will generally consist of the following Work:

(a) Complete replacement of Raw Sewage Pumps 1 and 2. Pumps are vertical centrifugal pumps coupled to an electric motor through a drive shaft. The pumps are installed in a dry well with the electric motors installed higher up in a motor room and a long drive shaft connecting the electric motors to the pumps. Submersible style pumps where the motor is directly coupled to the pump will not be acceptable. The pumps will be required to be replaced with like-for-like flow rates. Under no circumstances shall the replacement pumps be the same size drive power.

i. Pump 1 Spec.

Pump No. 1	
Tag No.	M100 PP
Drive Type	Electric Motor
Drive Power	298 kW (400 HP)

Capacity (original design)	450 l/s (39 MLD) – 700 l/s (60 MLD)
Capacity (current)	255 l/s (22 MLD) – 1,100 l/s (95 MLD)
Speed regulation	VFD

ii. Pump 2 Spec

Pump No. 2	
Tag No.	M200 PP
Drive Type	Electric Motor
Drive Power	150 kW (200 HP)
Capacity (original design)	unknown – 473l/s (41 MLD)
Capacity (current)	93l/s (8 MLD – 473l/s (41 MLD)
Speed regulation	Magnetic coupling

- iii. The Consultant will be required to conduct a hydraulic review of each pump, suction and discharge piping for review and recommendations to the control strategy and pumping. Review of Station capacity will consider WEWPCC facility capacity and operational requirements;
- iv. Max flow at Perimeter Road Pumping Station is estimated to be approximately 170 MLD. The Department is currently reviewing the flows to this Station and may provide updated information.
- v. Install new pumps including volutes in dry well pump room and associated hardware;
- vi. Install new drive shafts within in dry well pump room and associated hardware;
- vii. Install new pump motors in existing motor room;
- viii. Install new vibration and temperature transmitters for both pumps on all four pump bearings (pump & motor end); and
- ix. 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;

(b) Install new Pump 1 and 2 VFDs in electrical room;

- i. 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), complete with line and load side filters and;
- ii. Pump 1 VFD must Work in conjunction with and existing back-up low voltage starter.
- iii. The Consultant will be required to develop and administer a separate single source standardized agreement or Tender procurement after award of this Contract to purchase the VFD's. 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;

(c) Additional monitoring and signals to the DCS

- i. New instruments including motor winding temperature motor bearing temperature, pump vibration, bearing vibration. Monitoring and Lockout statuses;
  - ii. Complete hardwired DCS feedback and control signals from each pump VFD (Ready Status, Running Status, Auto Mode, Manual Mode, VFD Fault, Remote Run, Motor Current, Motor Speed, Speed Set);
  - iii. Complete Realtime monitoring, statuses and control of the Hydro service Automatic transfer switch;
  - iv. Complete seal water Statuses and monitoring;
  - v. Update the DCS pumping and control strategy to account for the new pumping, monitoring and control equipment. Programming to be completed internally by the city AICG group. A detailed strategy and list of new monitoring will need to be provided;
- (d) Upgrade pump 1 and 2 seal water systems. Each pump will require a dedicated seal water solenoid branch complete with pressure regulator, pressure switch, flow switch along with a bypass branch. Isolation valves will be required to isolate the solenoid branches and utilize the bypass branches. Solenoid valves shall be 120 VAC and connect directly into pump VFD control circuits, flow switch shall be brought to the DCS system as a discrete input;
- (e) Upgrade Headingley MB Hydro service for full redundancy. Replace 450KVA pole mount transformer with 750kVA pad mount transformer (or as deemed appropriate);
- I. Permits, site layout plans, developing specifications, procurement, etc. to be managed by the Consultant;
- (f) Replacement of automatic transfer switch to a new standalone automatic transfer switch. New status signals (Auto/Maula status, DCS Manual control, Normal feed, Emergency feed, fault, etc.) will be required to be hardwired to DCS system for monitoring;
- (g) It was noted there will be additional heat loads on the main floor as a result of the upgrade and the area tends to get warm in the summer. The Consultant will determine if HVAC modifications are required;
- (h) It was noted there may be some concerns with discharge piping due to wear. The Consultant will review and determine if discharge piping replacement is required.
- (i) The Consultant may also need to include other required goods with long delivery schedules under this separate Tender such as, but not limited to electrical components.
- (j) Demolition: remove existing Raw Sewage Pump 1 and 2 assemblies, motors and motor controls (VFD, starter, slip drive). Demolish existing switchgear automatic transfer controls;
- (k) Perform commissioning activities for new equipment installed;

#### **D4. SCOPE OF SERVICES**

D4.1 The Services required under this Contract shall consist of consultant engineering, procurement Contract Admin and construction Contract Admin services for Perimeter Road Pumping Station upgrades in accordance with the following:

- (a) Preliminary Design (D7);
- (b) Detailed Design (D7);
- (c) Procurement (D8);
- (d) Contract Administration Services – Non-Resident (D9);
- (e) Contract Administration Services – Resident (D10);
- (f) Commissioning (D11);
- (g) Record Documents (D12);

- (h) Project Closeout Services (D13) and;
- (i) Additional Work Allowances (D14).

D4.2 The Scope of Services outlined in (D4) provides a brief description of the Services and is only to be considered a guideline for Proposal preparation. The Consultant is encouraged to use their initiative when developing their Proposal to refine the Scope of Services activities and propose additional or alternative activities which they consider appropriate or beneficial to the Project.

D4.3 Unless otherwise stated, the document titled "Definition of Professional Consultant Services" and attached as Appendix D shall be applicable to the provision of Professional Engineering services for this Project.

## **D5. DEFINITIONS**

D5.1 When used in this Request for Proposal:

- (a) "Commissioning" means a process by which equipment, a facility or a plant is tested to verify if it functions according to design and functional requirements;
- (b) "CWO" means Change Work Order;
- (c) "DCS" means Distributed Control System;
- (d) "HVAC" means Heating, Ventilation, and Air Conditioning;
- (e) "I/O" means Input / Output;
- (f) "MCC" means Motor Control Centre;
- (g) "O&M" means Operations & Maintenance;
- (h) "PRPS" means Perimeter Road Pumping Station;
- (i) "PNC" means Product Change Notification;
- (j) "Professional Engineer" means an engineer registered in the Province of Manitoba;
- (k) "Record Documents (Drawings)" means documents (drawings) that are prepared and engineer sealed by the reviewing professional after verifying in detail the actual conditions of the completed Project;
- (l) "RFI" means Request for Information;
- (m) "VFD" means Variable Frequency Drive and;
- (n) "WEWPCC" means West End Sewage Treatment Plant;

## **D6. GENERAL REQUIREMENTS**

### **D6.1 General Requirements for the Consultant**

D6.1.1 The Consultant shall ensure that the Scope of Services is performed under direct supervision of a Professional Engineer.

- (a) All drawings, reports, recommendations and other documents involving the practice of professional engineering shall bear the stamp or seal and signature of a qualified engineer by the Engineering and Geoscientific Professions Act of the Province of Manitoba and By-laws of the Engineers Geoscientists Manitoba.
- (b) Final design documents irrespective of the level of design shall bear an engineer's seal.
- (c) Other reports and documents not involving the practice of professional engineering, such as letters of information and minutes of meetings, may be originated and signed by other personnel engaged by the Consultant and accepted by the City and;
- (d) Create, manage and update the Project schedule.

D6.1.2 Progress estimates, completion certificates, and other reports related to the technical aspects of this Project shall be endorsed by the Consultant's Representative in a manner acceptable to the City.

- D6.1.3 The Consultant shall coordinate and obtain approval/permit(s) where required, including but not limited to: Manitoba Hydro, MTS, and City Departments.
- D6.1.4 The Consultant shall, at a minimum, utilize the most current industry standard sustainable practices and conform to the latest codes, standards, regulations, and legislative requirements in effect. The Consultant shall liaise with the Consulting Contract Administrator on the application of codes and standards.
- D6.1.5 The Consultant shall coordinate with outside agencies required to perform the Services. The Consultant shall confirm with the Consulting Contract Administrator the agencies that are being contacted prior to doing so

## **D6.2 General Requirements for Contract Administration**

- D6.2.1 General Requirements.
- (b) Administer the Procurement and construction contracts.
  - (c) Attend meetings with City staff to ensure all required information, issues, and concerns are accounted for.
  - (d) Use the appropriate City templates throughout the course of the Project. All documents can be found on the City's Infrastructure Planning Office website:  
<https://www.winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stms>
- D6.2.2 Relevant City templates include but are not limited to:
- (a) pre-construction meeting agenda and meeting minutes;
  - (b) proposed change notice (PCN);
  - (c) request for information (RFI);
  - (d) field instruction;
  - (e) field instruction log;
  - (f) Contract change log;
  - (g) change Work order (CWO);
  - (h) inspection report;
  - (i) meeting minutes;
  - (j) site meeting minutes;
  - (k) Certificate of Substantial Performance;
  - (l) Certificate of Total Performance; and
  - (m) Certificate of Acceptance.
- D6.2.3 All personnel provided by the Consultant for non-resident or resident engineering Contract Administration Work shall be experienced and qualified to perform the Work.
- D6.2.4 The City reserves the right to withhold payment of Consultant fees for additional Contract Administration services which result out of errors or omissions in the design Work prepared by the Consultant.
- ## **D6.3 General Requirements for Project Deliverables**
- D6.3.1 All Deliverables shall have incorporated the Consultant's internal quality procedures before being submitted to the City.
- (a) All Deliverables shall be reviewed by a representative of the Consultant who is proficient in technical writing prior to being submitted to the City.
  - (b) Any Deliverables deemed by the City to be of poor quality and/or incomplete be rejected and will be required to be revised and resubmitted at no additional cost to the City or additional time to the Project schedule.
- D6.3.2 Project Deliverables include but are not limited to:

- (a) Safe Work procedure;
- (b) Technical specifications;
- (c) Preliminary Design;
- (d) New Construction Documents and Drawings;
- (e) Update of existing City Documents and Drawings
- (f) Class 2 and 1 cost estimates;
- (g) Preparation, Tendering and Contract Administration of procurement and construction Tenders.
- (h) Consultant progress reports;
- (i) Meeting minutes;
- (j) Shop drawings;
- (k) Change control management documents (i.e. PCN's, CWO's, FI's, RFI's and associated logs);
- (l) Asset data schedule \ asset registry;
- (m) Operation and maintenance manuals;
- (n) Training documentation;
- (o) Record drawings and;
- (p) Commissioning documentation;

D6.3.3 The deliverables shall be submitted in a substantially completed draft format for review prior to submittal as a final document. All deliverables shall be submitted to the City's Consulting Contract Administrator. All City review comments shall be considered and incorporated into the final version.

D6.3.4 Submit comment tracking spreadsheet as part of draft document revisions and resubmissions.

D6.3.5 Comment tracking spreadsheet to log specific comments/edits requested by the City Working group, the Consultant's response, and City's acceptance/rejection of Consultant's response

#### **D6.4 General Requirements for Operation and Maintenance Information**

D6.4.1 The Operation and Maintenance Information (Appendix K) guidelines shall be applicable to this Project. Supplied O&M manuals are to follow recommended formatting, sections and information as applicable. Items identified in the O&M design standard include but are not limited to:

- (a) User guide;
- (b) Asset identification;
- (c) Equipment Manuals, operation manual;
- (d) Supplier list and contact information;
- (e) Bill of material, spare parts;
- (f) Model specifications;
- (g) Shop drawings;
- (h) Commissioning records;
- (i) Sealed settings/parameters;
- (j) Safe Work and lockout procedures; and

(k) Lessons Learned.

D6.4.2 Operation and maintenance manuals in addition to (Appendix K) are to include:

- (a) Recommended maintenance schedules for equipment. Identify assets requiring regular maintenance checks, calibration and/or service to create service schedules for proper maintenance of new equipment;
- (b) Factory Acceptance Test Reports & Calibration Records and;
- (c) DCS control strategy and other applicable literature.

## **D6.5 General Requirements for Drawings**

D6.5.1 Drawings shall not be prepared using the City's GeoMedia data or Google Earth screen captures and instead shall be prepared from the legal plans, certificates of title, as-built drawings, record drawings, aerial surveys and/or topographic surveys.

D6.5.2 All profile components of drawings shall be in natural scale.

- (a) All drawings that include plans, elevations and section details are required to be metric scaled with all unique scalebars shown on the drawings;

D6.5.3 Where existing systems are being modified, the existing drawings shall be modified or superseded rather than creating a new drawing only showing a limited portion of the new Work.

- (a) show modifications to existing drawings by adjusting the existing revision number;
- (b) drawings that are no longer accurate or in use as a result of new or updated drawings shall be modified by marking them as obsolete;
- (c) the Consultant acknowledges that not all existing drawings are in CAD files and recreation of the drawing in CAD may be required;
- (d) the Consultant's professionals are responsible for the content of drawings bearing their seals. If existing drawing are being modified the Consultant shall notify the Consulting Contract Administrator;
- (e) Limited liability clauses will not be accepted on any final drawings and;
- (f) The Drawing Content document (Appendix Q) shall be adhered to and utilized for revising and superseding existing drawings.

D6.5.4 The City shall provide Drawing numbers for all new Drawings that are generated. All references in the final Drawings shall reference the City's Drawing number not the Consultant's Drawing number. The Proponent will be required to fill out an excel template to list all new drawings to be created as part of the project, title lines of all five (5) title lines along with recommended WSTP drawing numbering standard for City review. The City will send the excel template for the Proponent to use.

- (a) Drawing numbers shall be requested from the WWD Supervisor of Drafting & Graphic Services. The following information is required with the request:
  - (i) City File Number;
  - (ii) Project Name;
  - (iii) Tender Number;
  - (iv) Contract Number, and
  - (v) Individual Drawing Titles (in spreadsheet format).

D6.5.5 Drawings submitted for Tender should be complete with digital seal with revision description Issued for Construction.

D6.5.6 The City will provide comments on all review submissions. Comments shall be reviewed and incorporated into the final documents.



All drawings shall be submitted in AutoCAD format version 2019 in ANSI B and/or A1 hard copy format, unless otherwise specified. Utilizing any other software and converting to AutoCAD will not be acceptable.

- D6.5.7 The Consultant shall follow WWD construction drawing standards. This standard is available on the “Computer Assisted Drafting (CAD)-Geographic Information System (GIS) Standards” page at [https://www.winnipeg.ca/waterandwaste/dept/cad\\_gis.stm](https://www.winnipeg.ca/waterandwaste/dept/cad_gis.stm), and the Process Drawing Standard as below:
- (a) document named “WWD CAD/GIS STANDARDS March 10,2023” (Appendix R);
  - (b) City of Winnipeg Project Document Numbering Standard (Appendix P) and;
  - (c) City of Winnipeg Drawing Content (Appendix Q);
- D6.5.8 Draft Tender drawings to be submitted to the Consulting Contract Administrator for review and comment at preliminary design, 66% and 99% completion. Comments shall be reviewed and incorporated into the final Tender Drawings, as applicable.
- D6.5.9 Consultant shall provide as part of each drawing submission, a complete index of drawings in Microsoft Excel (XLS) format. The index shall have filters enabled to facilitate retrieval of information and shall include the following:
- (a) Header (Tender number, description)
  - (b) Drawing Number;
  - (c) Sheet Number;
  - (d) Revision Number;
  - (e) Drawing Title;
  - (f) Date of Issue;
  - (g) Type (Electrical, Mechanical, Civil, etc.) and;
  - (h) Drawing size.

## **D6.6 General Requirements for Progress Meetings**

- D6.6.1 Various Project meetings will be required throughout the Project in order to track the Consultant and Contractor progress, review the Project Work plan, address Project issues and allow for technical reviews with the City. The Consultant will be responsible for the coordination of all meetings and should clearly indicate in their Proposal Submission, locations, number of meetings and proposed meeting schedule associated with meetings for each of the various tasks/Work activities.
- D6.6.2 Schedule and chair Project meetings.
- D6.6.3 An agenda shall be sent to the Consulting Contract Administrator at least two (2) Business Days prior to any meeting.
- D6.6.4 The Consultant shall take minutes at all meetings and Workshops in which they attend. Minutes are to be forwarded to the City’s Consulting Contract Administrator within two (2) Business Days.
- D6.6.5 Mandatory meetings to be attended by the Consultant’s Project Manager and all Key Personnel required for specific discussion topics are as follows:
- (a) Project Initiation Meeting (All Key Personnel required);
  - (b) Throughout the Detailed Design Phase, meet with the City steering committee monthly to discuss progress, findings, obtain input from City personnel, and discuss design options;
  - (c) Create and manage risk register. Lead two (2) project risk assessment workshop using the city of Winnipeg Risk Register template. Include WWD operations staff, and other City departments to identify operational constraints and concerns with the planned construction;

- (d) Formal Design Review Meetings at preliminary design, 66% and 99% of detailed design (Key Personnel per Tender required) with location to be at 1199 Pacific Avenue.
  - i. 66% design review meetings per Tender can be combined if appropriate, and if the Project schedule allows it.
  - ii. 99% design review meetings per Tender can be combined if appropriate, and if the Project schedule allows it.
  - iii. addressing City review comments;
  - iv. anticipated construction cost and;
  - v. anticipated constructability of the design.
- (e) These meetings shall be shown in the Consultant's Project Schedule;
- (f) Additional meetings can be accommodated to suit the Consultant's requirements, and should be shown in the Consultant's Project Schedule.

#### D6.6.6 Remote Meetings

- (a) Informal meetings can be held remotely with Microsoft teams or similar software.

#### D6.6.7 Construction Progress Meetings

- (a) To be held bi-weekly during construction.
- (b) A combination of remote meetings and on-site meetings will be accepted by the City.

### D6.7 Relevant Design Standards

#### D6.7.1 The following design standards shall be applicable to this Project:

- (a) WWD Electrical Design guide (Appendix E);
- (b) WWD Identification Standard (Appendix F);
- (c) WWD Wastewater Treatment Facilities Automation Design Guide (Appendix G);
- (d) WSTP Electrical and Instrumentation Standardization Summary (Appendix H)
  - (i) The City of Winnipeg has standardized on specific electrical and automation manufacturers. The Consultant should use standardized equipment in their design where applicable.
- (e) Computer Assisted Drafting (CAD) and Geographic Information System (GIS) Standards and templates can be found here  
[https://legacy.winnipeg.ca/waterandwaste/dept/cad\\_gis.stm](https://legacy.winnipeg.ca/waterandwaste/dept/cad_gis.stm)
- (f) Asset Registry Guideline (Appendix I);
- (g) Operation and Maintenance Information (Appendix K);
- (h) Training Requirements (Appendix L);
- (i) Safety Management documents (Appendix J);
- (j) Project Document Numbering [drawing numbers] (Appendix P);
- (k) Drawing Content (Appendix Q);
- (l) The City's Project Management Manual 4.0:
- (m) [Policy, Manuals and Templates - Asset Management Program - Infrastructure Planning Office - City of Winnipeg](#);
- (n) The City's Project Management templates:
  - (i) <https://legacy.winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#5> and;
- (o) Universal Design Policy
  - i. <http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeId=2&DocId=3604>

#### D6.7.2 The Consultant shall notify the Consulting Contract Administrator of any conflict identified between the documents listed under D6.7.1 for resolution.

D6.7.3 Notwithstanding the foregoing, the Consultant is being engaged by the City for its professional expertise; the Consultant shall bring to the City's Consulting Contract Administrator attention any aspect of the City's standards, manuals, guidelines or templates which the Consultant is of the opinion is not consistent with good industry practice.

## **D7. PRELIMINARY AND DETAILED DESIGN DEVELOPMENT**

### **D7.1 Design Requirements**

D7.1.1 The Consultant will perform all duties related to preliminary design, detailed design, specification development, procurement, Tendering, Contract Administration, and record drawings.

D7.1.2 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, VFD's, MB Hydro transformer and electrical components. Station design for all pumps, motors and process piping modification to be completed and reviewed by the department prior to Tendering goods with long deliveries;

D7.1.3 Preparation of standardized Schneider Electric equipment, including Variable Frequency Drives along with line and load reactors;

D7.1.4 The Project will consist of multiple procurements (competitive bid and/or single source) and one construction services Tender;

- (b) Procurement - Replacement of Pump 1 and 2 mechanical and electrical components to address obsolete equipment (pump, drive shaft, motor) complete with Form N (Detailed Specifications);
- (c) Procurement - VFDs with line and load reactors for new Pump 1 & 2 Motors;
- (d) Construction Tender – Upgrade equipment to design specifications, procure other equipment, site services;

D7.1.5 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 an Instrument List to convey the design. Provide options for City staff to select anticipated designs. Provide an excel Drawing Number and Titles of each line of planned drawings to be produced.

D7.1.6 The development of the Detailed Design shall be based upon the Preliminary Design derived from existing equipment, facility design specifications, review comments, operational and maintenance requirements.

D7.1.7 The Project shall generally conform to the latest codes, standards, regulations, licences and legislative requirements in effect. The Consultant shall liaise with the City on the application of codes and standards.

- (a) The Consultant shall comply with the design standards listed in D6.7

D7.1.8 The Detailed Design shall include all requirements including but not limited to: site development, civil, structural, architectural, process, plumbing, mechanical, electrical, automation.

D7.1.9 HVAC is to be reviewed by the Contractor for recommendation and part of the scope of services. HVAC Engineering modifications and design is considered an addition to the scope of services and will be completed under the additional Work Allowance. Detailed design will be required for modifications. If approved, written approval by the city Contract Administrator is required.

- (a) The Consultants will be required to submit concise scope of Work and cost Proposal, following recommended requirements in collaboration with the Consulting Contract Administrator. The Proposal shall be submitted to the

Consulting Contract Administrator for final approval. No Work shall start prior to this approval.

- (b) Recommendations for all HVAC scope of Work and costs Proposals will follow the additional Work Allowance requirements defined in B9 and D14.

- D7.1.10 The Consultant shall coordinate with outside agencies and City departments external to the Water and Waste Engineering Division required to perform the services
- D7.1.11 Collect and review all available existing information including files, reports, drawings, operations information, etc. Where necessary, conduct site investigations and informal meetings with the Consulting Contract Administrator and Operations staff to verify existing conditions and to supplement available information.
- D7.1.12 The Consultant shall identify all permits necessary for construction. The Consultant shall fill out permit information to assist a General Contractor for obtaining permits along with providing approvals to close out all permits.
- (a) The Consultant shall obtain all necessary permits, and regulatory approvals.
- D7.1.13 Unless otherwise stated, the indicated deliverables and any other deliverables which, in the opinion of the Consulting Contract Administrator are typical of a Detailed Tender Package, shall be prepared by the Consultant. Delegation of deliverables to the construction Contractor will not be accepted.
- D7.1.14 Organize meetings with City staff to ensure all required information, issues, and concerns are accounted for.

## **D7.2 Detailed Design for producing procurement and construction Tenders Packages**

- D7.2.1 The Detailed Design shall include;
- (a) Drawings from all disciplines;
  - (b) Technical specifications;
  - (c) The Tender documents;
  - (d) Class 1 and 2 cost estimates;
  - (e) Construction plan;
  - (f) Project commissioning plan;
  - (g) A major equipment and instrumentation list with reference information to the drawings;
  - (h) Applicable reference drawings of the existing site;
  - (i) Project arc flash study;
  - (j) Operation and maintenance manual requirements;
  - (k) Contractor training requirements;
  - (l) Contractor commissioning requirements; and
  - (m) Any other information required by the Contractor.
- D7.2.2 Submit one (1) electronic copy of the preliminary design, Equipment Tenders, 66% and 99% draft Detailed Tender Package for all aspects of the Work, including detailed construction drawings and technical specifications. Any incomplete submissions will be returned to the Proponent and will require resubmission. The City is not responsible for any project schedule delays as a result of incomplete submissions. The following submissions at a minimum are required:
- (a) Preliminary design report including instrument list, drawing title list, Pumps 1 & 2 P&ID along with Station Single Line Diagram.
  - (b) Equipment Tenders (Pumps & VFDs) review submission along with Class I, pre-Tender estimate (for equipment tenders only). The Proponent is required to prepare a Form N (Detailed Specification) for the Pump Tender, the City will provide a sample template. The Equipment Tenders shall not be Tendered without this review

- (c) 66% design review submission complete with Drawings List in excel format, Drawings, Specifications, Instrument list, detailed I/O address list (ranges, states, alarms, type, etc...), Update DCS control strategy for new equipment and monitoring along with Class II estimate.
  - (d) 99% design review submission complete with Drawings, Specifications, Instrument List, detailed I/O address list, update DCS control strategy for new equipment, I/O and monitoring, Shop Drawing Log Submittal along with Class I, pre-Tender estimate. The Project shall not be Tendered without this review
  - (e) The Consultant should allow for a ten (10) Business Day review period for the City to provide comments. A blackout period of December 23-January 3 will apply to the review period if applicable. This should be accounted for and shown in the Proposal;
  - (f) Submit electronic copies of the draft Tender document and technical specifications in Microsoft Word format;
  - (g) The electronic copies of the draft Drawings shall be submitted in PDF format;
  - (h) Conduct a meeting to review the City's comments on the draft Tender documents and;
  - (i) Incorporate all City comments into the final Tender package.
- D7.2.3 Prepare an arc flash report review submission no later than one (1) month after approval of electrical equipment shop drawings.
- D7.2.4 Provision of appropriate response to Proponents and advice to the Department during the periods of Tender call and, subject to acceptance by the Department, issuing addenda to the Tender documents.
- D7.2.5 Arrange and attend a Tender site investigation during the Tendering process.
- D7.2.6 Review Proposal Submissions for completeness and prepare Bid Submission tabulations.
- D7.2.7 If required, arrange for a pre-award meeting(s) with the Department and the lowest qualified Bidder for which the purpose is:
- (a) To establish that the Contractor has received all the addenda.
  - (b) To ascertain that the Contractor understands the scope of Work in the Tender.
  - (c) To determine that the Contractor is capable of meeting the obligations detailed in the Tender.
  - (d) To secure advisement by the Contractor of intended methods, materials, stages, timelines or sequences of the Contract that are of interest to the Department.
  - (e) 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.
- D7.2.8 Each discipline shall perform at minimum monthly construction site inspections to verify construction Works conforms with Contract documents.
- D7.3 Cost Estimate**
- D7.3.1 Prepare required cost estimates per D7.2.2 following incorporation of City review comments of the Tender package submissions.
- (a) The Class Cost Estimate shall be completed using the latest version of the City's Basis of Estimate template, available on the City Asset Management Program page at The City of Winnipeg, Corporate Finance, Infrastructure Planning Division website: <https://legacy.winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4>.
- D7.4 Structural Engineering**
- D7.4.1 Provide an overall structural review of the existing Station substructure to determine condition, identify and scope any concerns with equipment placement.
- D7.4.2 Include all steel reinforcing requirements.
- D7.4.3 Provision for housekeeping pad(s) for MCC's, VFD's and associated equipment.

- D7.4.4 Provision for new concrete support slabs or mounting brackets for new pumps, motors and piping.
- D7.4.5 Ensure that all building upgrades are in compliance with the Manitoba Building Code, latest edition.

## **D7.5 Mechanical Engineering**

- D7.5.1 Provide design recommendation for replacement of existing wastewater sewage pumps and pump motors in the “dry-pit” section of the Station with two (2) new pumping units (pumps, motors, driveshafts, guards, etc.)
- (a) The Consultant shall review the desired flow capacities and provide recommended pump motor sizing to achieve the desired flows in the system;
  - (b) Include vibration and temperature analog instruments and tie into DCS Control Panel. Each pump vibration signal shall provide a high vibration alarm indication and a high, 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. Vibration signal shall be brought into motor starter as an analog signal input to a relay. The relay shall have output contact and output analog signal for controls and monitoring;
  - (c) Vibration is to be monitored on the pump (2 locations) and motor (2 locations) and;
  - (d) Temperature monitoring placements on pump (2 locations) and motor (2 locations) bearings.
  - (e) In addition to the vibration sensors, the Consultant will be required to include design details for a vibrational system with auto diagnosis. This is to assist with maintenance activities when high vibrations levels are detected on the pumps. The vibrational system shall include triaxial wireless sensors along with a built in camera, pyrometer and stroboscope for diagnosing the pumps. The City’s preference is to use Fixturlaser SMC by STCD. Contact Charles Gagne, Ph. (514) 213-1437, email: [charles@stcd.ca](mailto:charles@stcd.ca) for details.
- D7.5.2 Pumps shall be of the same manufacturer and type.
- (a) non-clog sewage pumps capable of handling acceptable solids and suitable for vertical dry-pit installation.
  - (b) Pump assemblies that are considered a submersible style pump where the motor is directly connected to the pump will not be acceptable.
  - (c) 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 facility
  - (d) Consultant shall review peak wet weather flows and recommend Station capacity accordingly.
  - (e) The new pumps capacities shall be recommended by the Consultant but have pumping capacity in-line with existing and required by operations.
- D7.5.3 Each pump shall include a complete rebuild kit for overhaul of each pump. This includes spare parts such as: upper bearings (motor side) set, lower bearings (pump side) set, mechanical seal set, wear rings, gaskets, O-rings, AEGIS ground ring and associated hardware. Process piping modification to accommodate the installation of new pumps and replacement of discharge elbows are considered part of the scope of Work.
- D7.5.4 The Consultant Shall include development of new hydraulic system curve for Station and shall provide recommendation for proper pump impeller size (based on pumping unit specifications) to provide maximum pumping efficiency. Pumps shall be designed to operate full speed along with lower required adjustable speeds.
- D7.5.5 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 (and/or pressure switch) connected into the DCS. Provide a manual bypass line for each seal water system.
- D7.5.6 Review existing HVAC system and make recommendations due to additional heating loads

- (a) Review Station heat loading for possible Air Conditioning requirements;
- (b) HVAC engineering design due to additional heating loads;
- (c) All HVAC fans shall be rated 575V, 3-phase, 60 Hz. Preference is to utilize fans that are direct driven rather than belt driven;
- (d) HVAC modifications must adequately fit in the layout of the existing Station building structure;
- (e) Provide a P&ID diagram of the proposed ventilation system and associated controls for the existing building;
- (f) All HVAC controls shall conform to the design guide;
- (g) All building code requirements to be satisfied and;
- (h) The Consultant will provide an assessment, recommendation and cost Proposal. Additional HVAC services shall be considered as an additional Work Allowance and follow the requirements defined in B9.3 and D14.

## **D7.6 Electrical and Instrumentation Engineering**

- D7.6.1 The Headingley electrical service to the station is undersized. A pad mount 750 KVA (estimated) transformer complete with bollards and CSTE with breaker is required. Review existing service to receive power supply from Manitoba Hydro and recommend required upgrades including renewing service lines to the Station, identifying new pole location. The new service shall be designed such that all facility loads are capable of operating without overloading the service. At least one (1) site visit and one (1) discussion meeting with Manitoba Hydro staff are required to determine the proper service sizing.
- D7.6.2 Prepare a spring demand load list. The demand load list shall be compared with the existing hydro service and upgraded.
- D7.6.3 Include a Customer Service Termination Equipment (CSTE) complete with LGIS breaker for the Headingley service upgrade.
- D7.6.4 The Consultant shall obtain new short circuit levels from Manitoba Hydro in order to produce the arc flash report.
- D7.6.5 Replacement VFD's are to be standalone units complete with:
- (a) line and load reactors;
  - (b) Housekeeping pads;
  - (c) The VFD's must be cable of running in manual via start/stop buttons with a potentiometer for speed control in additional to auto;
  - (d) Each VFD shall include Ready, Running, SS fault, Manual, Auto, Seal water and motor current statuses and;
  - (e) Door mounted Graphic display terminal (ex. VW3A1111 (display, comes w/ ATV600), VW3A1112 (door kit), VW3A1104R30 (10' cable).
- D7.6.6 The PRPS transfer switch is to be replaced. Review electrical requirements and design to automatically transfer power in the event of a failure. The system shall be designed so that in the event both services have failed, the transfer switch will operate to power the station from the first service to be restored.
- D7.6.7 Preparation of a Station Arc Flash study:
- (a) Arc Flash study to be completed using SKM software for the entire Station electrical distribution (including entire 600 VAC distribution and 120/208/240V panel boards). SKM library files, report file and single line drawings to be submitted to the City;
  - (b) Arc flash energies to be kept as low as reasonably attainable;
  - (c) 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;
  - (d) Obtain new short circuit levels for the new station service upgrade from Manitoba Hydro along with current short circuit levels from the Rannock Line;
  - (e) Provide an arc flash report including title page with revision history, table of contents, equipment nameplate information (used in the model), power system model description (i.e. assumptions and technical detail describing how scenarios were created), equipment incident energy, coordination of protective devices with time current curves

- (TCCs) showing each downstream breaker up to the incoming hydro protective devices along with equipment short-circuit duty results. TCCs shall include single line and logarithmic graph with each device labelled to match single line equipment tags. Provide Word document of arc flash report as part of this submission.
- (f) Submit arc flash study for City review prior to the final sealed report being issued;
  - (g) Final arc flash report submission shall include an Engineer sealed pdf report. Provide Word document of arc flash report as part of this submission;
  - (h) All electrical code requirements to be satisfied.
  - (i) Provide recommendations regarding the proposed facility wiring type (Teck cable, Aluminum conduit or PVC conduit.
  - (j) In addition to the final design, the deliverables will include:
    - i. Updated Single Line Diagram with preliminary arc flash labels including Working distance, incident energy and arc flash boundary,
    - ii. Updated Plan layout drawings of electrical distribution.

#### **D7.7 Automation Engineering**

- D7.7.1 Review the existing automation control strategy and update to allow for additional I/O, condition monitoring and control.
- D7.7.2 Make recommendations regarding all the I/O to be utilized.
- D7.7.3 The Control Strategy will be used as a guideline for city AICG staff to provide programming of the DCS. The Consultant will be submitting to the Department during the design review process. The final control strategy shall be provided in a report format.
- D7.7.4 Prepare P&ID drawings, following City of Winnipeg standards showing the process and instrumentation for all process, HVAC and miscellaneous services.
- D7.7.5 The Proponent shall prepare and submit Instrument List for City review referencing the applicable specification sections along with drawings that each instrument can be found on.
- D7.7.6 The Proponent shall prepare and submit an input/output (I/O) address list with complete information for City review including any DCS setpoints and generated alarms.

#### **D7.8 New Construction Drawings and Documents**

- D7.8.1 Proponents are to develop all required drawings for the Project. Include complete sets of drawings for electrical, structural, architectural, mechanical and automation. Provide site plan, floor plans, elevations, sections, details, and any other drawings for required for the Project.
- D7.8.2 The following required drawings are to be included for complete drawing sets but not limited to:
  - (a) The following Construction Documents 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 including drawing numbers and titles. Drawings shall be separated out for each discipline and;
    - iii. Shop Drawing Submittal List including all Contractor submittals required along with Specification section and Drawing number reference where submittal can be found.
  - (b) 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 and;
    - iii. VFD housekeeping pad along with pump, motor and support details.



- (c) 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 design details and;
  - iii. Seal water piping details.
- (d) Provide 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 demolition single line
  - ii. Relevant existing drawings are to be modified or superseded per the Drawing Content document (Appendix Q).
  - iii. New single line diagram to represent complete station distribution. Existing City drawings 1-0111L-E0002, 1-0111L-E0004, 1-0111L-E0017 and 1-0111L-E0018 to be superseded complete with demolition work.
  - iv. Updated Single line diagram complete with breaker settings table for all breakers with field adjustable settings.
  - v. Site plan including property lines shown. Manitoba Hydro scope of Work along with Contractor scope of Work shall be clearly identified.
  - vi. Electrical plan layout including sections view(s) showing all floor levels to show all electrical instruments, motors and HVAC loads.
  - vii. VFD elevation details for both pump VFDs, including showing where all pilot devices (lights, push buttons, emergency stops, analog meters, etc.) are located along with all bucket and pilot device equipment lamacoids. A typical elevation detail showing both pump VFDs will not be acceptable.
  - 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 DCS shall be clearly shown. For pump schematics, provide speed potentiometer for manual adjustment of the VFD.
  - ix. Separate motor connection diagrams clearly showing all control field wires for electrical instruments and DCS control panel.
  - x. Separate Setting Letters for Variable Frequency Drives and any other equipment on soft starters.
- (e) 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. Update DCS panel layout arrangement if required.
  - iii. Separate loop diagrams for each new instrument. Include content for any instrument alarming details. All instrument signals shall be clearly indicated on loop diagrams for tie in to the DCS for monitoring.
  - iv. Instrument List including reference to specification section and drawing(s). Clearly identify existing instruments along with new instruments.
  - v. Input/output List including internal DCS generated signals including terminal numbers and addresses. All internal software signals are required to be indicated as well. All discrete signals shall be mapped to distinguish what the '0' state refers to along with the '1' state. All analog signals shall be mapped to distinguish what the analog range refers to.
- (f) 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. Pump P&ID(s). All pump signals (between DCS and run operation of the pumps as shown on pump motor schematics) shall be clearly shown on the P&IDs.
  - ii. Process Piping Plan, Section Views and Details. The pump arrangement shall show the volute, motor and driveshaft and pipe work to be illustrated.

## **D7.9 Existing City Documents to be Updated**

- (a) The Proponent shall be required to update existing City documentation for the project.
- (b) All applicable drawings in Appendix C in addition to drawings to be provided are required to be updated or superseded by new construction drawings.
  - i. The consultant shall review existing drawings and provide a list of drawings to be updated and/or superseded.
  - ii. Supersede per the Drawing Content document (Appendix Q). Where the drawing CAD file does not exist, the Consultant will be required to embed the image onto a new CAD City Title block and fill out the title block details.

## **D8. PROCUREMENT**

- D8.1 Equipment procurement services are required prior to one (1) competitive General Contractor Tender to supply remaining equipment, perform construction and demolition services. The Consultant shall prepare, Tender, procure and Contract Admin:
- (a) One (1) Competitive supply Tender. Outline design requirements and approve supply of Pump 1 and 2 equipment. Pump, drive shaft, motor and monitoring equipment (vibration, temp) and;
  - (b) One (1) standardized agreement supply procurement. Outline design requirements and submission approval for supply of P1 and P2 VFD's. Including line and load reactors.
- D8.2 After Approval by the Consulting Contract Administrator, submit the Detailed Tender Package to Materials Management for public bidding.
- (a) All Tender packages shall be prepared and posted in accordance with the City of Winnipeg Materials Management Division requirements.
    - (i) the City bid submission forms, Bid Procedures, General Conditions, Supplemental Conditions which are available at <https://legacy.winnipeg.ca/matmgt/templates/>;
  - (b) Coordinate review of the package with Materials Management and make changes as requested to the Tender package.
- D8.2.1 When submitting the Tenders to Materials Management, send an e-mail to WWD Drafting and Graphics Supervisor with the following information:
- (a) City File Number;
  - (b) Project Name;
  - (c) Tender Number;
  - (d) Contract Number, and
  - (e) Individual Drawing Titles (in spreadsheet format).
- D8.3 Provide appropriate response to Proponents and advice to the City during Tender call and issue addenda to the Contract documents as necessary.
- D8.4 Arrange for and lead Proponents site visit(s) for each Tender package.
- D8.5 Review bid submissions for completeness and prepare bid tabulations for multiple Tenders.
- D8.6 Review low bidder qualifications.
- (a) Perform a complete review of the low bidder's qualification to determine if they are capable of performing the Work under the terms of the Contract.
- D8.7 If required, Coordinate and lead a pre-award meeting with general construction Contractor.
- D8.8 Complete a review, analysis, comparison, tabulation, calculation, and evaluation of the Tenders received. Make recommendations for award of Tender.

- (a) If the bids deviate more than 15% from the Class 1 Cost Estimate, provide justification for the difference in pricing in the award recommendation letter. Submit a Letter of Recommendation, copies of the bids, a Tender comparison sheet, and a Tender tabulation.

D8.9 Following Tender close, submit one (1) electronic copy of the Final Detailed Tender Package including all addenda.

## **D9. CONTRACT ADMINISTRATION SERVICES – NON-RESIDENT**

D9.1 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.

D9.2 The Consultant Shall:

- (a) Prior to construction, prepare and submit a written and photographic records of the physical condition of the Work area, existing facilities, and structures sufficient to equip the City 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 for damages arising from the Project.
- (b) 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.
- (c) The Consultant will be required to attend the Factory Acceptance Testing (FAT). The Consultant will be required to attend in person locally or virtually over Microsoft Teams if remote. The consultant shall allow for 32 hours total for one (1) representative to attend all major equipment (pumps, VFDs, ATS) FAT testing sessions. It is assumed that FAT testing will be conducted in Winnipeg. For any in-person FAT testing outside of Winnipeg, the Consultant will be eligible to include any travel and/or accommodations to attend the FAT testing sessions.
- (d) Make application to public agencies for necessary authorizations and permits, prepare and submit reports and drawings thereto, and appear before the same in support of all applications.
  - (i) Coordinate with the Contractor for completion of permits, if applicable in a timely matter.
- (e) Consultation with and advice to the Department during the course of construction.
- (f) Review and accept Contractor submittals.
  - (i) The review and acceptance of vendor and Contractor submittals (i.e. shop drawings, safe Work plan, etc.) shall be conducted by a Professional Engineer(s) of the appropriate discipline and any other associated or impacted disciplines.
  - (ii) Provide one comprehensive review of each submittal that the Contractor has stamped and submitted. Subsequent reviews of submittals shall be at the cost to the Contractor.
- (g) 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.
- (h) Review acceptability of inspection and test plans from contractors, vendors or manufacturers.
- (i) Review any alternate materials or methods that may be required to progress the Work. No alternates shall be approved without written authorization from the City.
- (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.
- (k) Promptly prepare, certify, and submit progress estimates to the City for payment to the Contractor(s) for construction performed in accordance with the drawings and specifications.

- (l) Consultant billings are to indicate the fee breakdown for the submitted invoice as well as the total fees to date.
- (m) Approved allowable disbursements and laboratory testing costs are to be shown as separate sub-totals from the fee charges.
- (n) Coordinate and prepare PCN's regarding the Contractor scope of Work. This may include the preparation of specifications and Drawings for the PCN.
- (o) Review extra Work claims submitted by the Contractor. Provide backup material to the Consulting Contract Administrator as requested.
- (p) Prepare and process CWO's accordingly in a timely manner.
- (q) Review and respond to Contractor RFIs in a timely matter.
- (r) Prepare Contractor site instructions/clarifications/directives.
- (s) Interpret technical aspects of the Contract as requested by the City.
- (t) Plan, coordinate, manage and lead all shutdown and tie-in protocols, required for construction and commissioning. Prepare detailed shutdown or tie-in protocols that detail out a schedule of Work, delegate responsibilities, and clearly identify all operational impacts and plans to address. Review operational and construction risks and plan risk mitigation measures as appropriate. Act as the interface between the Contractor and City during the shutdowns and tie-ins.
  - (i) Base any required construction shutdown and tie-in protocols on the procedures developed during the Detailed Design phase.
- (u) Arrange for regular job meetings (minimum one per two-week period) on/near the Work site or at an agreed location throughout the duration of the Contract Work. The meetings are to be attended by the Contract Administrator, or their designate, as well as the Resident inspector, the Contractor, and the Department's Consulting Contract Administrator.
  - (i) The typical frequency of meetings shall be bi-weekly during the course of construction, although meeting frequency may vary based upon the level of construction activity.
  - (ii) Provide minutes of all site meetings within two (2) Working days of the meeting.
- (v) Monitor Project progress and ensure all items of Work are completed within the terms of the Contract.
- (w) Training
  - (i) Coordinate and manage training sessions for City personnel for the operation and maintenance of new and upgraded facilities and equipment in accordance with Appendix L. This includes but is not limited to planning and scheduling of training sessions, review of training procedures and training documents prepared by the Contractor;
  - (ii) Coordinate with the Installation Contractor and Equipment Supplier to provide a minimum of two (2) on-site training sessions to provide instruction to City staff on the safe operation of all new equipment including recommended maintenance tasks and schedules;
  - (iii) The Consultant is responsible for the overall packaging and quality assurance of the training program, although delivery of selected portions may be by the Contractor or subcontractor;
  - (iv) Hands-on training needs to be completed shortly after classroom training;
  - (v) Training materials to be submitted to the City for review and comment prior to the on-site training;
  - (vi) Coordinate to ensure video records of each unique training session are provided to the City. Ensure acceptable and uniform standard of video quality;
    - (i) Note: Simply video recording the training sessions is not considered adequate. Audio video material needs to be edited and integrated into comprehensive modules;

- (vii) The Consultant shall ensure online SCORM content with clear learning objectives and assessment built-in. The SCORM content shall be compatible with OCMS (WWS learning management system);
  - (i) SCORM is a collection of standards and specifications for web-based electronic educational technology (also called e-learning) and;
- (viii) Training requirements are identified in Appendix L.
- (x) Administer Substantial Performance with regards to the construction Contract.
  - (i) Coordinate and lead a comprehensive detailed inspection prior to Substantial Performance, including the Contractor and the City. Document and report on all issues identified and coordinate completion of the issues.
  - (ii) Make a recommendation to the Consulting Contract Administrator when the Contractor has achieved Substantial Performance.
  - (iii) Act as Payment Certifier and administer all contracts under the Builder's Liens Act of Manitoba.
  - (iv) Upon approval, Prepare and issue a Certificate of Substantial Performance.
- (y) Administer Total Performance with regards to the construction Contract.
  - (i) Coordinate and lead a comprehensive, detailed inspection prior to Total Performance, including the Contractor and the City. Document and report on all issues identified and coordinate completion of the issues.
  - (ii) Make a recommendation to the Consulting Contract Administrator when the Contractor has achieved Total Performance.
  - (iii) Upon approval, prepare and issue the Certificate of Total Performance.

## **D10. CONTRACT ADMINISTRATION SERVICES – RESIDENT**

- D10.1 Personnel with demonstrated experience in the design and Contract Administration of the mechanical, process, automation, electrical, structural, and civil components the Works are to be assigned to this Project
- D10.2 The Consultant shall;
- (a) Provide reference for the Works and check the Contractor's adherence.
  - (b) Ensure that Quality Assurance/Quality Control (Qa/Qc) is undertaken to Building Code requirements and Departmental standards.
  - (c) Monitor the activities of the Contractor to ensure:
    - i. Project schedules are being realized;
    - ii. Contract requirements are being met;
    - iii. 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 and;
    - iv. site safety is in accordance with Provincial Regulations.
  - (d) Provide construction inspection and acceptance of the Work during installation and construction.
  - (e) Provide inspection services when the Contractor is on-site to ensure that the construction conforms to the design Drawings and specifications.
  - (f) Provide Bi-weekly updates during the course of construction. Construction meeting minutes is sufficient provided progress updates are recorded and shall include but not be limited to:
    - (i) Written updates on the procurement, construction Work progress, Contract progress estimates and ongoing activities;

- (ii) Upcoming and delays;
  - (iii) Photographic records of the construction.
  - (iv) Any deficiencies found and corrections to be done,
- (g) Keep a continuous record of Project activities;
- (h) 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. The Consultant key personnel will be required to attend site visits whenever applicable discipline inspections will be carried out by the Authority Having Jurisdiction. The Consultant shall after the conclusion of each inspection, notify the Contract Administrator in writing noting any deficiencies found by third party inspectors along with results of the inspection.
- (i) Participate in regular construction review meetings.
- (i) The typical frequency of the meetings shall be bi-weekly during the course of construction, although meeting frequency may vary based upon the level of construction activity.
  - (ii) Arrange for construction meetings in person and/or over Microsoft Teams between the Consultant (including all key personnel), City staff and Contractor staff;
  - (iii) Minutes of all meetings shall be distributed to all in attendance and the copy list. Meeting minutes shall be distributed no later than two (2) Business Days after the meeting has finished;
- (j) 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.
- (k) 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.
- (l) 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
- (m) Participate in a comprehensive, detailed inspection prior to Substantial Performance. Document and add all issues identified to the deficiency log.
- (n) Participate in a comprehensive, detailed inspection prior to Total Performance. Document and add all issues identified to the deficiency log.

D10.3 Prepare, update, maintain, and coordinate a deficiency list of all issues identified during inspections. Coordinate remediation of the deficiency list with the Contractor.

## **D11. COMMISSIONING**

D11.1 The Contract Administrator shall require at minimum; draft O&M manuals, equipment settings/parameters and red line drawings as a prerequisite for commissioning and issuance of a Certificate of Substantial Performance.

D11.2 The Consultant shall 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.

D11.3 The Consultant will be required to attend commissioning site visits to ensure proper testing is performed. Prepare and submit commissioning equipment and loop checks sheets and field reports including date & time, all staff in attendance (Consultant, Contractor, City staff), general scope, Work completed, items requiring completion and/or changes and other items.

- (a) Ensure the Contractor fills out the required commissioning sheets/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. Separate commissioning forms are required for each piece of equipment. and;

- (b) Sign-off on all commissioning and training records.

D11.4 The Consultant shall perform the following Commissioning Services:

- (a) Coordinate with the installation Contractor and equipment supplier for all required site testing and commissioning services;
- (b) Provide checks sheets to be completed by the Contractor and validate;
- (c) Submit commissioning plan and testing documentation for review two (2) weeks prior to commissioning;
- (d) Coordinate with the Contractor to ensure appropriate measures regarding safety, health and environmental aspects are implemented throughout the commissioning activities;
- (e) Coordinate commissioning activities with City operations personnel. Ensure that City operations personnel are always aware of the current commissioning status and any upcoming operational requirements or impacts;
- (f) The Consultant is fully responsible for the planning and leadership of the overall commissioning activities. While the Contractor and the City team may perform specific commissioning tasks, this does not reduce or eliminate the Consultant's responsibilities. Schedule and coordinate all commissioning Work in coordination with the Contractor's schedule;
- (g) Ensure all commissioning team members have clear definition of their role and understanding of their responsibilities;
- (h) Conduct pre-commissioning meeting(s);
- (i) Prepare agenda, lead and record minutes of the commissioning meetings;
- (j) Review all commissioning records and ensure that the overall commissioning records demonstrate compliance to the specifications and overall Project design requirements;
- (k) Ensure all equipment and control system settings are documented;
- (l) Manage the commissioning documentation:
  - I. Ensure commissioning forms are filled out and signed.;
  - II. Including general scope, Work completed, items requiring completion and/or changes and other items. Commissioning tasks shall include, but not be limited to;
    - (a) Test each I/O point and provide a detailed paper report documenting the checks. For discrete signals, both '0' and '1' states shall be recorded. For analog signals, record at least three (3) points shall be recorded. For example, with Analog pump motor temperature, record temperature when motor is stopped, after 5 seconds of motor starting up and after 1 minute of run time;
    - (b) Check I/O wiring, labels and provided detailed paper documentation;
    - (c) Test device warnings, alarms and lockouts signals and provided detailed paper documentation and;
    - (d) Perform Operational and Functional checks and provide detailed paper documentation.

D11.5 Commissioning checks are to include Equipment operation, loop/wire checks, alarms, lockouts, control and other functional checks. Sheets must be submitted and approved prior to testing. Refer to Appendix N for commissioning check sheet reference documentation. Commissioning check sheets must include but is not limited to:

- (a) Project Name;
- (b) Drawing reference;
- (c) Equipment number, loop number, wire tag information;
- (d) Description of equipment and check function;
- (e) As applicable include: I/O address, analog range, test points, warnings, alarms, source/input/output, as-expected vs. as found results;

- (f) Functional checks (run, stop, warning, alarm shutdown, E-stop, etc....);
- (g) Notes and;
- (h) Date, time, name and signature.

## **D12. RECORD DOCUMENTS**

D12.1 As-built drawings and settings are to be submitted in two phases:

- (a) Red-line Drawings, Settings and;
- (b) Final Record Documents.

D12.2 Red-line Drawings and Settings.

- (a) The Consultant shall submit field red line drawings and equipment settings noting any changes from the construction drawings. Red-line drawings and settings are to be provided prior to commissioning and;
- (b) Final mark-up edits are to be provided post commissioning.

D12.3 Final Record Documents.

- (a) Once all final revisions have been completed, submit four (4) complete sets of full size (A1 & ANSI B) drawings for the Works, and the digital AutoCAD and PDF file for each record drawing. Each drawing file must have the Water and Waste Department drawing number assigned to that drawing.
  - (i) Copies will be provided to the Department's Supervisor of Drafting & Graphic Services, Engineering, WEWPCC operations and EI maintenance. The Contract Administrator may receive and distribute copies and;
  - (ii) Submit the Final Record Drawings within one month of receipt of final comments from the Department.
- (b) All sealed Construction documents produced for the Project are required to be updated to become sealed Record Drawings. The Record Drawings shall include all changes from the final construction Work;
- (c) Final record drawings shall be sealed by a Professional Engineer with a P.Eng. stamp with tracked document revision history;
- (d) Existing drawings that require superseding as a result of the project are to be completed per the Drawing Content Document (Appendix Q) and submitted as part of final record documents;
- (e) 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) and;
  - (iv) Installation Contractor.
- (f) Record documents shall include:
  - (i) Variable Frequency Settings Letters;
  - (ii) DSC Control/monitoring strategy/Strategy for new equipment and;
  - (iii) Arc Flash Report

D12.4 The Proponent shall submit Record Drawings and Record Documents price as identified in item 7 on Form B: Fees.

D12.5 Record Drawings shall adhere to the Requirements for Drawings as described D6.5, D6.7 and D12.



### **D13. PROJECT CLOSEOUT SERVICES**

D13.1 Confirm and ensure complete turnover of Project Contract Administration documentation to the City by the Contractor and verify that the documents are in conformance with the construction Contract.

- (a) Review the operation and maintenance manuals to ensure they conform to the specification requirements and in accordance with D6.4 and Appendix K;
- (b) Assist the Contractor in closing out the applicable building permits (electrical, mechanical, structural, building occupancy, etc.);
- (c) Final approved submittals for Shop drawings, Record Drawings, operations and maintenance manuals, spare parts, photographs, etc.);
- (d) 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;
- (e) Complete any additional documents of the completed mechanical, electrical, automation, process, structural, and civil Works to the Department contact;
- (f) Coordinate with the Installation Contractor and Equipment Supplier to provide four (4) full hard copy sets of all Operation & Maintenance manuals to the City for all newly installed equipment and devices. A digital copy is to be provided through electronic transfer;
- (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. The final arc flash report shall be sealed by an Engineer. Arc flash labels will be required to be installed on all Station electrical distribution equipment including (MCCs, transformers, panel boards, disconnect switches, motors, generators, etc.). MCCs will require an arc flash label on each bucket where 600 VAC is present;
- (h) Coordinate with the Installation Contractor and Equipment Supplier for all required site testing and commissioning services and;
- (i) Coordinate with the Installation Contractor and Equipment Supplier to provide training per D9.2(w) and Appendix L;

D13.2 The City will require the Consultant and Subconsultants to provide, within sixty (60) Business Days of the completion of Total Performance electronic copies of all required documents for review.

- (a) The format for the provided materials may take multiple formats, but should be provided in format (spreadsheets, CAD drawings, doc, SKM, etc.) in an organized electronic filing system. All text is to be searchable in electronic documents.

#### **D13.3 Warranty Services**

D13.3.1 Provide one (1) year warranty services tied to the date of Total Performance.

D13.3.2 The warranty services shall include but are not limited to the following:

- (a) provision of inspection services by the request of the City in addition to performing a warranty inspection site visit approximately eleven (11) months after the date of Substantial Completion has been achieved with the Contractor and City staff. During the warranty period of the construction Contract to advise the City in writing of any deficiencies and the proposed resolution of the deficiencies. Upon approval of the City, provide the Contractor appropriate notice to correct the deficiencies;
- (b) determination if corrective Work is part of Contractor's warranty;
- (c) liaison and coordination with the Contractor to repair defective Work;
- (d) conduction of the inspection and approval of warranty Work (as requested);
- (e) issuance of instructions for correction of deficiencies;

- (f) review of updates to operations and maintenance manuals and resolve deficiencies;
- (g) respond to requests of the City related to the Project;
- (h) coordinate and lead a comprehensive, detailed inspection prior to the expiration of the warranty period for construction, including the Contractor and the City. Document and report on all issues identified and coordinate completion of the issues; and
- (i) prepare and issue the certificate of acceptance.

#### D13.4 Asset Data

- (a) The Consultant shall provide a comprehensive list of all maintainable assets along with associated data based on the Guideline to Document Asset Registry. The list shall be in a spreadsheet in a format defined by the City for uploading into the City's Oracle Work and Asset Management (OWAM) system.
- (b) The Consultant shall reference the latest revision of the Wastewater Services Division asset registry document outlined in Appendix I.

#### D13.5 Attend the Project closeout meeting with the City to:

- (a) mark the completion of the Project;
- (b) review Project performance;
- (c) identify the lessons learned; and
- (d) confirm that essential contractual and other Project closure activities are completed.

#### D13.6 Deliverables from Project Closeout shall include, but not be limited to:

- (a) Operation & Maintenance Manuals including recommended preventative maintenance schedule for new equipment. Four (4) hard copy and one (1) in electronic format;
- (b) Training Materials;
- (c) Final Asset Registry;
- (d) Final Construction Report in both hard copy and electronic file format;
- (e) End of warranty period site inspection, recommendations, and meeting minutes; and
- (f) Certificate of Acceptance for construction Contract(s).

### D14. ADDITIONAL WORK ALLOWANCES

#### D14.1.1 The General Requirements for the Additional Work Allowance are as follows:

- (a) The Consultant shall include Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this Project by role. These rates will be used for the Additional Work Allowance when defined and approved.
- (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P: Person Hours, when that staff member is proposed for Work under the Additional Work Allowance, the Consultant shall follow the requirements as stated in B11.
- (c) The Consultant shall apply a maximum of ten (10) percent markup on all Work performed by a Sub Consultant.
- (d) Expenditures under the Additional Work Allowance must be authorized by the Consulting Contract Administrator identified in D2.
- (e) The Contract price will be adjusted by written order to provide for a difference between the amount of the Additional Work Allowance and the actual cost of the Work.

- (f) The City reserves the right to delete any or all of the Additional Work Allowance from the Contract if the Work intended to be covered by the Additional Work Allowance is not required, or if the Works intended are found to be more extensive than the provisional Additional Work Allowance.

D14.2 The Additional Work Allowance is to be used for engineering and design services that arise due to unforeseen conditions arising in preliminary stages of the Project. When such Work arises, the Consultant will prepare a concise scope of Work and cost Proposal, following requirements as defined in B9.3 and D14, in collaboration with the Consulting Contract Administrator. The Proposal shall be submitted to the Consulting Contract Administrator for final approval. No Work shall start prior to this approval.

## **D15. RELEVANT DOCUMENTS**

D15.1 Relevant Appendix document(s) marked CONFIDENTIAL are available by request to the Consulting Contract Administrator after completion of a Non-Disclosure Agreement. These documents will be released at the sole discretion of the City. The Non-Disclosure Agreement can be found in Appendix O – Non-Disclosure Agreement.

## **D16. ACCESSIBLE CUSTOMER SERVICE REQUIREMENTS**

D16.1 The Accessibility for Manitobans Act (AMA) imposes obligations on The City of Winnipeg to provide accessible customer service to all persons in accordance with the Customer Service Standard Regulation (“CSSR”) to ensure inclusive access and participation for all people who live, Work or visit Winnipeg regardless of their abilities.

D16.1.1 The Consultant agrees to comply with the accessible customer service obligations under the CSSR and further agrees that when providing the Goods or Services or otherwise acting on the City of Winnipeg’s behalf, shall comply with all obligations under the AMA applicable to public sector bodies.

D16.1.2 The accessible customer service obligations include, but are not limited to:

- (a) providing barrier-free access to goods and services;
- (b) providing reasonable accommodations;
- (c) reasonably accommodating assistive devices, support persons, and support animals;
- (d) providing accessibility features e.g. ramps, wide aisles, accessible washrooms, power doors and elevators;
- (e) inform the public when accessibility features are not available;
- (f) providing a mechanism or process for receiving and responding to public feedback on the accessibility of all goods and services and;
- (g) providing adequate training of staff and documentation of same.

## **D17. UNFAIR LABOUR PRACTICES**

D17.1 Further to C3.2, the Consultant declares that in bidding for the Work and in entering into this Contract, the Consultant and any proposed Subconsultant(s) conduct their respective business in accordance with established international codes embodied in United Nations Universal Declaration of Human Rights (UDHR) <https://www.un.org/en/about-us/universal-declaration-of-human-rights> International Labour Organization (ILO) [https://www.ilo.org/global/lang--en/index.htm](https://www.ilo.org/global/lang-en/index.htm) conventions as ratified by Canada.

D17.2 The City of Winnipeg is committed and requires its Consultants and their Subconsultants, to be committed to upholding and promoting international human and labour rights, including fundamental principles and rights at Work covered by ILO eight (8) fundamental conventions and the United Nations Universal Declaration of Human Rights which includes child and forced labour.

- D17.3 Upon request from the Consulting Contract Administrator, the Consultant shall provide disclosure of the sources (by company and country) of the raw materials used in the Work and a description of the manufacturing environment or processes (labour unions, minimum wages, safety, etc.).
- D17.4 Failure to provide the evidence required under D17.3, may be determined to be an event of default in accordance with C14.
- D17.5 In the event that the City, in its sole discretion, determines the Consultant to have violated the requirements of this section, it will be considered a fundamental breach of the Contract and the Consultant shall pay to the City a sum specified by the Consulting Contract Administrator in writing ("Unfair Labour Practice Penalty"). Such a violation shall also be considered an Event of Default, and shall entitle the City to pursue all other remedies it is entitled to in connection with same pursuant to the Contract.
- D17.5.1 The Unfair Labour Practice Penalty shall be such a sum as determined appropriate by the City, having due regard to the gravity of the Consultant's violation of the above requirements, any cost of obtaining replacement goods/ services or rectification of the breach, and the impact upon the City's reputation in the eyes of the public as a result of same.
- D17.5.2 The Consultant shall pay the Unfair Labour Practice Penalty to the City within thirty (30) Calendar Days of receiving a demand for same in accordance with clause D17.5. The City may also hold back the amount of the Unfair Labour Practice Penalty from payment for any amount it owes the Consultant.
- (a) The obligations and rights conveyed by this clause survive the expiry or termination of this Contract, and may be exercised by the City following the performance of the Work, should the City determine, that a violation by the Consultant of the above clauses has occurred following same. In no instance shall the Unfair Labour Practice Penalty exceed the total of twice the Contract value.

## **SUBMISSIONS**

### **D18. AUTHORITY TO CARRY ON BUSINESS**

- D18.1 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 Consulting Contract Administrator with evidence thereof upon request.

### **D19. SAFE WORK PLAN**

- D19.1 The Consultant shall ensure the Contractor submits 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 C4.4(a) for the return of the executed Contract.
- D19.2 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>

### **D20. INSURANCE**

- D20.1 The Consultant shall procure and maintain, at their own expense and cost, insurance policies with limits no less than those shown below.

- D20.2 As a minimum, the Consultant shall, without limiting their obligations or liabilities under any other Contract with the City, procure and maintain, at their 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 \$5,000,000.00 per claim and \$5,000,000.00 in the aggregate.
- D20.2.1 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.
- D20.3 The policies required in D20.2(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.
- D20.4 The Consultant shall require any Consultants hired to perform geo technical drilling and sample collecting or closed-circuit television to procure and maintain, at their own expense and cost, comparable insurance to that set forth under D20.2(a) and D20.2(b).
- D20.5 The Consultant shall require each of their Subconsultants hired for design, architectural or engineering services as outlined in the Scope of Services to provide comparable insurance to that set forth under D20.2(a) and D20.2(c).
- D20.6 The Consultant shall provide the Consulting Contract Administrator with a certificate(s) of insurance in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Services, but in no event later than the date specified in C4.4(a) 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 D20.9.
- D20.7 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.
- D20.8 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.
- D20.9 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**

### **D21. COMMENCEMENT**

- D21.1 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.
- D21.2 The Consultant shall not commence any Services until:
- (a) the Consulting Contract Administrator has confirmed receipt and approval of:
    - (i) evidence of authority to carry on business specified in D18;
    - (ii) the Safe Work Plan specified in D19; and
    - (iii) evidence of the insurance specified in D20.
  - (b) the Consultant has attended a meeting with the Consulting Contract Administrator, or the Consulting Contract Administrator has waived the requirement for a meeting;
  - (c) The direct deposit application specified in D25.1
- D21.3 The City intends to award this Contract by July 21, 2023.

### **D22. CRITICAL STAGES**

- D22.1 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 Nov 3, 2023;
  - (b) Procurement of Schneider Electric equipment (Variable Frequency Drives, line and load reactor) ready for ordering by Nov 3, 2023;
  - (c) Final design for Station upgrades completed and accepted by the City by April 5, 2024;
  - (d) Tender for Station upgrades closing by June 7, 2024;
  - (e) New Station pumps and pump motors (including all related components such as drive shafts, cabling, conduits, controls, VFDs, etc...) must be installed, commissioned and operational by March 1, 2025;
  - (f) Substantial Performance by May 22, 2025;
  - (g) Total Performance by June 19, 2025 and;
  - (h) Operation and Maintenance manuals, Record documents review submission received no later than two (2) months after Total Performance.
  - (i) Final Operation & Maintenance Manuals along with sealed Record Documents no later than one (1) month after City review.

### **D23. COVID-19 SCHEDULE DELAYS**

- D23.1 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 Consulting Contract Administrator.
- D23.2 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.
- D23.3 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.

- D23.4 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 D23.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D23.5 The Services schedule, including the durations identified in the Contract, will be adjusted to reflect delays accepted by the Consulting Contract Administrator.
- D23.6 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Consulting Contract Administrator, shall be documented in accordance with C8.

## MEASUREMENT AND PAYMENT

### D24. INVOICES

- D24.1 Further to C11, the Consultant shall submit an invoice for each portion of Work performed. to:  
The City of Winnipeg  
Corporate Finance - Accounts Payable  
4th Floor, Administration Building, 510 Main Street  
Winnipeg MB R3B 1B9  
Facsimile No.: 204-949-0864  
Send Invoices to [CityWpgAP-INVOICES@winnipeg.ca](mailto:CityWpgAP-INVOICES@winnipeg.ca)  
Send Invoice Inquiries to [CityWpgAP-INQUIRIES@winnipeg.ca](mailto:CityWpgAP-INQUIRIES@winnipeg.ca)  
**Ensure the Contract Administrator is CC'd on all Invoice emails**
- D24.2 Invoices must clearly indicate, as a minimum:
- (a) the City's purchase order number;
  - (b) the City's Project number and title: "S-1251(133-2023) - PRPS Pump 1 & 2 Equipment Replacement and Electrical Upgrades";
  - (c) the Consultant's Contract Administrator's name;
  - (d) date of delivery;
  - (e) delivery address;
  - (f) type and quantity of Work performed;
  - (g) the amount payable with GST and MRST shown as separate amounts; and
  - (h) the Consultant's GST registration number.
- D24.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

### D25. PAYMENT

- D25.1 Further to C11.14, the City shall make payments to the Consultant by direct deposit to the Consultant's banking institution, and by no other means. Payments will not be made until the Consultant has made satisfactory direct deposit arrangements with the City. Direct deposit application forms are at [https://winnipeg.ca/finance/files/Direct\\_Deposit\\_Form.pdf](https://winnipeg.ca/finance/files/Direct_Deposit_Form.pdf).

### D26. PAYMENT SCHEDULE

- D26.1 Further to C12, payment shall be in accordance with the following payment schedule:
- (a) Payment for Record Drawings will be as Follows:
    - i. 50% Form B Record Documents upon submittal and acceptance of red-line drawings and equipment settings;

- ii. 50% Form B Record Documents upon submittal and acceptance of the Final Record documents.
- (b) The final Five (5) percent payment of contracted value will be paid upon delivery and acceptance of Operation and Maintenance (O&M) manuals, record drawings, training documents, training sessions provided, submittal of lessons learned.

## DISPUTE RESOLUTION

### D27. DISPUTE RESOLUTION

- D27.1 If the Consultant disagrees with any opinion, determination, or decision of the Consulting Contract Administrator, the Consultant shall act in accordance with the Consulting Contract Administrator's opinion, determination, or decision unless and until same is modified by the process followed by the parties pursuant to D27.
- D27.2 The entire text of C17.4 is deleted, and amended to read: "Intentionally Deleted"
- D27.3 The entire text of C17.5 is deleted, and amended to read:
- (a) If Legal Services has determined that the Disputed Matter may proceed in the Appeal Process, the Consultant must, within ten (10) Business Days of the date of the Legal Services Response Letter, submit their written Appeal Form, in the manner and format set out on the City's Materials Management Website, to the Chief Administrative Officer, and to the Consulting Contract Administrator. The Consultant may not raise any other disputes other than the Disputed Matter in their Appeal Form.
- D27.4 Further to C17, prior to the Consulting Contract Administrator's issuance of a Final Determination, the following informal dispute resolution process shall be followed where the Consultant disagrees with any opinion, determination, or decision of the Consulting Contract Administrator ("Dispute"):
- (a) In the event of a Dispute, attempts shall be made by the Consulting Contract Administrator and the Consultant's equivalent representative to resolve Disputes within the normal course of Project dealings between the Consulting Contract Administrator and the Consultant's equivalent representative.
  - (b) Disputes which in the reasonable opinion of the Consulting Contract Administrator or the Consultant's equivalent representative cannot be resolved within the normal course of Project dealings as described above shall be referred to a without prejudice escalating negotiation process consisting of, at a minimum, the position levels as shown below and the equivalent Consultant representative levels:
    - (i) The Consulting Contract Administrator;
    - (ii) Supervisory level between the Consulting Contract Administrator and applicable Department Head;
    - (iii) Department Head.
- D27.4.1 Names and positions of Consultant representatives equivalent to the above City position levels shall be determined by the Consultant and communicated to the City at the pre-commencement or kick off meeting.
- D27.4.2 As these negotiations are not an adjudicative hearing, neither party may have legal counsel present during the negotiations.
- D27.4.3 Both the City and the Consultant agree to make all reasonable efforts to conduct the above escalating negotiation process within twenty (20) Business Days, unless both parties agree, in writing, to extend that period of time.
- D27.4.4 If the Dispute is not resolved to the City and Consultant's mutual satisfaction after discussions have occurred at the final escalated level as described above, or the time period set out in D27.4.3, as extended if applicable, has elapsed, the Consulting Contract Administrator will issue a Final Determination as defined in C1.1(dd), at which point the parties will be governed by the Dispute Resolution process set out in C17.



## THIRD PARTY AGREEMENTS

### D28. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D28.1 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.
- D28.2 Further to D28.1, in the event that the obligations in D28 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 C8.4. In all other respects Funding Costs will be processed in accordance with Changes in Services under C8.
- D28.3 For the purposes of D28:
- (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.
- D28.4 Modified Insurance Requirements
- D28.4.1 If not already required under the insurance requirements identified in D20, 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.
- D28.4.2 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.
- D28.4.3 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.
- D28.4.4 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D28.5 Indemnification By Consultant
- D28.5.1 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.
- D28.5.2 The Consultant agrees that in no event will Canada or Manitoba, their respective officers, servants, employees or agents be held liable for any damages in Contract, tort (including negligence) or otherwise, for:
- (a) any injury to any person, including, but not limited to, death, economic loss or infringement of rights;
  - (b) any damage to or loss or destruction of property of any person; or

- (c) any obligation of any person, including, but not limited to, any obligation arising from a loan, capital lease or other long term obligation;  
in relation to this Contract or the Work.

#### D28.6 Records Retention and Audits

- D28.6.1 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.
- D28.6.2 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 D28.6.1 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.

#### D28.7 Other Obligations

- D28.7.1 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.
- D28.7.2 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.
- D28.7.3 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.
- D28.7.4 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.
- D28.7.5 The Consultant represents and warrants that no current or former public servant or public office holder, to whom the Value and Ethics Code for the Public Sector, the Policy on Conflict of Interest and Post Employment, or the Conflict of Interest Act applies, shall derive direct benefit from this Contract, including any employment, payments, or gifts, unless the provision or receipt of such benefits is in compliance with such codes and the legislation.
- D28.7.6 The Consultant represents and warrants that no member of the House of Commons or of the Senate of Canada or of the Legislative Assembly of Manitoba is a shareholder, director or officer of the Consultant or of a Subconsultant, and that no such member is entitled to any benefits arising from this Contract or from a Contract with the Consultant or a Subconsultant concerning the Work.

**APPENDIX A – PERIMETER ROAD PUMPING STATION PUMP 1 INFORMATION**  
**APPENDIX B – PERIMETER ROAD PUMPING STATION PUMP 2 INFORMATION**  
**APPENDIX C – PERIMETER ROAD PUMPING STATION HISTORICAL DRAWINGS**  
**APPENDIX D – DEFINITION OF PROFESSIONAL SERVICES**  
**APPENDIX E – WWD ELECTRICAL DESIGN GUIDE**  
**APPENDIX F – WWD IDENTIFICATION STANDARD**  
**APPENDIX G – WWD WASTEWATER TREATMENT FACILITIES AUTOMATION DESIGN GUIDE**  
**APPENDIX H- WSTP E&I STANDARDIZATION SUMMARY**  
**APPENDIX I – ASSET REGISTRY GUIDELINE**  
**APPENDIX J – CREATE SAFETY MANAGEMENT DOCUMENTS**  
**APPENDIX K – OPERATION AND MAINTENANCE INFORMATION**  
**APPENDIX L – TRAINING REQUIREMENTS**  
**APPENDIX M – EQUIPMENT LIST EXAMPLE**  
**APPENDIX N – COMMISSIONING REPORT EXAMPLE**  
**APPENDIX O – NON-DISCLOSURE AGREEMENT**  
**APPENDIX P – PG-RC-PC 05 PROJECT DOCUMENT NUMBERING STANDARD**  
**APPENDIX Q – PG-RC-PC-06 DRAWING CONTENT**  
**APPENDIX R CAD-GIS STANDARDS MANUAL (MARCH 2023)**  
**APPENDIX S – (CONFIDENTIAL) PRPS CONTROL STRATEGY OPERATION MANUAL**