



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 285-2022

**PROFESSIONAL CONSULTING SERVICES FOR WEST END WATER POLLUTION
CONTROL CENTRE (WEWPCC) FACILITIES PLAN**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

- B1.1 PROFESSIONAL CONSULTING SERVICES FOR WEST END WATER POLLUTION CONTROL CENTRE (WEWPCC) FACILITIES PLAN

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, May 9, 2022.
- B2.2 The Project Manager or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

- B3.1 The Project Manager or an authorized representative will conduct a Site Investigation of the West End Water Pollution Control Centre (WEWPCC), located at 7740 Wilkes Avenue, Headingley, MB, for each individual Proponent during the week of April 25-29, 2022. Investigations are by **appointment only** and for a **maximum of three (3) attendees** per Proponent to maintain current social distancing measures related to the COVID-19 pandemic. The tour will be approximately one hour in duration.
- B3.1.1 Proponents are requested to register for the site investigation by contacting the Project Manager identified in D2, before April 22, 2022 at 4:00 p.m.
- B3.1.2 Proponents are requested to meet at the reception area of the WEWPCC.
- B3.1.3 Proponents attending the Site Investigation outlined B3.1 are required to provide their own Personal Protective Equipment; at a minimum hard hat, CSA approved safety footwear, safety vest, non-medical mask or face covering and safety glasses. Guidelines on how to safely use a non-medical mask or face covering are provided in Appendix A.
- B3.2 Although attendance at the Site Investigations is not mandatory, the City strongly suggests that Proponents attend.
- B3.3 All Proponent attendees are required to review the City's latest revision of a COVID-19 Daily Self-Screening Questionnaire and respond in writing (i.e. mark "yes" or "no" to each question, print date and full name, sign questionnaire, and submit via e-mail) to the Project Manager or authorized representative at least one (1) Business Day prior to the Site investigation. Failure to provide written confirmation to the Project Manager or authorized representative may result in the Proponent attendee being denied access to the Site Investigation. A sample copy of the COVID-19 Daily Self-Screening Questionnaire is provided in Appendix B.
- B3.4 The Proponent shall not be entitled to rely on any information or interpretation received at the site investigation unless that information or interpretation is the Proponent's direct observation, or is provided by the Project Manager in writing.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Project Manager identified in D2.
- B4.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Project Manager of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Project Manager, require a correction to or a clarification of the Request for Proposal will be provided by the Project Manager to all Proponents by issuing an addendum.

- B4.4 Responses to enquiries which, in the sole judgment of the Project Manager, do not require a correction to or a clarification of the Request for Proposal will be provided by the Project Manager only to the Proponent who made the enquiry.
- B4.5 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the City's Project Manager. Failure to restrict correspondence and contact to the Project Manager may result in the rejection of the Proponents Proposal Submission.
- B4.6 The Proponent shall not be entitled to rely on any response or interpretation received pursuant to B3.1 unless that response or interpretation is provided by the Project Manager in writing.
- B4.7 Any enquiries concerning submitting through MERX should be addressed to:
MERX Customer Support
Phone: 1-800-964-6379
Email: merx@merx.com

B5. CONFIDENTIALITY

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

B6. ADDENDA

- B6.1 The Project Manager may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 The Project Manager will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the MERX website at www.merx.com.
- B6.4 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Project Manager indicated in D2.

B7. PROPOSAL SUBMISSION

- B7.1 The Proposal shall consist of the following components:
- (a) Form A: Bid/Proposal (Section A) in accordance with B8;
 - (b) Fees (Section B) in accordance with B9.

- B7.2 The Proposal should also consist of the following components:
- (a) Experience of Proponent and Subconsultants (Section C) in accordance with B10;
 - (b) Experience of Key Personnel Assigned to the Project (Section D), in accordance with B11;
 - (c) Project Understanding and Methodology (Section E) in accordance with B12; and
 - (d) Project Schedule (Section F) in accordance with B13.
- B7.3 Further to B7.1 all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B7.4 Further to B7.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.
- B7.5 Proposal format, including number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their proposed solution.
- B7.6 The Proposal shall be submitted electronically through MERX at www.merx.com.
- B7.6.1 Proposals will **only** be accepted electronically through MERX.
- B7.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B23.1(a).
- B7.8 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B8. PROPOSAL (SECTION A)

- B8.1 The Proponent shall complete Form A: Bid/Proposal, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid/Proposal shall be completed in accordance with the following requirements:
- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Proponent is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2
- B8.3 In Paragraph 3 of Form A: Bid/Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.
- B8.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:
- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
 - (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;

- (c) if the Proponent is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Proponent is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

B8.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B9. FEES (SECTION B)

B9.1 The Proposal shall include a Fixed Fee for all disciplines and/or phases identified in D7 Scope of Services.

B9.2 The Proposal should include Form P: Person Hours showing the hourly breakdown and assigned Key Personnel for each Fixed Fee item of work identified in D7 Scope of Services.

B9.3 The Proposal shall include an additional work allowance of \$150,000.00 for force main inspection services (in accordance with D10), geotechnical investigation / groundwater monitoring of Polishing Ponds (in accordance with D11), physical inspection of critical assets (in accordance with D11.10.2(a)), and any other unforeseen work.

- (i) The additional work allowance is to be included in the calculation of total Fees proposed by the Proponent.

- (ii) The additional work allowance shall only be used with written permission of the Project Manager and formally documented in a Change in Scope of Services form.

B9.4 There will be no fee escalation allowed for yearly adjustments, promotion, etc. The fee scale shall be fixed for the duration of the Project.

B9.5 Adjustments to Fees will only be considered based on increases to the Scope of Services.

B9.5.1 The City will not consider an adjustment to the Fees based on changes in the Project budget or the Final Total Construction Cost.

B9.6 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.

B9.7 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.

B9.8 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.

B9.9 Payments to Non-Resident Consultants are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B9.9.1 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 D20. Any such costs shall be determined in accordance with D20.

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.

B10.2 Proposals should include:

- (a) details demonstrating the history and experience of the Proponent and Subconsultants in providing programming, evaluation, study, design, and management of the project on three (3) projects of similar complexity, scope and value.
 - (i) Priority in evaluation will be given to projects of similar scope, then of similar complexity, and finally of similar value.
 - (ii) Priority in evaluation will be given to Proponents with experience of advanced wastewater treatment plant planning and design in cold climates.
 - (iii) Priority in evaluation will be given to Proponents with experience in condition assessment of wastewater treatment plant infrastructure.

B10.3 For each project listed in B10.2(a), the Proponent should submit:

- (a) description of the project;
 - (i) Include project owner, project objectives, size, and other relevant information;
- (b) scope of the engineering assignment and role of the consultant;
- (c) Listing of assigned Key Personnel involved in the reference project as per B11.
 - (i) Preference in evaluation shall be provided to reference projects in which Key Personnel assigned to the project as per section B11 had a major role.
 - (ii) Details of the role of each of the Key Personnel on the project should be provided.
 - (iii) The approximate percentage of each Key Personnel's workload in comparison to the total Proponent workload on the project should be provided.
- (d) project's original contracted cost and final cost;
 - (i) Provide this information separately for the value of the Scope of the Consultant Services assignment and the construction.
 - (ii) where the original contracted cost and final cost differ, the Proponent should submit an explanation.
 - (iii) Identify the amount of scope changes and the reasons for each of them.
- (e) design and construction schedule (anticipated project schedule and actual project delivery schedule, showing design separately);
 - (i) Provide explanations if there are discrepancies between the projected and the actual durations.
- (f) reference information (two current names with telephone numbers per project).
 - (i) references should have worked directly on the projects described, such as the Project Manager or Contract Administrator.
 - (ii) references may be utilized to confirm the information provided in the proposal.
 - (iii) other sources not named in references may be contacted to verify qualifications, work experience, past projects, applicability to the role, etc.

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) Clearly identify Subconsultants to be engaged by the Proponent on the organizational chart.
- (b) Roles of each of the Key Personnel in the Project should also be identified in the organizational chart.
- (c) Distinguish roles and Key Personnel for any subconsultants that are part of the work.

- B11.2 Identify the following Key Personnel assigned to the Project:
- (a) Project Manager;
 - (b) Process Lead Designer;
 - (c) Mechanical Lead Designer;
 - (d) Electrical Lead Designer;
 - (e) Instrumentation and Control Lead Designer;
 - (f) Civil / Municipal Lead Designer;
 - (g) Geotechnical Lead Designer; and
 - (h) Structural Lead Designer.
- B11.2.1 Multiple Key Personnel positions may be filled by one individual, however for evaluation purposes, be sure to identify the experience and qualifications for each role separately.
- B11.3 Submit the experience and qualifications of the Key Personnel assigned to the Project for projects of similar complexity, scope and value, including the project manager, managers of the key disciplines and lead designers.
- B11.3.1 Include the following for each of the Key Personnel:
- (a) educational background and degrees;
 - (b) professional recognition;
 - (c) job title;
 - (d) years of experience in current position;
 - (e) years of experience related to the items identified in PART D - Supplemental Conditions; and
 - (f) years of experience with existing employer.
- B11.4 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;
 - (i) Key Personnel's workload in comparison to the total Proponent workload may be evaluated along with the Key Personnel's role.
 - (c) Project Owner;
 - (d) Reference information (two current names with telephone numbers per project).
- 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.
- B12.2 Methodology should be presented in accordance with the Scope of Services identified in D7.
- B12.2.1 The proposals should address the proponent's methodology for conducting the pond condition assessment including assessing the liner integrity, and estimating leakage from the ponds. The proposal should also highlight uncertainties and risks which will be investigated during the contract.
- 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 Scope of Services and the broad functional and technical requirements;
- (b) the deliverables and the associated task requirements of the Project;
- (c) the work activities and clearly identify all significant assumptions and interpretations;
- (d) the activities and services to be undertaken by the City and equipment and supplies to be provided by the City;
- (e) any potential risks, along with their implications and possible mitigation measures, that could be encountered during inspection;
- (f) the proposed Project budget;
- (g) the City's Project methodology with respect to the information provided within this RFP and the City's Project Management Manual at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4> ; and;
- (h) any initiative and innovation to be used to perform the Services; and
- (i) any other issue that conveys your team's understanding of the Project requirements.

B12.5 The Proposal should include Form P: Person Hours for all disciplines and or phases identified in D7 Scope of Services.

B12.5.1 The total Fees on Form P: Person Hours should match Fees submitted in response to B9.

B12.6 Proponents may use Form P: Person Hours or a table of their own design provided it includes all information requested in accordance with B12.5.

B12.7 A sample of Form P: Person Hours can be found at <https://winnipeg.ca/matmgt/templates/information.stm>

B12.8 For each person identified in B11.2, list the percent of the person's time to be dedicated to the Project in accordance with the Scope of Services identified in D7.

B12.9 The Form P: Person Hours should be broken down such that the task descriptions align with the project schedule and work breakdown structure submitted in accordance with B13.

B13. PROJECT SCHEDULE (SECTION F)

B13.1 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.

- (a) The schedule should align within the items within the Fee Schedule of Form B: Fees, and the Task Descriptions of Form P: Person Hours.

B13.2 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.

B13.3 Unless otherwise indicated, the review period for City deliverables should be a minimum of ten (10) Business Days and commensurate to the number of pages and complexity of the document.

B13.4 The Proponent should develop the most effectual schedule attainable using their experience and experience to meet the requirements of the City. In the circumstance that the Proponent's schedule contrasts with any milestone listed in D17 Critical Stages, the Proponent should provide detailed commentary on their justification.

B14. ELIGIBILITY

- B14.1 As a result of their involvement in the Winnipeg Sewage Treatment Program (WSTP) in relation to this Project, Veolia Water North America (VWNA) Winnipeg Inc. (Veolia) or their affiliates are not eligible to be a Proponent, participate as team members of a Proponent, or act as advisors to a Proponent or to any of its team members or to otherwise participate in the development and preparation of Proposals for the Project.
- B14.2 A Proponent may be disqualified if any of the above-noted ineligible persons participate in the development and preparation of the Proponent's Proposal for West End Water Pollution Control Centre (WEWPCC) Facilities Plan (RFP 285-2022).

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) AECOM Canada Ltd.
 - (b) Alliance Engineering Services Inc.
 - (c) EnviroSim Associates Ltd.
 - (d) Kontzamanis Graumann Smith MacMillan Inc. (KGS Group)
 - (e) SNC Lavalin
- B15.3 The following reports were prepared by the organizations identified in B15.2:
- (a) Perimeter Road Pumping Station Forcemain Twinning Operations & Maintenance Manual – AECOM – February 2009
 - (b) Perimeter Road Pumping Station Forcemain Twinning – Existing Forcemain Assessment – AECOM – March 2010
 - (c) WEWPCC Nutrient Removal and UV Disinfection Upgrade – Draft Conceptual Design Report – Earth Tech – December 2004
 - (d) WEWPCC Nutrient Removal and UV Disinfection Upgrade – Functional Design Report – Earth Tech – December 2005
 - (e) Full Scale CEPT Trial Report – Draft – AECOM – 2017
 - (f) Structural Condition Assessment of Sludge Truck Bay Slab and Intermediate Support Beams at West End Sewage Treatment Plant – FINAL – AECOM – February 2021
 - (g) WEWPCC HVAC Replacement – Functional Design Report – Final – Alliance Engineering – March 2010
 - (h) West End WPCC – Wastewater Characterization Study – EnviroSim Associates – September 2004
 - (i) Condition Assessment of Primary Sludge Fermenter No. 2 at WEWPCC – KGS Group – May 2018
 - (j) Condition Assessment of Primary Sludge Fermenter No. 1 at WEWPCC – KGS Group – January 2019
 - (k) WEWPCC Process Blowers – Preliminary Design Report – SNC Lavalin – June 2012

B16. CONFLICT OF INTEREST AND GOOD FAITH

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

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

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

that could or would be seen to:

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

B16.3 In connection with its Proposal, each entity identified in B16.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Project Manager; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B16.4 Without limiting B16.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

B16.5 Without limiting B16.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:

- (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of its Key Personnel;
- (b) require the removal or replacement of any Key Personnel proposed for the Services that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
- (c) disqualify a Proponent or Key Personnel proposed for the Services that fails to comply with any requirements prescribed by the City pursuant to B16.4 to avoid or mitigate a Conflict of Interest; and

- (d) disqualify a Proponent if the Proponent, or one of its Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.

B16.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B17. QUALIFICATION

B17.1 The Proponent shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; and
- (b) be financially capable of carrying out the terms of the Contract;
- (c) have all the necessary experience, capital, organization, and equipment to perform the Services in strict accordance with the terms and provisions of the Contract;
- (d) have or establish and staff an office in Winnipeg for the duration of the Project.

B17.2 The Proponent and any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:

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

B17.3 The Proponent and/or any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:

- (a) have successfully carried out services for the programming; design, management of construction and contract administration for architectural and/or engineering projects of similar complexity, scope and value; and to those required for this Project; and
- (b) be fully capable of performing the Services required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
- (d) have the knowledge and resources to administer the requirements of The Workplace Safety and Health Act (Manitoba) during the construction works associated with this Contract; and
- (e) undertake to meet all licensing and regulatory requirements of the appropriate governing authorities and associations in the Province of Manitoba.

B17.4 The Proponent shall submit, within three (3) Business Days of a request by the Project Manager, further proof satisfactory to the Project Manager of the qualifications of the Proponent and of any proposed Subconsultant.

B17.5 The Proponent shall provide, on the request of the Project Manager, full access to any of the Proponent's equipment and facilities to confirm, to the Project Manager's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Services.

B18. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B18.1 Proposals will not be opened publicly.
- B18.2 After award of Contract, the Contract amount and the name of the successful Proponent and their address will be available on the MERX website at www.merx.com.
- B18.3 The Proponent is advised any information contained in any Proposal Submission may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B18.3.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Proposal Submission identified by the Proponent as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.
- B18.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of his/her submission upon written request to the Project Manager.

B19. IRREVOCABLE OFFER

- B19.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.
- B19.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Services for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B20. WITHDRAWAL OF OFFERS

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

B21. INTERVIEWS

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

B22. NEGOTIATIONS

- B22.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.
- B22.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.
- B22.3 If, in the course of negotiations pursuant to B22.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B23. EVALUATION OF PROPOSALS

- B23.1 Award of the Contract shall be based on the following evaluation criteria:
- (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: (pass/fail)
 - (b) qualifications of the Proponent and the Subconsultants, if any, pursuant to B17: (pass/fail)
 - (c) Fees (Section B) 20%
 - (d) Experience of Proponent and Subconsultant (Section C) 20%
 - (e) Experience of Key Personnel Assigned to the Project (Section D) 25%
 - (f) Project Understanding and Methodology (Section E) 30%
 - (g) 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(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is qualified.
- B23.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B23.1(a) and B23.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B23.5 Further to B23.1(c), Fees will be evaluated based on Fees submitted in accordance with B9.
- B23.6 Further to B23.1(c), the Award Authority may reject a Proposal as being non-responsive if it exceeds the funds available as shown in D7.2.
- B23.7 Further to B23.1(d), Experience of Proponent and Subconsultants will be evaluated considering the experience of the organization on projects of similar size and complexity as well as other information requested, in accordance with B10.
- B23.8 Further to B23.1(e), Experience of Key Personnel Assigned to the Project will be evaluated considering the experience and qualifications of the Key Personnel and Subconsultant personnel on Projects of comparable size and complexity, in accordance with B11.
- B23.9 Further to B23.1(f), Project Understanding and Methodology will be evaluated considering your firm's understanding of the City's Project, project management approach and team organization, in accordance with B12.
- B23.10 Further to B23.1(g), Project Schedule will be evaluated considering the Proponent's ability to comply with the requirements of the Project, in accordance with B13.
- B23.11 Notwithstanding B23.1(d) to B23.1(g), where Proponents fail to provide a response to B7.2(a) to B7.2(d), the score of zero may be assigned to the incomplete part of the response.
- B23.12 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B21.
- B23.13 Where references are requested, the reference checks to confirm information provided may not be restricted to only those submitted by the Proponent, and may include organizations representing Persons, known to have done business with the Proponent.

B24. AWARD OF CONTRACT

- B24.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B24.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be qualified, and the Proposals are determined to be responsive.
- B24.2.1 Without limiting the generality of B24.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Services;
 - (b) the prices are materially in excess of the prices received for similar services in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Services, or a significant portion thereof, with its own forces;
 - (d) only one Proposal is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B24.3 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.
- B24.4 The City may, at its discretion, award the Contract in phases.
- B24.5 Further to B24.4 the City reserves the right to negotiate and award future phases to the successful Proponent.
- B24.6 Further to Paragraph 7 of Form A: Bid/Proposal and C4, the City may issue an award letter to the successful Proponent in lieu of execution of Contract Documents
- B24.6.1 The Contract documents as defined in C1.1(o)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the award letter notwithstanding that they are not necessarily attached to or accompany said award letter.
- B24.7 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(o).
- B24.8 If funding for the Services is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, Proponents are advised that the terms of D20 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B24.9 Following the award of Contract, a Proponent will be provided with information related to the evaluation of its Proposal upon written request to the Project Manager.
- B24.10 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Proponent will be paid for all Services rendered up to time of termination.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Consultant Services* (Revision 2017-03-24) are applicable to the Services of the Contract.
- C0.1.1 The *General Conditions for Consultant Services* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm.
- C0.2 A reference in the Request for Proposal to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Consultant Services*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. PROJECT MANAGER

D2.1 The Project Manager is:
Arash Kiayee, P.Eng.
Telephone No. 204 918-1391
Email Address: akiayee@winnipeg.ca

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

D3. DEFINITIONS

D3.1 When used in this Request for Proposal:

- (a) “**AACE**” means AACE International (Association for the Advancement of Cost Engineering);
- (b) “**CAD**” means Computer Assisted Drawing;
- (c) “**Class 4 Cost Estimate**” means an estimate within an expected accuracy within -30% to +50%;
- (d) “**FM**” means Force Main;
- (e) “**HVAC**” means Heating, Ventilation, and Air Conditioning;
- (f) “**MACP**” means Manhole Assessment Certification Program;
- (g) “**MH**” means Maintenance Hole or Manhole;
- (h) “**NASSCO**” means National Association of Sewer Service Companies
- (i) “**Native format**” means the original format from which a deliverable was generated (i.e. MS Word, MS Excel, AutoCAD, etc.);
- (j) “**O&M**” means Operation and Maintenance;
- (k) “**PACP**” means Pipeline Assessment Certification Program;
- (l) “**PCCP**” means Prestressed Concrete Cylinder Pipe;
- (m) “**P&ID**” means Process and Instrumentation Diagram;
- (n) “**PRPS**” means Perimeter Road Pumping Station;
- (o) “**Professional Engineer**” means an engineer registered in the Province of Manitoba;
- (p) “**Scope of Services**” means all Services executed under the Contract;
- (q) “**TM**” means Technical Memorandum;
- (r) “**WEWPCC**” means West End Water Pollution Control Centre;
- (s) “**WBS**” means Work Breakdown Structure;
- (t) “**WSTP**” means Winnipeg Sewage Treatment Program; and
- (u) “**WWD**” means Water and Waste Department.

D4. BACKGROUND

- D4.1 The current West End Water Pollution Control Centre (WEWPCC) was constructed in 1993, and was upgraded to a biological nutrient removal (BNR) system in 2008.
- D4.2 Currently, wastewater is pumped from Perimeter Road Pumping Station (PRPS) to WEWPCC via two parallel force mains. Following treatment, the effluent from the BNR plant flows through five polishing ponds, originally constructed in 1964, where it is naturally disinfected via ultra violet from sunlight, and cooled before discharge to the Assiniboine River.
- D4.3 The treatment facility consists of the following process units (see P&IDs listed in Appendix C for more details):
- (a) Preliminary Treatment: two mechanically raked coarse screens followed by two vortex grit chambers.
 - (b) Primary Treatment: two 30 m diameter primary clarifiers equipped with rotating scrapers.
 - (c) Secondary Treatment:
 - (i) Two bioreactors using Westbank Process, each with a volume of 5,125 m³ provide secondary treatment of primary effluent. The bioreactors are partitioned into a three-pass serpentine configuration with the first pass comprising the pre-anoxic, anaerobic and anoxic zones. Each bioreactor is equipped with four 3.75 kW mixers, and one 11.5 kW nitrified recycle pump.
 - (ii) Aeration system is comprised of three 200 kW multi-stage centrifugal blowers (two duty, one standby), and fine bubble membrane diffusers.
 - (iii) Three 30 m diameter secondary clarifiers, equipped with suction tubes mounted on a rotating mechanism.
 - (iv) There are five return activated sludge (RAS), and two waste activated sludge (WAS) pumps, handling process sludge.
 - (d) Primary Sludge Fermenters: two 16 m diameter concrete tanks, equipped with center driven rake and picket mechanism to provide short-chain volatile fatty acids (VFAs) for the process to enhance biological phosphorus removal. The fermenter supernatant is directed to the two bioreactor anaerobic zones. The thickened sludge underflow is pumped to the sludge storage tank.
 - (e) Waste Activated Sludge Thickeners: two rectangular dissolved air floatation (DAF) units equipped with chain and flight mechanism. The thickened WAS will be pumped to the sludge storage tanks. The DAF thickening facility is equipped with polymer dosing equipment, air compressors, saturators and pressurization pumps.
 - (f) Sludge Storage Tanks: sludge removed from the fermenters and the DAF units is stored on-site and then hauled to the North End Water Pollution Control Centre (NEWPCC) for treatment and disposal.
- D4.4 Some processes have undergone refurbishments whereas others are nearing end of life.
- D4.5 The WEWPCC Facilities Plan will review existing asset condition assessment data, performance data, and capacity design data of the force mains, treatment plant process units, and polishing ponds. It will also review the condition and capacity of assets with respect to the current and future flows and loads, and will develop long-term planning to accommodate future wastewater flows and loadings to the plant in the design horizon of 2050.
- (a) The study will include an assessment of the treatment plant assets in terms of their remaining useful lives, and will provide recommendations for modifications, refurbishments, upgrades, and/or replacements, so they can be in service by the 2050 design horizon. Sizing required process units to accommodate 2050 flows and loads and modeling treatment process will be included in the study.
 - (b) An investment profile and implementation timeline for expected modifications, refurbishments, upgrades, and/or replacements of treatment plant assets, with Class 4

Capital Cost estimates for these works, is to be provided as part of the Facilities Plan Study.

- D4.6 New condition assessment of the following assets is also included in the study.
- (a) PRPS Twin Force Mains to WEWPCC
 - (b) Polishing Ponds
 - (c) Conditions of all other assets are to be evaluated using existing condition assessment and performance data.
- D4.7 There are two parallel force mains (FMs) conveying wastewater from Perimeter Road Pumping Station (PRPS) to WEWPCC.
- (a) The original FM (Charleswood Lagoon Sewage FM) was installed in 1964. It consists of 1,112 m of 750 mm diameter PCCP extended from the pumping station to Valve Chamber No. 1 (VC1) and then to VC2A (previously identified as Valve Chamber No. 2), and 340 m of 600 mm diameter PCCP extended from VC2A to WEWPCC. There are seven (7) inspection manholes (MHs) installed on the original line.
 - (b) In 1981, 73 m of 600 mm diameter and 60 m of 450 mm diameter Concrete Pressure Pipes as well as a new valve chamber (VC5) were installed to bypass the flow from the VC2 to Primary Cell No. 1.
 - (c) In 1992, 393 m of 900 mm diameter Class 14 Prestressed Concrete Pressure Pipe, as well as 56 m of 600 mm diameter Class 14 Prestressed Concrete Pressure Pipe and a valve chamber (VC2B) were added to the FM system to divert the flow to the Headworks Building of the current wastewater treatment plant.
 - (d) In 2007, a twin FM consists of 1,070 m of 600 mm diameter PVC pipe, one blow-off MH, and one drain MH were installed between the PRPS and VC2A using a different route than the original FM route.
- D4.8 The Polishing Ponds (formerly sewage lagoons) include three Primary Cells each with an area of 18 hectares, and two Secondary Cells, each with an area of 25 hectares. The lagoons were originally interconnected via 750 mm concrete pipes. As the pipes were partially clogged, broken, or capacity deficient, additional interconnections have been added to the primary cells by cutting the top of the dikes. The Secondary Cell No. 1 used to house an aerated lagoon system consisting of four smaller lagoons, aerated by three different aeration systems. The aeration lagoons are no longer in operation, and the lagoon walls and platforms are either submerged or damaged.
- D4.9 The City has engaged Veolia Water North America to provide advice to the City during the delivery of this Project. Veolia will attend meetings and workshops and assist with reviews throughout the Project. This does not relieve the Consultant of their obligation.

D5. RELEVANT DOCUMENTS

- D5.1 Relevant documents and drawings listed in Appendix C are available by request to the City's Project Manager after completion of Appendix D - Non-Disclosure Agreement. These documents and drawings will be released at the sole discretion of the City.
- D5.2 Drawings, specifications, bid opportunity document, photos, video captures, and other related information for the Perimeter Road Pumping Station Upgrades - Contract A - Forcemain Twinning can be viewed and copied from the Materials Management website link for City of Winnipeg Bid Opportunity (BO) 481-2007 at:
https://winnipeg.ca/MatMgt/FolderContents.asp?FOLDER_NAME=481-2007&YEAR=2007

D6. GENERAL REQUIREMENTS

D6.1 General Requirements of 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 as required by the Engineering and Geoscientific Professions Act of the Province of Manitoba and By-laws of the Engineers Geoscientists Manitoba.
 - (b) Other reports and documents not involving the practice of professional engineering, such as letters of information, minutes of meetings, may be originated and signed by other personnel engaged by the Consultant and accepted by the City.
- D6.1.2 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 City on the application of codes and standards.
- D6.1.3 The Consultant shall not substitute or replace Key Personnel throughout the duration of the Project without the written approval of the Project Manager.
- (a) Experience and qualification as specified in B11 shall be submitted for all requested substitute(s) and replacement(s).
- D6.1.4 As sewage treatment is a continuous operation twenty four hours a day, seven days a week, the Consultant shall maintain close coordination between the Project and WWD engineering staff and plant operations staff so that process disruptions are minimized.
- (a) No work shall take place which will interfere with the continuous plant or plant process operation without written approval of the Project Manager.
- D6.1.5 The Consultant shall coordinate with outside agencies and City departments external to the Water and Waste Engineering Division as required to perform the services.
- D6.1.6 The Consultant and their Subconsultants, and contractors shall be aware of their obligation as stated in the Wastewater Services Division Environmental Preservation and Compliance statements and the Water and Waste Department Environmental Management Policy attached as Appendix E.

D6.2 General Requirement for Project Deliverables

- D6.2.1 Project deliverables include but are not limited to:
- (a) Flow & Load Assessment Technical Memorandum
 - (b) Safe Work Plans for inspections and site activities
 - (c) Plans and Schedule for condition assessment of force mains
 - (d) Plans and Schedule for condition assessment of polishing ponds
 - (e) Force Main Condition Assessment Technical Memorandum
 - (f) Polishing Pond Condition Assessment Technical Memorandum
 - (g) Facilities Plan Report
- D6.2.2 Facilities Plan Minimum Submission Requirements
- (a) This sequence of document submission is required at minimum over the course of the Project. The Consultant to determine if additional submission stages beyond those listed below are required, and include them in their Proposal.
 - (i) Facilities Plan Report Table of Contents
 - (ii) 60% Complete Facilities Plan Report
 - (iii) 95% Complete Facilities Plan Report

- (iv) Final Facilities Plan Report
- (v) BioWin Model Files

- D6.2.3 Submit comment tracking spreadsheet as part of draft document revisions and resubmissions.
- (a) Comment tracking spreadsheet to log specific comments/edits requested by the City, the Consultant's response, and City's acceptance/rejection of Consultant's response
- D6.2.4 The Consultant shall indicate the review periods for project deliverables on the Critical Path Method schedule as outlined in B13 Project Schedule (Section F).
- D6.2.5 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 shall 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.
- D6.2.6 All Deliverables shall be submitted in both native format (MS Word, MS Excel, MS Project, etc.) and PDF format.
- D6.2.7 Where possible, all documents provided as PDF shall be in a single electronic file and searchable.
- D6.2.8 Inspection media of the FM shall be submitted to the City.
- D6.2.9 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 Project Manager. All City review comments shall be considered and incorporated into the final version, if applicable.

D6.3 General Requirements for Drawings

- D6.3.1 Drawings shall be prepared in accordance with the Department's CAD-GIS Specifications.
- D6.3.2 Drawings shall not be prepared using the City's GeoMedia and Google Earth screen captures and instead shall be prepared from the legal plans, certificates of title, as-built records, and topographic survey.
- D6.3.3 All profile components of Drawings shall be in natural scale.
- D6.3.4 The City will provide comments on the draft Drawings. Comments shall be reviewed and incorporated into the final Drawings.
- D6.3.5 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. New drawing numbers will be required for all drawings containing new work.
- D6.3.6 All final Drawings shall be Submitted in AutoCAD format version 2012, and in 11x17 hard copy format, unless otherwise specified.
- D6.3.7 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, specifically:
- (a) document named "WWD CAD/GIS STANDARDS (August 4, 2016)" at <https://winnipeg.ca/waterandwaste/pdfs/dept/CAD-GIS-Specifications.pdf>

D6.4 General Requirements for Photographs

- D6.4.1 All photographs submitted to the City as part of the Project shall include captions with the following information:
- (a) date photograph was taken;

- (b) location and orientation where the photograph was taken; and
- (c) a brief description of what is depicted by the photograph.

D6.4.2 All photographs submitted to the City as part of the Project shall have the date and time stamped on the photograph.

D6.5 General Requirements for Reports

D6.5.1 Final Documents Submission Requirements

- (a) Project Manager must give final approval that all comments have been satisfactorily addressed prior to the Consultant printing paper copies.
- (b) Two (2) paper copies, with one (1) unbound and one (1) bound shall be submitted of all documents once finalized.
- (c) Submit searchable .PDF copy and native file format document of all final documents.

D6.6 General Requirements for Meetings

D6.6.1 Various project meetings will be required throughout the Project in order to track the Consultant's 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 the meetings and their proposed schedules for each of the various tasks/work activities.

D6.6.2 Schedule and chair Project meetings as listed in D8.3.

- (a) provide an agenda a minimum of two (2) Business Days before the meeting date.
- (b) provide meeting minutes within five (5) Business Days after the meeting date.
- (c) Meetings can be held remotely via Microsoft Teams or at 1199 Pacific Ave. / WEWPCC, depending on Manitoba COVID-19 Public Health Guidelines.

D7. SCOPE OF SERVICES

D7.1 The Services required under this Contract shall consist of condition assessments of some assets at the WEWPCC. The major components of the Work include the following:

- (a) Project Management in accordance with D8;
- (b) Flow and Load Assessment in accordance with D9;
- (c) Condition Assessment of Perimeter Road Pumping Station (PRPS) Twin Force Mains to WEWPCC in accordance with D10;
- (d) Condition Assessment of the Polishing Ponds in accordance with D11;
- (e) Facilities Plan Report in accordance with D12.
 - (i) The treatment plant headworks (i.e. screens and grit removal system), and its associated HVAC system will be **excluded** from Scope of Services identified in (e) as there is a separate project to upgrade the Headworks.

D7.1.1 Unless otherwise stated, Appendix F – Definition of Professional Consultant Services (Consulting Engineering Services) shall be applicable to the provision of Professional Engineering services for this Project.

D7.1.2 The Services required under this Contract shall be in accordance with the City's Project Management Manual <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4> . Notwithstanding the foregoing, the Consultant is being engaged by the City for its professional expertise; the Consultant shall bring to the Project Manager's attention any aspect of the City's Project Management Manual or templates which the Consultant is of the opinion is not consistent with good industry practice.

D7.2 The funds available for this Contract are \$500,000.

- (a) The total available funds stated in D7.2 include an Additional Work Allowance of \$150,000 in accordance with B9.3.

D8. PROJECT MANAGEMENT

D8.1 Project Management activities required to carry out the Scope of Services will include but not limited to the following:

- (a) Directing and coordinating efforts of the Consultant team to achieve the specific Project goals and objectives and to meet all City requirements.
- (b) Managing and coordinating activities between the Consultant and the subcontractor required for pipe inspection services in accordance with D10.4.
- (c) Providing advice, engineering services, consultation and oversight with respect to the Scope of Services.
- (d) Planning to conduct condition assessments of PRPS Force Mains and Polishing Ponds including:
 - (i) Preparation of a detailed schedule with required resources.
 - (ii) Preparation of methodologies, and procedures to conduct each condition assessment task demonstrating involvement of each stakeholder and activities expected from them.
 - (i) Providing program development, and procurement required for condition assessments.
- (e) Liaising with the City's Project Manager on a **weekly** basis (at a minimum) to provide project status update.
- (f) Submitting monthly consultant progress reports. The reports shall utilize the latest version of the City's consultant progress report template.
- (g) Providing adequate notice (at least one (1) week) prior to any site visit or work that will require assistance from City personnel.
- (h) Organizing and chairing project meetings and provide agendas, materials, and minutes.
- (i) Providing Safe Work Plans in accordance with D14.

D8.2 Deliverables

D8.2.1 The following Deliverables shall apply to the Project Management phase of work:

- (a) Meeting agenda, PowerPoint presentation slides (as applicable) and meeting minutes
- (b) Monthly Consultant progress reports
 - (i) Submit the proposed progress reporting format for City review and acceptance within two (2) weeks from the project award. The initial progress report will include development of the performance measurement baseline schedule for each task/activity and specific deliverables. Reporting will be completed in a format consistent with the Consultants work breakdown structure (WBS) and be reconcilable with the monthly accounting and invoicing system. Progress reports will include the following minimum requirements;
 - ◆ Progress reporting to be submitted to the Project Manager on a monthly basis
 - ◆ Problems/issues update including description of the issue and proposed method of resolution
 - ◆ Updated schedule – The schedule shall include details on the Consultant / Sub-contractor / Wastewater Services activities for each condition assessment task, meeting / workshops, deliverables, and review periods.
 - ◆ Work planned for next month
 - ◆ Progress of work planned last month

- ◆ Estimated percentage complete by task/activity and overall
- (c) Safe Work Plans
- (d) progress reports will be coordinated so as to be incorporated as part of the monthly progress meetings.

D8.3 Meetings

D8.3.1 Mandatory meetings listed below to be attended by the Consultant's Project Manager and any relevant Key Personnel at minimum.

- (a) Project Initiation Meeting
 - (i) This meeting may be completed remotely, or at the City's offices.
 - (ii) This meeting will at minimum discuss:
 - ◆ Sequence of tasks expected by the Consultant to complete the project
 - ◆ City's goals for project. Ensure the City's goals as part of this meeting are clearly documented in the meeting minutes
 - ◆ Milestone dates
 - ◆ Key personnel on project and their role
 - ◆ Project communications
 - ◆ Procedures for modifications to project scope, key personnel, scheduled dates
 - (iii) Consultant Key Personnel are required at this meeting.
- (b) Flow & Load Assessment Technical Memorandum Review Meeting
 - (i) See D9 for further information on the scope of work in relation to this meeting.
 - (ii) This meeting may be completed remotely, or at the City's offices.
 - (iii) A minimum ten (10) Business Day internal review period of the City will occur prior to this meeting.
- (c) Risk Review Workshop
 - (i) This workshop is to discuss/brainstorm all risks and opportunities for implementation of the Facilities Plan for the design horizon of 2050, condition assessments of PRPS FMs and Polishing Ponds, and inspection of the treatment plant assets.
 - (ii) The workshop will be conducted in person at WEWPCC, followed by a walk-through (providing compliance with Public Health Orders and City's policies), and after review of all relevant drawings and documents.
 - (iii) A framework/register in which risks and opportunities are to be identified shall be submitted at minimum five (5) Business Days prior to this meeting.
 - (iv) The Consultant shall allow sufficient time in their proposal for risk planning, the risk review meeting, and the walk-through.
 - (v) The completed Risk/Opportunity Register shall be included as an appendix to the Facilities Plan Report.
- (d) Condition Assessment Planning Meetings
 - (i) The Consultant shall allow for **two (2)** meetings (at a minimum), prior to condition assessment of PRPS Force Mains, and Polishing Ponds.
 - (ii) The Consultant shall allow sufficient time in their proposal for planning of the work, and for the meetings.
 - (iii) This meeting may be completed remotely, at the City's offices, or at the WEWPCC.
 - (iv) See D10 and D11 for further information on the scope of work in relation to these meetings.
 - (v) Some of the items to be discussed at the Planning Meetings include:
 - ◆ Background information review of assets to be inspected / assessed

- ◆ Plans, arrangements, schedules, and resources to conduct the inspection / assessment
 - ◆ Methodologies and procedures to conduct each condition assessment task demonstrating involvement of each stakeholder and activities expected from them
 - ◆ Operational constraints, and potential issues/concerns during condition assessment
 - ◆ Interview the WEWPCC Operations to inquire about the issues associated with each task
 - ◆ Site safety and PPE requirements
 - ◆ Level of assistance required from City employees
- (vi) The summary of these meetings shall be incorporated into the respective condition assessment reports.
- (e) Condition Assessment TM Review Meetings
- (i) The Consultant shall allow for **two (2)** meetings, following submission of draft condition assessment technical memorandums (TMs) of PRPS Force Mains, and Polishing Ponds.
 - (ii) See D10 and D11 for further information on the scope of work in relation to these meetings.
 - (iii) This meeting may be completed remotely, or at the City's offices.
 - (iv) A minimum ten (10) Business Day internal review period of the City will occur prior to this meeting.
 - (v) All Consultant Key Personnel involved in preparation of the TMs are required at these meetings.
- (f) 60% Complete Facilities Plan Review Meeting
- (i) See D12 for further information on the scope of work in relation to this meeting.
 - (ii) This meeting may be completed remotely, or at the City's offices.
 - (iii) A minimum fifteen (15) Business Day internal review period of the City will occur prior to this meeting.
 - (iv) This meeting will at minimum discuss:
 - ◆ Summary of work to date
 - ◆ Summary of methodology to be used to produce AACE Class 4 estimate for the solution selected.
 - ◆ Summary of unknowns remaining at this point
 - ◆ Allow for City's feedback
 - (v) All Consultant Key Personnel involved in preparation of the report are required at this meeting.
- (g) 95% Complete Facilities Plan Review Meeting
- (i) See D12 for further information on the scope of work in relation to this meeting.
 - (ii) This meeting may be completed remotely, or at the City's offices.
 - (iii) A minimum fifteen (15) Business Day internal review period of the City will occur prior to this meeting.
 - (iv) This meeting will at minimum discuss:
 - ◆ Specific content of sections of the report, where applicable
 - ◆ Milestone dates upcoming
 - ◆ Allow for City's feedback
 - (v) All Consultant Key Personnel involved in preparation of the report are required at this meeting.
- (h) Monthly Progress Meetings

- (i) These meetings will be completed by MS Teams (or alternatives), throughout the Project duration.
- (ii) The City Project Manager, or a designate to act on behalf of the City Project Manager, along with the Consultant's Key Personnel considered appropriate are to attend this meeting.

D8.3.2 The Consultant is to determine if additional meetings beyond the mandatory meetings listed above are required, and include these meetings in their Proposal.

D9. FLOW AND LOAD ASSESSMENT

D9.1 This task shall be started immediately following award of the Contract.

D9.2 Flow and Load Assessment activities required to carry out the Scope of Services will include but not limited to the following:

- (a) Review existing plant flows and loads and project design flows and loads for an estimated future population in 2050.
 - (i) Future population estimates will be provided to the Consultant for their use.
- (b) Compare selected values with typical values in wastewater treatment references and provide recommendations for flows and loads in the design horizon of 2050.
- (c) Prepare a yearly profile of flows and loads up to the 2050 design horizon.
 - (i) This yearly profile will be needed to plan for interim treatment upgrades over time leading to the 2050 design horizon.

D9.3 Deliverables

D9.3.1 Draft Flow and Load Assessment Technical Memorandum

- (a) Prepare a draft Flow and Load Assessment technical memorandum (TM) documenting data gathered, explaining the assessment made, and stating the resulting conclusions. The TM must contain all recommendations relevant to this stage of the project.
 - (i) The first draft of this TM will be provided a minimum ten (10) Business Days prior to the Flow & Load Assessment TM Review Meeting.

D9.3.2 Final Flow and Load Assessment Technical Memorandum

- (a) Update the TM based on the City's feedback to the first draft, and feedback provided during the review meeting, and submit a second draft to the City.
 - (i) The Consultant should allow five (5) Business Days for the City to review the second draft and provide comments.
- (b) Update the TM based on the City's feedback to the second draft, and submit a third draft to the City.
 - (i) The Consultant should allow two (2) Business Days for the City to verify that all comments made to the TM at this phase are addressed appropriately by the Consultant.
- (c) Submit the final version to the City.

D10. CONDITION ASSESSMENT OF PERIMETER ROAD PUMPING STATION TWIN FORCE MAINS TO WEWPCC

D10.1 The Consultant shall carry out a condition assessment of the twin force mains from the PRPS to the WEWPCC and their corresponding manholes and valve chambers based on the analytical inspection findings submitted by a specialized pipe inspection company. Refer to D4.7 and PRPS FM Routes sketch (listed in Appendix C) on which the work extent is shown.

- D10.2 The Consultant shall review all pertinent background information including, but not limited to, drawings, previous bid opportunities, tenders, reports, technical memorandums, and operations and maintenance manuals.
- D10.3 The Consultant shall conduct a detailed site investigation to familiarize themselves with the scope of work, verify existing drawings and documentation, and to plan for conducting the condition assessment.
- D10.4 An additional work allowance is to be used for the required pipe inspection services. The pipe inspection services are expected to be CCTV inspection, however, the use of any other technologies (e.g. laser and sonar inspections) should be considered, if required.
- D10.5 To conduct the pipe inspection, the Consultant will prepare a concise scope of work and cost proposal in collaboration with the Project Manager. The proposal shall be submitted to the Project Manager for final approval. No additional work shall start prior to written approval from the Project Manager.
- D10.6 The pipe inspection is to be conducted after the PRPS FM Condition Assessment Planning meeting with all stakeholders including the Consultant, and the City staff. See D8.3.1(d).
- D10.7 The Consultant shall take seasonal flow variations into consideration prior to the FM inspection.
- D10.8 The Consultant shall inspect the manholes, valve chambers, and other appurtenances on the FMs.
- D10.9 For the condition assessment the Consultant shall:
- (a) Ensure NASSCO PACP | MACP assessment condition coding is used for the pipes and manholes.
 - (b) Only personnel with current and valid NASSCO PACP and MACP certification can perform this Work.
 - (c) In graph and tabular form, summarize the overall condition of Structural Performance Grade (SPG) values by length and segment count.
 - (d) Provide a summary of assets where inspections were not possible and reasons why inspections were not completed.
 - (e) Perform Quality Assurance / Quality Control (QA/QC) to industry and Departmental standards on 10% of the submitted NASSCO PACP and MACP raw coded data.
 - (f) Perform a cursory review of all FM and manhole inspections provided by the Contractor for conformance to the specifications.
 - (g) Estimate the remaining useful life for each section of pipe, MHs, and VCs.
 - (h) Provide feasible rehabilitation options.
 - (i) Prepare required drawings and specifications.
- D10.10 Deliverables
- D10.10.1 Draft Force Main Condition Assessment Technical Memorandum
- (a) Prepare a draft technical memorandum (TM) documenting and analyzing the data gathered, explaining the assessment made, and stating the resulting conclusions. The TM must contain all recommendations relevant to this stage of the project.
 - (i) The first draft of this TM will be provided a minimum ten (10) Business Days prior to the FM Condition Assessment TM Review Meeting.
- D10.10.2 Final Force Main Condition Assessment Technical Memorandum
- (a) Update the TM based on the City's feedback to the first draft, and feedback provided during the review meeting, and submit a second draft to the City.
 - (i) The Consultant should allow five (5) Business Days for the City to review the second draft and provide comments.

- (b) Update the TM based on the City's feedback to the second draft, and submit a third draft to the City.
 - (i) The Consultant should allow two (2) Business Days for the City to verify that all comments made to the TM at this phase are addressed appropriately by the Consultant.
- (c) Submit the final version to the City.
 - (i) Include all processed data from the specialized inspection company in an appendix of the TM.

D11. CONDITION ASSESSMENT OF POLISHING PONDS

- D11.1 The Consultant shall carry out a condition assessment of the polishing ponds with regard to dike stability at the exterior toe, dike erosion, riprap, interconnections, growth of weeds and trees on the banks, access roads, liner, and amount of sludge/sediment deposits in the ponds.
- D11.2 The inspection activities are to be conducted after the Polishing Pond Condition Assessment Planning meeting with all stakeholders including the Consultant, and the City staff. See D8.3.1(d).
- D11.3 Prepare required Standard Operating Procedures (SOPs) for inspection activities.
- D11.4 The Consultant shall provide general comments on the performance of the ponds, and prepare an annual water balance for them.
- D11.5 The Consultant shall conduct a visual inspection of the ground around the toe of the dikes to determine if seepage is occurring.
- D11.6 Following the site inspection, the Consultant shall make recommendations if geotechnical investigation / groundwater monitoring services of the polishing ponds are required to further assess their conditions.
- D11.7 The Consultant shall conduct a bathymetric survey (and a topographic survey, if required) to determine the sludge depth and volume in all polishing ponds.
- D11.8 The Consultant shall conduct a sludge survey to identify the presence of pollutants in biosolids using samples taken from the polishing ponds.
 - (a) The Consultant shall develop their own methodology to conduct the sludge survey and collect samples. However, the "Determination of Sludge Quality and Estimation of Sludge Quantity" document and its associated appendices may be used as a guideline to perform the task.
 - (b) The Consultant shall prepare the required samples for each of the five cells, and send them to the City's lab for analysis. The analysis will be done for the following parameters at the City's expense.
 - (i) pH and conductivity
 - (ii) Total Kjeldahl Nitrogen, Ammonia Nitrogen, and Total Phosphorus
 - (iii) Polychlorinated biphenyls
 - (iv) Heavy metals, including cadmium, copper, nickel, chromium, lead, and zinc
- D11.9 An additional work allowance is to be used for geotechnical investigation and ground water monitoring services of the polishing ponds.
- D11.10 Deliverables
 - D11.10.1 Draft Polishing Pond Condition Assessment Technical Memorandum
 - (a) Prepare a draft TM documenting and analyzing the data gathered, explaining the assessment made, and stating the resulting conclusions. The TM must contain all

recommendations relevant to this stage of the project along with required drawings, and details.

- (i) The first draft of this TM will be provided a minimum ten (10) Business Days prior to the Polishing Pond Condition Assessment TM Review Meeting.

D11.10.2 Final Polishing Pond Condition Assessment Technical Memorandum

- (a) Update the TM based on the City's feedback to the draft, and feedback provided during the review meeting, and submit a second draft to the City.
 - (i) The Consultant should allow five (5) Business Days for the City to review the second draft and provide comments.
- (b) Update the TM based on the City's feedback to the second draft, and submit a third draft to the City.
 - (i) The Consultant should allow two (2) Business Days for the City to verify that all comments made to the TM at this phase are addressed appropriately by the Consultant.
- (c) Submit the final version to the City.

D12. FACILITIES PLAN REPORT

D12.1 This phase shall include all activities required to prepare a Facilities Plan Report to serve as a road map for the development of the wastewater treatment system of the WEWPCC Catchment at 2050. The Scope of Services will include but not limited to the following:

- D12.1.1 Review of all pertinent background information and reports.
- D12.1.2 Review condition and capacity of existing force mains, treatment plant process units, and polishing ponds with respect to future growth.
- D12.1.3 Conduct assessment of current performance of treatment plant process units to estimate current remaining capacity. Compare this to expected remaining design life from prior WEWPCC Upgrade Design Reports.
- D12.1.4 Conduct desktop study using data on install dates and industry accepted asset life, walkthrough visual inspection of all treatment plant assets to verify assumptions, interview operators about O&M issues, and review all asset history and reports.
- D12.1.5 Estimate remaining useful life, considering performance, condition, and remaining design capacity of the assets up to 2050 to meet the current WEWPCC license conditions (EA 2669 E RR).
- D12.1.6 Provide recommendations (further assessment, modifications, upgrades, refurbishments, and/or replacements) to have assets operable and overall treatment performance maintained to 2050.
- D12.1.7 Determine if the process units as installed are capable of treating flows and loads projected to 2050, and if required, propose treatment solutions (at a conceptual design level) to meet 2050 flow and load maximizing the reuse of existing infrastructure.
 - (a) Consideration should be given to process adjustments to increase capacity without the use of chemicals and/or physical expansion.
- D12.1.8 Conduct wastewater treatment process modeling based on the yearly flow and load profiles identified in D9.2(c), calibrate the model using historical data to run simulations under the following scenarios (at a minimum), and provide recommendations to the City to optimize the plant performance while meeting the discharge requirements. BioWin is the City's preferred simulation software.
 - (a) Base Scenario – to simulate the existing condition.
 - (b) Interim Treatment Upgrade Scenario – to identify potential for the treatment plant performance improvements with no or minimum changes to the existing conditions and to make best use of the existing assets.

- (a) 2050 Design Horizon Scenario – to size process units of the liquid and sludge streams for the 2050 projected flows and loads using existing licence conditions and assuming a 0.5 mg/L total phosphorous limit.
- D12.1.9 Review requirements for upgrading Facility Utilities (electricity, water, natural gas) & emergency power generation for 2050 design horizon.
- D12.1.10 Review suitability of maintenance and administration facilities for 2050 design horizon.
- D12.1.11 Review suitability of existing control room & control system with respect to any process recommendations for 2050 design horizon, and provide high-level requirements.
- D12.1.12 Evaluate risks associated with license changes by review of treatment solutions to achieve an effluent total phosphorus of 0.5 mg/L.
- D12.1.13 Evaluate the risks of climate change on the treatment plant performance, provide planning for climate change adaptation as part of treatment plant upgrades or modifications.
- D12.1.14 Review major operating costs (i.e. electricity, sludge hauling, and natural gas) and provide recommendations to reduce the operational costs.
- D12.1.15 Prepare an investment profile and implementation timeline for expected modifications, refurbishments, upgrades, and/or replacements of treatment plant assets, showing various stages of work required to be implemented to accommodate 2050 design horizon, and the required funds.
- D12.1.16 Prepare AACE Class 4 Cost Estimate and & Life-Cycle Cost Analysis for all required work to accommodate 2050 population (including FMs, treatment plant units, and polishing ponds).
- (ii) These cost estimates 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://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4>
- D12.1.17 Prepare required drawings including general site plans, process flow diagrams, etc., and details for the proposed treatment solutions.
- D12.2 The treatment plant headworks (i.e. screens and grit removal system), and its associated HVAC system will be **excluded** from work scope identified in D12.1.
- D12.3 An additional work allowance is to be used for physical inspection of a percentage of critical assets. Selection of assets for inspection and the type of assessment to be based on the findings of visual inspection and asset information review, and following the workshops with maintenance staff.
- D12.4 Deliverables
- D12.4.1 Facilities Plan Report Table of Contents
- (a) This deliverable shall be submitted during the initial work within item D12.
- (b) A high-level listing of the headings and sections are anticipated to be included as part of the report.
- (c) This shall be completed shortly after beginning the Facilities Plan Report development.
- (d) The table of contents shall include a summary of work previously performed with regard to Flow and Load Assessment, Force Mains Condition Assessment, and Polishing Ponds Condition Assessment.
- (e) The City will review the high-level Table of Contents and will identify any areas of concern or clarification regarding the Consultants anticipated work during this phase.

- D12.4.2 60% Complete Facilities Plan Report
- (a) A 60% complete copy of the Facilities Plan Report shall be submitted at minimum fifteen (15) Business Days prior to the 60% Complete Facilities Plan Review Meeting.
- D12.4.3 95% Complete Facilities Plan Report
- (a) Perform all activities required to finalize the Facilities Plan Report in accordance with the Scope of Services and the Table of Contents.
 - (b) Incorporate the City's review comments and meeting discussions outlined in 60% Complete Draft Facilities Plan Review Meeting.
 - (c) A 95% complete copy of the Facilities Plan Report shall be submitted at minimum fifteen (15) Business Days prior to the 95% Complete Facilities Plan Review Meeting.
 - (d) All contents of the 95% Complete Facilities Plan Report will be reviewed by the City.
- D12.5 Final WEWPCC Facilities Plan Report
- (a) Update the report based on the City's feedback to the 95% Complete Facilities Plan Report, and feedback provided during the review meeting, and submit a revised version (95% Complete WEWPCC Facilities Plan – Revision 1) to the City.
 - (i) The Consultant should allow ten (10) Business Days for the City to review the report and provide comments.
 - (b) Update the Revision 1 based on the City's feedback to the report, and submit the Revision 2 to the City.
 - (i) The Consultant should allow five (5) Business Days for the City to verify that all comments made to the report at this phase are addressed appropriately by the Consultant.
 - (c) Submit the final WEWPCC Facilities Plan Report to the City.
 - (i) Include the final versions of the technical memorandums as an Appendix to the Facilities Plan Report.
- D12.6 BioWin Model Files
- (a) To be submitted in conjunction with 60% and 95% Complete Facilities Plan Report submissions.
 - (b) Provide the model in raw .bwc file format for City review.

SUBMISSIONS

D13. AUTHORITY TO CARRY ON BUSINESS

- D13.1 The Consultant shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Consultant does not carry on business in Manitoba, in the jurisdiction where the Consultant does carry on business, throughout the term of the Contract, and shall provide the Project Manager with evidence thereof upon request.

D14. SAFE WORK PLANS

- D14.1 The Consultant shall provide the Project Manager with Safe Work Plans at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D14.2 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>

D15. INSURANCE

- D15.1 The Consultant shall procure and maintain, at its own expense and cost, insurance policies with limits no less than those shown below.
- D15.2 As a minimum, the Consultant shall, without limiting its obligations or liabilities under any other contract with the City, procure and maintain, at its own expense and cost, the following insurance policies:
- (a) Comprehensive or Commercial General Liability Insurance including:
 - (i) an inclusive limit of not less than \$2,000,000 for each occurrence or accident with a minimum \$2,000,000 Products and Completed Operations aggregate and \$5,000,000 general aggregate;
 - (ii) all sums which the Consultant shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting therefrom) sustained by any person or persons or because of damage to or destruction of property caused by an occurrence or accident arising out of or related to the Services or any operations carried on in connection with this Contract;
 - (iii) coverage for Products/Completed Operations, Blanket Contractual, Consultant's Protective, Personal Injury, Contingent Employer's Liability, Broad Form Property Damage, Employees as Additional Insureds, and Non-Owned Automobile Liability;
 - (iv) a Cross Liability clause and/or Severability of Interest clause providing that the inclusion of more than one Insured shall not in any way affect the rights of any other Insured hereunder in respect to any claim, demand, suit or judgment made against any other Insured.
 - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Consultant directly or indirectly in the performance of the Service. The limit of liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence.
 - (c) Professional Errors and Omissions Liability Insurance including:
 - (i) an amount not less than \$500,000 per claim and \$1,000,000 in the aggregate.
- D15.2.1 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.
- D15.3 The policies required in D15.2(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.
- D15.4 The Consultant shall require any Consultants hired to perform geo technical drilling and sample collecting or closed-circuit television to procure and maintain, at its own expense and cost, comparable insurance to that set forth under D15.2(a) and D15.2(b).
- D15.5 The Consultant shall require each of its Subconsultants hired for design, architectural or engineering services as outlined in the Scope of Services to provide comparable insurance to that set forth under D15.2(a) and D15.2(c).
- D15.6 The Consultant shall provide the Project Manager with a certificate(s) of insurance in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Services, but in no event later than the date specified in C4.1 for the return of the executed Contract. Such certificates shall state the exact description of the Services and provide for written notice in accordance with D15.9.
- D15.7 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.

- D15.8 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.
- D15.9 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

D16. COMMENCEMENT

- D16.1 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.
- D16.2 The Consultant shall not commence any Services until:
- (a) the Project Manager has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D13;
 - (ii) the Safe Work Plan specified in D14;
 - (iii) evidence of the insurance specified in D15; and
 - (iv) the direct deposit application specified in D19.1.
 - (b) the Consultant has attended a meeting with the Project Manager, or the Project Manager has waived the requirement for a meeting.
- D16.3 The City intends to award this Contract by July 4, 2022.

D17. CRITICAL STAGES

- D17.1 The Consultant shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
- (a) Submission of the Final Flow and Load Assessment TM by September 23, 2022.
 - (b) Submission of the Final WEWPCC Facilities Plan Report by the end of July 2023.

D18. COVID-19 SCHEDULE DELAYS

- D18.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Services shall be performed by the Consultant with due consideration to the health and safety of workers and the public, directives from health authorities and various levels of government and in close consultation with the Project Manager.
- D18.2 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.
- D18.3 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.
- D18.4 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 D18.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D18.5 The Services schedule, including the durations identified in the Contract, will be adjusted to reflect delays accepted by the Project Manager.

D18.6 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Project Manager, shall be documented in accordance with C8.

MEASUREMENT AND PAYMENT

D19. PAYMENT

D19.1 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

THIRD PARTY AGREEMENTS

D20. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

D20.1 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.

D20.2 Further to D20.1, in the event that the obligations in D20 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.

D20.3 For the purposes of D20:

- (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.

D20.4 Modified Insurance Requirements

D20.4.1 If not already required under the insurance requirements identified in D15, 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.

D20.4.2 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.

D20.4.3 Further to D15.6 insurers shall provide satisfactory Certificates of Insurance to the Government of Manitoba prior to commencement of Services as written evidence of the insurance required. The Certificates of Insurance must provide for a minimum of thirty (30) days' prior written notice to the Government of Manitoba in case of insurance cancellation.

D20.4.4 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.

D20.5 Indemnification By Consultant

D20.5.1 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.

D20.6 Records Retention and Audits

D20.6.1 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.

D20.6.2 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 D20.6.1 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.

D20.7 Other Obligations

D20.7.1 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.

D20.7.2 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.

D20.7.3 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.

D20.8 The Consultant shall properly account for the Services provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.

APPENDIX A – HOW TO USE A NON-MEDICAL MASK OR FACE COVERING

APPENDIX B – COVID-19 DAILY SELF-SCREENING QUESTIONNAIRE

APPENDIX C – LIST OF RELEVANT DOCUMENTS AND DRAWINGS

TYPE	TITLE
Sketch	PRPS FM Routes Sketch – See D10
Diagram	WEWPCC Process Flow Diagram
Report	Perimeter Road Pumping Station Forcemain Twinning Operations & Maintenance Manual – AECOM – February 2009
Report	Perimeter Road Pumping Station Forcemain Twinning – Existing Forcemain Assessment – AECOM – March 2010
Report	WEWPCC Nutrient Removal and UV Disinfection Upgrade – Draft Conceptual Design Report – Earth Tech – December 2004
Report	WEWPCC Nutrient Removal and UV Disinfection Upgrade – Functional Design Report – Earth Tech – December 2005
Report	Full Scale CEPT Trial Report – Draft – AECOM – 2017
Report	WEWPCC Process Blowers – Preliminary Design Report – SNC Lavalin – June 2012
Report	WEWPCC HVAC Replacement – Functional Design Report – Final – Alliance Engineering – March 2010
Report	West End WPCC – Wastewater Characterization Study – EnviroSim Associates – September 2004
Report	Condition Assessment of Primary Sludge Fermenter No. 2 at WEWPCC – KGS Group – May 2018
Report	Condition Assessment of Primary Sludge Fermenter No. 1 at WEWPCC – KGS Group – January 2019
Report	Structural Condition Assessment of Sludge Truck Bay Slab and Intermediate Support Beams at West End Sewage Treatment Plant – FINAL – AECOM – February 2021
Report	WEWPCC Lagoon Decommissioning – Determination of Sludge Quality and Estimation of Sludge Quantity – City of Winnipeg – December 1993
Drawing Package	Charleswood Lagoon Sewage Force Main – As Constructed – UMA 1965
Drawing Package	900 mm Forcemain from VC2A to VC2B, VC2B, and Connections to Headworks Building – Reid Crowder – 1994
Drawing Package	PRPS Upgrades – Contract A – FM Twinning – Issued for Record – AECOM 2009
Drawing Package	Perimeter Road Pump Station Forcemain Extension – As-Built – IDE 1982
Drawing Package	Charleswood Sewage Lagoon– 60’s – 70’s vintage
Drawing Package	P&ID Drawings – As Constructed – AECOM – 2008
Licence	WEWPCC Environment Act Licence – EA 2669 E RR – June 2009

APPENDIX D – NON-DISCLOSURE AGREEMENT

APPENDIX E – ENVIRONMENTAL PRESERVATION & COMPLIANCE AND ENVIRONMENTAL MANAGEMENT POLICY

APPENDIX F – DEFINITION OF PROFESSIONAL CONSULTANT SERVICES (CONSULTING ENGINEERING SERVICES)

1. INTRODUCTION

- 1.1 It is the intent of the City of Winnipeg, in defining Professional Consultant Services (Consulting Engineering Services), to clarify the role required of consulting Engineers; to more fully identify the services to be rendered by consulting Engineers to the City and to other parties on behalf of the City; and to provide a more clearly determined basis of obligation in respect thereof by consulting Engineers to the City and to third parties in the provision of such services.
- 1.2 The services shall be performed in the City of Winnipeg, unless otherwise authorized by the City, under direct supervision of a professional Engineer. All drawings, reports, recommendations and other documents, originating therefrom involving the practice of professional engineering, shall bear the stamp or seal and signature of a qualified Engineer as required by the Engineering and Geoscientific Professions Act of the Province of Manitoba and By-laws of the Association of Professional Engineers and Geoscientists of the Province of Manitoba. Other reports and documents not involving the "practice of professional engineering", such as letters of information, minutes of meetings, construction progress reports, may be originated and signed by other responsible personnel engaged by the consulting Engineer and accepted by the City. Progress estimates, completion certificates and other reports related to the technical aspects of a project, must be endorsed by the Engineer in a manner acceptable to the City.

2. ADVISORY SERVICES

- 2.1 Advisory services are normally not associated with or followed by preliminary design and/or design services, and include, but are not limited to:
- (a) Expert Testimony;
 - (b) Appraisals;
 - (c) Valuations;
 - (d) Rate structure and tariff studies;
 - (e) Management services other than construction management;
 - (f) Feasibility studies;
 - (g) Planning studies;
 - (h) Surveying and mapping;
 - (i) Soil mechanics and foundation engineering;
 - (j) Inspection, testing, research, studies, or reports concerning the collection, analysis, evaluation; and
 - (k) Interpretation of data and information leading to conclusions and recommendations based upon specialized engineering experience and knowledge.

3. PRELIMINARY DESIGN

- 3.1 Preliminary design services are normally a prelude to the detailed design of a project and include, but are not limited to:
- (a) Preliminary engineering studies;
 - (b) Engineering investigation;
 - (c) Surface and subsurface site explorations, measurements, investigations, and surveys;
 - (d) Operations studies including drainage studies, traffic studies, etc.;
 - (e) Functional planning;

- (f) Physical, economical (capital and operating) and environmental studies including evaluation, comparison, and recommendation regarding alternative preliminary designs;
- (g) Preparation and submission of a report and appropriate drawings to the City, fully documenting data gathered, explaining adequately the assessment made, stating with clarity the resulting conclusions, and containing all recommendations which are relevant to this stage of project implementation;
- (h) Special applications to public agencies for necessary authorizations, preparation and submission of reports and drawings thereto and appearance before same in support of the application.

4. DETAILED DESIGN

4.1 Detailed design services normally involve preparation of detailed designs, tender specifications and drawings, and analysis of bids and recommendations for contract award, and include, but are not limited to:

- (a) Addressing alternative methods of accommodating; relocating; avoiding, and/or avoiding injury to Utilities and railways; proposing alternative methods of solution, reviewing same with the appropriate Regulatory approval agencies and stakeholders;
- (b) Application to public agencies for necessary authorizations, preparation and submission of reports and drawings thereto, and appearance before same in support of the application;
- (c) Preparation and submission of detailed engineering calculations, drawings, and criteria employed in the design(s), securing review of and an acceptance by the City;
- (d) Preparation of detailed engineering drawings, specifications and tender documents consistent with the standards and guidelines of the City, securing review of acceptance by the City;
- (e) Preparation and provision to the City in written form, a fully detailed formal construction contract estimate;
- (f) Provision of appropriate response to bidders and advice to the City during the bid period and, subject to acceptance by the City, issuing addenda to the tender documents;
- (g) Submission of a review, analysis, comparison, tabulation, calculation, and evaluation of the bids received, to the City;
- (h) Preparation of a report including revised contract estimate, identifying and explaining variations from the earlier formal estimate, and containing recommendation regarding contract award identifying the reasons therefore.

5. CONTRACT ADMINISTRATION SERVICES

5.1 Contract administration services are associated with the construction of a project and include the office and field services required to ensure the conduct of the project in accordance with the intent of the City and in conformance with the particulars of the drawings and specifications; and include but are not limited to

5.2 NON-RESIDENT SERVICES

- (a) Consultation with and advice to the City during the course of construction;
- (b) Review and acceptance of shop drawings supplied by the contractor or supplier to ensure that the drawings are in conformance with the drawings and specifications, without relieving the contractor of his contractual and other legal obligations in respect thereof;
- (c) Review and report to the City upon laboratory, shop and other tests conducted upon materials and/or equipment placed or installed by the contractor to ensure to the City

- conformance with the drawings and specifications, without relieving the contractor of his contractual and other legal obligations in respect thereof;
- (d) Acceptance of alternate materials and methods, subject to prior acceptance by the City, without relieving the contractor of his contractual and other legal obligations in respect thereof;
 - (e) Provision to the City of a complete current report on the project status on a monthly basis;
 - (f) Provision to the City a current update of revised contract-end cost estimate on a monthly basis, or more frequently if found necessary, with explanation and justification of any significant variation from the preceding contract-end cost estimate;
 - (g) Definition and justification of and estimate of cost for additions to or deletions from the contract for authorization by the City;
 - (h) Furnishing the City with a copy of all significant correspondence relating directly or indirectly to the project, originating from or distributed to, parties external to the consulting Engineer, immediately following receipt or dispatch of same by the consulting Engineer;
 - (i) Provision of adequate and timely direction of field personnel by senior officers of the Consultant;
 - (j) Establishment prior to construction and submission to the City of written and photographic records of, and assessment of the physical condition of adjacent buildings, facilities, and structures sufficient to equip the consulting Engineer 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 thereto arising from the project;
 - (k) Arranging and attending pre-construction meetings and on-site or off-site review meetings, which meetings shall include representatives of the contractor and the City;
 - (l) The preparation and submission of:
 - (i) a detailed design notes package including items such as structural, geotechnical, hydraulic and heating, air-conditioning and ventilation design calculations; mechanical and electrical design calculations related to process equipment and building services; process design calculations; and instrumentation and process control design calculations;
 - (ii) approved related shop drawings and equipment process manuals all within one (1) month of completion of each separate installation contract required to complete the Works.

5.3 Resident Services

- (a) Provision of qualified resident personnel acceptable to the City present at the project site to carry out the services as specified immediately below, without relieving the contractor of his contractual and other legal obligations in respect thereof:
 - (i) inspection of all pipe prior to installation;
 - (ii) inspection and acceptance of excavation for, and full time inspection at the time of bedding placement, pipe laying and backfilling in respect of installation of water mains, land drainage sewers, and waste water sewers;
 - (iii) inspection of installation of all connections to water mains, sewers, manholes, valves, hydrants or house services, and excavation and/or exposing of all underground services, structures, or facilities;
 - (iv) "full time inspection" and/or testing of water mains and sewers;
 - (v) inspection of all excavations to determine soil adequacy prior to installation of base and subbase courses for sidewalks, public back lanes, and street pavements.
- (b) It is to be understood that "full time inspection" will require assignment of a qualified person to each specific location when the referenced work is being undertaken by the

- contractor
- (c) Without relieving the contractor of his contractual and other legal obligations in respect thereof, conduct detailed inspection of construction sufficient to ensure that the construction carried out by the contractor is in conformance with the drawings and specifications;
 - (d) Co-ordination and staging of all other works on the project site including traffic signal installations, hydro, telephone, and gas utility work, railway work forces and City or developer work;
 - (e) In conjunction with the City, provision of notice to adjacent residents and businesses of those stages of construction of the project that will interrupt public services or access thereto, sufficiently in advance of same to permit preparation therefore;
 - (f) Enforcement of contractor conformance with the City of Winnipeg Manual of Temporary Traffic Control in Work Areas on City Streets and with reasonable standards of safety for motorists and pedestrians, without relieving the contractor of his contractual and other legal obligations in respect thereof;
 - (g) Provision of reference line and elevation to the contractor and checking upon the contractor's adherence thereto, without relieving the contractor of his contractual and other legal obligations in respect thereof;
 - (h) Responsible, sensitive, and prompt reaction to the reasonable requests and complaints of citizens regarding the conduct of the project, acting in the interest of the City;
 - (i) Arranging for and carrying out of testing of materials utilized by the contractor to ensure conformance with the drawings and specifications, without relieving the contractor of his contractual and other legal obligations in respect thereof;
 - (j) Preparation, certification, and prompt submission of progress estimates to the City for payment to the contractor for construction performed in accordance with the drawings and specifications
 - (k) Arrange, attend and prepare and distribute records of and minutes for, regularly held on-site or offsite project review meetings including representatives of the contractor and the City;
 - (l) Promptly reporting to the City upon any significant and unusual circumstances;
 - (m) Promptly arranging for and taking part in a detailed final inspection of the project with the contractor and the City prior to commencement of the period of contractor maintenance guarantee specified in the contract for the project and providing to the City in written form an appropriate recommendation of acceptance of the constructed or partially constructed project;
 - (n) Act as Payment Certifier and administer all contracts as required under the Builder's Liens Act of Manitoba;
 - (o) Prepare a Certificate of Substantial Performance;
 - (p) Preparation and submission to the City of "as-constructed" drawings for the project within 1 month of project completion;
 - (q) Prepare a Certificate of Total Performance;
 - (r) Provision of inspection services during the maintenance guarantee period of the contract;
 - (s) Undertake a detailed inspection of the project with the contractor and the City prior to the end of the period of contractor maintenance guarantee specified in the contract for the project;
 - (t) Keep a continuous record of working days and days lost due to inclement weather during the course of contract works;
 - (u) Prepare a Certificate of Acceptance.

6. ADDITIONAL SERVICES

6.1 Additional services are in addition to those specified in other Types of Services and may or may not be associated with a construction project, but are not in place of or in substitution for those services elsewhere specified in the Definition of Standard Consulting Engineering Services in respect of other Types or Categories of Services.

- (a) Revision of completed, or substantially completed, drawings and/or specifications that were in conformance with the original intent of the City or had been accepted by the City;
- (b) Preparation of operating manuals and/or training of operating personnel;
- (c) Startup and/or operation of operating plants;
- (d) Procurement of materials and equipment for the City;
- (e) Preparation for and appearance in litigation on behalf of the City;
- (f) Preparation of environmental studies and reports and presentation thereof in public hearings.