

# THE CITY OF WINNIPEG

# **REQUEST FOR PROPOSAL**

RFP NO. 122-2023

PROFESSIONAL CONSULTING SERVICES FOR CENTREPORT SOUTH (AIRPORT AREA WEST) REGIONAL WATER AND WASTEWATER SERVICING – PHASE 1A DETAILED DESIGN AND CONTRACT ADMINISTRATION

# TABLE OF CONTENTS

#### PART A - BID SUBMISSION

Form A: Bid/Proposal	
Form B: Prices	
Form P: Person Hours	

#### **PART B - BIDDING PROCEDURES**

B1.	Contract Title	1
B2.	Submission Deadline	1
B3.	Site Investigation	1
	Enquiries	1
B5.	Confidentiality	1
B6.	Addenda	2
B7.	Proposal Submission	2
	Proposal (Section A)	3
	Fees (Section B)	3
	Experience of Proponent and Subconsultants (Section C)	5
	Experience of Key Personnel Assigned to the Project (Section D)	6
	Project Understanding and Methodology (Section E)	7
	Project Schedule (Section F)	8
	Disclosure	9
	Conflict of Interest and Good Faith	10
	Qualification	11
	Opening of Proposals and Release of Information	12
	Irrevocable Offer	12
	Withdrawal of Offers	12
	Interviews	12
	Negotiations	12
	Evaluation of Proposals	13
	Award of Contract	14
PART C	- GENERAL CONDITIONS	
C0.	General Conditions	1
PART D	- SUPPLEMENTAL CONDITIONS	
Gene	eral	
	General Conditions	1
	Consulting Contract Administrator	1
	Definitions	1
	Background	3
	Relevant Documents and Drawings	5
	General Requirements	5
	Scope of Services	14
	Project Management	15
	Consultant Progress Reports	17
	Land Agreements and Planning Services	17
	Wastewater Hydraulic Modeling	18
	Detailed Design and Specification Development	21
	Procurement Services	30
D14.	Contract Administration	30
	Record Drawings	35
	Project Closeout	36
017.	Flow Monitoring Work Allowance	38
	Flow Monitoring Work Allowance Geotechnical Work Allowance	38 39
D18.	0	
D18. D19.	Geotechnical Work Allowance	39

D22. Unfair Labour Practices	42
Submissions D23. Authority to Carry on Business D24. Safe Work Plan D25. Insurance	42 43 43
Schedule of Services D26. Commencement D27. Critical Stages D28. COVID-19 Schedule Delays	44 44 45
Measurement and Payment D29. Invoices D30. Payment	45 46
Dispute Resolution D31. Dispute Resolution	46
Third Party Agreements D32. Funding and/or Contribution Agreement Obligations	47
APPENDIX A – AIRPORT AREA WEST REGIONAL WATER AND WASTEWATER SERVICING PRELIMINARY ENGINEERING FINAL REPORT	
APPENDIX B – MAP OF CENTREPORT	
APPENDIX C – LAND AGREEMENTS TABLE	
APPENDIX D – CENTREPORT SOUTH DRAWING LIST	
APPENDIX E – DEFINITION OF PROFESSIONAL CONSULTANT SERVICES	
APPENDIX F – COW MODELING GUIDELINES	
APPENDIX G – WWD ELECTRICAL DESIGN GUIDELINE	
APPENDIX H – WWD IDENTIFICATION STANDARD	
APPENDIX I – HMI LAYOUT AND ANIMATION PLAN	

- APPENDIX J WSTP AUTOMATON DESIGN GUIDE
- APPENDIX K WSTP E&I STANDARDIZATION SUMMARY
- APPENDIX L ASSET REGISTRY GUIDELINE
- APPENDIX M O&M MANUAL INFORMATION
- **APPENDIX N TRAINING REQUIREMENTS**
- APPENDIX O FEEDER MAIN DESIGN STANDARDS
- APPENDIX P WAPUG COP FOR THE HYDRAULIC MODELING OF SEWER SYSTEMS
- APPENDIX Q WSTP E&I STANDARDIZATION CLAUSES
- APPENDIX R EQUIPMENT LIST EXAMPLE
- APPENDIX S SUBMITTAL LIST EXAMPLE

### PART B - BIDDING PROCEDURES

#### B1. CONTRACT TITLE

B1.1 PROFESSIONAL CONSULTING SERVICES FOR CENTREPORT SOUTH (AIRPORT AREA WEST) REGIONAL WATER AND WASTEWATER SERVICING – PHASE 1A DETAILED DESIGN AND CONTRACT ADMINISTRATION

#### B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, April 12, 2023.
- B2.2 The Consulting Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

#### B3. SITE INVESTIGATION

B3.1 Where possible, regional water and wastewater servicing infrastructure has been proposed within the public right-of-way or on City owned land with no special access required. Proponents may visit the site at their leisure.

#### B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Consulting Contract Administrator identified in D2.
- B4.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Consulting Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Consulting Contract Administrator, require a correction to or a clarification of the Request for Proposal will be provided by the Consulting Contract Administrator to all Proponents by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Consulting Contract Administrator, do not require a correction to or a clarification of the Request for Proposal will be provided by the Consulting Contract Administrator only to the Proponent who made the enquiry.
- B4.5 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the City's Consulting Contract Administrator. Failure to restrict correspondence and contact to the Consulting Contract Administrator may result in the rejection of the Proponents Proposal Submission.
- B4.6 The Proponent shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Consulting Contract Administrator in writing.
- B4.7 Any enquiries concerning submitting through MERX should be addressed to: MERX Customer Support Phone: 1-800-964-6379 Email: merx@merx.com

#### B5. CONFIDENTIALITY

B5.1 Information provided to a Proponent by the City or acquired by a Proponent by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Consulting Contract Administrator. The use and disclosure of the Confidential Information shall not apply to information which:

- (a) was known to the Proponent before receipt hereof; or
- (b) becomes publicly known other than through the Proponent; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Request for Proposals to the media or any member of the public without the prior written authorization of the Consulting Contract Administrator.

#### B6. ADDENDA

- B6.1 The Consulting Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 The Consulting Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the MERX website at <u>www.merx.com</u>.
- 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 nonresponsive.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Consulting Contract Administrator 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;
  - (d) Project Schedule (Section F) in accordance with B13; and
  - (e) Form P: Person Hours in accordance with B9.3 and B9.4.
- 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 <u>www.merx.com</u>.
- 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 B22.1(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 their own name, their name shall be inserted;
  - (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Proponent is carrying on business under a name other than their own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2
- B8.3 In Paragraph 3 of Form A: Bid/Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.
- B8.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:
  - (a) if the Proponent is a sole proprietor carrying on business in their own name, it shall be signed by the Proponent;
  - (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
  - (c) if the Proponent is a corporation, it shall be signed by their duly authorized officer or officers;
  - (d) if the Proponent is carrying on business under a name other than their own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.
- B8.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

#### B9. FEES (SECTION B)

- B9.1 The Proposal shall include a Fixed Fee for all disciplines and/or phases identified in D7 Scope of Services.
  - (a) Project Management (D8);

- (b) Consultant Progress Reports (D9);
- (c) Land Agreements and Planning Services (D10);
- (d) Wastewater Hydraulic Modeling (D11);
- (e) Detailed Design and Specification Development (D12);
- (f) Procurement Services (D13);
- (g) Contract Administration Services Non-Resident (D14.2);
- (h) Record Drawings (D15); and
- (i) Project Closeout (D16).
- B9.2 The Proposal shall include a Time-Based Fee schedule for the following sections identified in D7 Scope of Services.
  - (a) Resident Services in accordance with (D14.3);
    - (i) Time-Based Fees shall be based on on-site inspection services as described in D14.3.
    - (ii) For Proposal purposes these fees shall be based on the following hours of inspection:
      - i. Contract 1A By-pass Lift Station (530 hours)
      - ii. Contract 2A 600 mm Force Main (2800 hours)
      - iii. Contract 3 Interceptor & Intake Sewer (1700 hours)
      - iv. Contract 4A 750 mm Feeder Main (2600 hours)
    - (iii) The number of hours listed in B9.2(a)(ii) is to be considered approximate only. The City will use this number for comparing bids.
    - (iv) The number of hours for which payment will be made to the Consultant for resident services is to be determined by the actual number of hours worked by the Consultant.
- B9.3 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 B9.1.
- B9.4 The hourly rate schedule for Key Personnel in Form P: Person Hours will be utilized where required for the Work identified in D17 Flow Monitoring Work Allowance, D18 Geotechnical Work Allowance, D19 Heritage Resource Work Allowance and D20 Additional Work Allowance.
  - (a) The Proponent shall include a Flow Monitoring Work Allowance of \$300,000.00 in their Proposal, which has been included on Form B: Fees and Form P: Person Hours.
  - (b) The Proponent shall include a Geotechnical Work Allowance of \$150,000.00 in their Proposal, which has been included on Form B: Fees and Form P: Person Hours.
  - (c) The Proponent shall include a Heritage Resource Work Allowance of \$300,000.00 in their Proposal, which has been included on Form B: Fees and Form P: Person Hours.
  - (d) The Proponent shall include an Additional Work Allowance of \$300,000.00 in their Proposal, which has been included on Form B: Fees and Form P: Person Hours.
  - (e) The Additional Work Allowance, Heritage Resource Work Allowance, Flow Monitoring Work Allowance, and Geotechnical Work Allowance is to be included in the calculation of total Fees proposed by the Proponent.
  - (f) The Flow Monitoring Work Allowance, Geotechnical Work Allowance, Heritage Resource Work Allowance and the Additional Work Allowance shall only be used with written permission of the Consulting Contract Administrator.
  - (g) There will be no fee escalation allowed for yearly adjustments, promotion, etc. The fee scale shall be fixed for the duration of the project based on the rates set in Form P: Person Hours.
- 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.
- B9.7.1 Further to B9.6, an allowable disbursement of \$50,000 associated with Item No. 26 -Additional Work Allowance, as identified in D20, has been included in Form B: Fees as the City's estimate of costs for these disbursements
  - (a) The Additional Work Allowance disbursement is to be used for the cost of any associated sampling, materials testing, drilling, hazardous materials investigation, advanced asset condition assessment (i.e. use of more complex and costly nondestructive testing technologies beyond visual inspection only), or any other required tasks related to the uncertainties and critical time constraints associated with this Project.
  - (b) The Additional Work Allowance disbursement is to be used for Underground Structures.
    - i. All requests for information from the City of Winnipeg Underground Structures will be billed directly to the Consultant by Underground Structures. The Consultant shall pay the invoice to Under Structures and submit a copy of the paid invoice to the Department as an allowable disbursement.
  - (c) The Additional Work Allowance disbursement is to be included on Form P: Person Hours and in the calculation of total fees proposed by the Proponent.
  - (d) The Additional Work Allowance disbursement shall only be used with prior written permission of the Consulting Contract Administrator.
- 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).

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

- B10.1 The Proposal should include general firm profile information, including years in business, average volume of work, number of employees and other pertinent information for the Proponent and all Subconsultants showing their ability to undertake the current work.
  - (a) information submitted relating to B10.1 should be limited to a maximum of four (4) pages total for Proponent and Subconsultant.
- B10.2 Proposals should include:
  - (a) details demonstrating the history and experience of the Proponent and Subconsultants in providing programming; design, management of the project and contract administration services on three (3) projects of similar complexity, scope and value.
    - (i) The following experience is considered an asset:
      - i. Experience with subdivision water, wastewater design (i.e. local pipes);
      - ii. Provision of utilities in unserviced land, or managing the logistics of utility extensions, to a planned facility in an unserviced area.
    - (ii) If more than three projects are submitted, only the first three referenced projects will be evaluated.

- 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) role of the Consultant;
  - (c) project's original contracted cost and final cost; shown separately for:
    - (i) Consultant
      - i. where the original contracted consulting cost and the final contracted consulting cost differ, the Proponent should submit an explanation;
      - ii. identify the amount of scope changes and the reasons for each of them.
    - (ii) Construction
      - i. where the original construction cost and the final construction cost differ, the Proponent should submit an explanation;
      - ii. identify the amount of scope changes and the reasons for each of them.
  - (d) design and construction schedule
    - (i) include anticipated project duration and actual project delivery duration, showing design and construction separately; and
    - (ii) where the anticipated project schedule and the actual project schedule differ, the Proponent should submit an explanation.
  - (e) reference information (two current names with telephone numbers and email address per project).
    - (i) references should have worked directly on the projects described, such as project manager or owner's representative.
    - (ii) references may be used to confirm the information provided in the Proposal.
    - (iii) other sources not named in the references may be contacted to verify information provided.
- 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) Identify by name all personnel with over 5% of the total Project hours.
  - (b) Cleary identify Subconsultants to be engaged by the Proponent on the organizational chart.
- B11.2 Identify the following Key Personnel assigned to the Project:
  - (a) Project Manager
  - (b) Lead Municipal Water Infrastructure
  - (c) Lead Municipal Wastewater Infrastructure
  - (d) Geotechnical Lead Professional
  - (e) Lead Planner (for Land Agreements)
  - (f) Lead Heritage Resources
  - (g) Contract Administrator
    - (i) Non-Resident
    - (ii) Resident
- B11.2.1 Multiple Key Personnel positions may be filled by one individual, however for evaluation purposes, be sure to identify the experience and qualification for each role separately.

- B11.3 Submit the experience and qualifications of the Key Personnel assigned to the Project for projects of similar complexity, scope and value. 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; and
  - (e) years of experience in design and construction.
- B11.3.1 Roles of each of the Key Personnel in the Project should be identified in the organizational chart referred to in B11.1.1.
- B11.4 For each person identified, list at least two comparable projects in which they have played a primary role similar to that proposed for this Project. If a project selected for a key person is included in B10, provide only the project name and the role of the key person. For other projects provide the following:
  - (a) project name and owner;
  - (b) description of project;
  - (c) role of the person; and
  - (d) reference information (two current names with telephone numbers and email addresses per project).
    - (i) references should have worked directly on the projects described, such as Project Manager or Contract Administrator.
    - (ii) references may be used to confirm the information provided in the Proposal.
    - (iii) other sources not named in the references may be contacted to verify information provided.
- B11.4.1 If more than two (2) projects are submitted for B11.4, only the first two (2) referenced projects will be evaluated.
- B11.5 For each Key Personnel identified in B11.2, provide a detailed breakdown of hours proposed in the detailed fee breakdown as requested in B9.3.

#### 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. The methods shall include:
  - (a) activities to be performed either by the Proponent's employees or by Subconsultants at an office located outside of the Province of Manitoba. Identify proposed arrangements (i.e. conference calls, webinars, travel, communication protocol, etc.) involving out-of-town employees to participate in coordination and review functions; and
  - (b) the collaborative process/method to be used by the Key Personnel of the team in the various phases of the Project.
- B12.2 Methodology should be presented in accordance with the Scope of Services identified in D7.
- B12.3 Describe methods to be used for quality control and to monitor and complete the project on time and within budget. Identify any programs, procedures, systems, or techniques used to demonstrate sophisticated levels of management, cost control or quality control normally used or proposed to be used for 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 related to the Scope of Services;
- (d) the City's Project methodology with respect to the information provided within this RFP and the City's Project Management Manual at <u>http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2</u> and templates at <u>http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4</u>; and;
- (e) 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 <u>https://winnipeg.ca/matmgt/templates/information.stm</u>
- 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.

#### 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.
- 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 Further to B13.1 and B13.2, the Proponent's schedule should also include:
  - (a) the critical stages listed in D27. The Proponent should give justification in the event that the milestone dates listed in the schedule deviate.
  - (b) an additional 8 weeks for the Tender award period if the anticipated construction Tender award value is more than \$5,000,000.00. The additional time is for Standing Policy Committee approval of the award report.
  - (c) future crossing, easement and land acquisition requirements;
    - Note: at the time of writing this RFP the City has initiated discussions with Province of Manitoba for the purchase of the Wastewater Lift Station land location. (See Appendix C - Land Agreements Table). Other lands identified in the table will need to be acquired during detailed design.
  - (d) flow monitoring activities;
    - (i) due to seasonal constraints the Consultant should plan their flow monitoring approach during proposal preparation.
  - (e) heritage resource impact assessments (HRIA);
    - (i) a preconstruction HRIA is required on all four (4) contracts. The HRIA can only be preformed during frost free and snow free conditions.
  - (f) City review requirements;

- (g) project meeting frequencies; and
- (h) submission dates for required deliverables.
- B13.4 The Proponent should clearly develop a schedule that is in the best interest of the City in terms of Contractor availability and construction costs.
- B13.5 Provide narrative that will describe how slippage in the proposed schedule will be managed and how the schedule will be re-evaluated to determine the impacts to critical paths.

#### B14. DISCLOSURE

- B14.1 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.
- B14.2 The Persons are:
  - (a) AECOM Canada Ltd.
    - (i) In 2012 AECOM was hired by the Government of Manitoba, Infrastructure and Transportation to complete a Servicing Review of the entire CentrePort area. This work included conceptual land use planning, regional wastewater servicing and regional water supply and fire protection servicing, using assumptions that were valid at that time. The City was transmitted this report for its information.
  - (b) KGS Group
    - (i) In 2019 KGS Group was retained by the City under RFP 289-2019 for Airport Area West Regional Water and Wastewater Preliminary Engineering Services. In May 2021, KGS group released their Airport Area West Water and Wastewater Servicing Preliminary Engineering report, detailing \$112.6 million (2020 dollars) class 3 cost estimate for providing water and wastewater infrastructure to the entire area.
  - (c) Landmark Planning & Design Inc.
    - (i) In 2020 Landmark Planning & Design Inc. applied on behalf of the Winnipeg Airport Lands Corporation (WALC), to have the Airport Area West Industrial Secondary Plan be adopted by Council.
  - (d) Stantec Consulting Ltd.
    - In 2020 Stantec Consulting Ltd. submitted documents on the behalf of the Winnipeg Airport Lands Corporation (WALC), to have the Airport Area West Industrial Secondary Plan be adopted by Council.
  - (e) WSP Canada Group Limited
    - (i) In 2020 WSP Canada Group Limited applied on behalf of Genstar Developments, to have the Airport Area West Residential Area Secondary Plan be adopted by Council.
- B14.3 Additional Material: (See D5 for further details and links to documents)
  - (a) CentrePort Regional Water and Wastewater Servicing Review, AECOM, August 2012. The Proponent shall not rely on any information contained within this report.
  - (b) Airport Area West Regional Water and Wastewater Servicing Preliminary Engineering Final Report, KGS, May 2021 (attached as Appendix A).
  - (c) By-Law No. 100/2020 Airport Area West Industrial Secondary Plan. Final Submission July 30, 2020, Stantec Consulting Ltd. and Landmark Planning & Design Inc on behalf of the Winnipeg Airport Lands Corporation (WALC) – adopted June 24, 2021 by Council.
  - (d) By-Law No. 86/2016 Airport Area West Residential Area Secondary Plan December 2020 by WSP Canada Group Limited, adopted June 24, 2021 by Council.
  - (e) By-law 8097/2002 Amendment to the Airport Area West Secondary Plan, July 30, 2020 application by Landmark Planning and Design Inc, Airport Area West Secondary Plan

Transportation Analysis and 2016 CentrePort Winnipeg AAWSP Industrial Amendment Serving Infrastructure report by Stantec Consulting Ltd. – adopted June 24, 2021 by Council.

#### B15. CONFLICT OF INTEREST AND GOOD FAITH

- B15.1 Further to C3.2, Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B15.2 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:

- exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Proposals or award of the Contract; or
- (ii) compromise, impair or be incompatible with the effective performance of a Proponent's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of their participation in the RFP process or the Project; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other Proponents and that could or would be seen to give that Proponent an unfair competitive advantage.
- B15.3 In connection with their Proposal, each entity identified in B15.2 shall:
  - (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;
  - (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Consulting Contract Administrator; and
  - (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.
- B15.4 Without limiting B15.3, the City may, in their sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in their sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in their sole discretion, to avoid or mitigate the impact of such Conflict of Interest.
- B15.5 Without limiting B15.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in their sole discretion:
  - (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of their Key Personnel;

- (b) require the removal or replacement of any Key Personnel proposed for the Services that has a perceived, actual or potential Conflict of Interest that the City, in their sole discretion, determines cannot be avoided or mitigated;
- (c) disqualify a Proponent or Key Personnel proposed for the Services that fails to comply with any requirements prescribed by the City pursuant to B15.4 to avoid or mitigate a Conflict of Interest; and
- (d) disqualify a Proponent if the Proponent, or one of their Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B15.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in their sole discretion.

#### B16. QUALIFICATION

- B16.1 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.
- B16.2 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 <u>https://winnipeg.ca/finance/findata/matmgt/listing/debar.pdf</u>
- B16.3 The Proponent and/or any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:
  - 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;
  - (b) be fully capable of performing the Services required to be in strict accordance with the terms and provisions of the Contract;
  - (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
  - (d) have the knowledge and resources to administer the requirements of The Workplace Safety and Health Act (Manitoba) during the construction works associated with this Contract;
  - (e) undertake to meet all licensing and regulatory requirements of the appropriate governing authorities and associations in the Province of Manitoba; and
  - (f) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B16.4 and D21).
- B16.4 Further to B16.3(f), the Proponent acknowledges they and all Subconsultants have obtained training required by the Accessibility for Manitobans Act (AMA) available at <u>http://www.accessibilitymb.ca/training.html</u> for anyone that may have any interaction with the public on behalf of the City of Winnipeg.

- B16.5 The Proponent shall submit, within three (3) Business Days of a request by the Consulting Contract Administrator, further proof satisfactory to the Consulting Contract Administrator of the qualifications of the Proponent and of any proposed Subconsultant.
- B16.6 The Proponent shall provide, on the request of the Consulting Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Consulting Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Services.

#### B17. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B17.1 Proposals will not be opened publicly.
- B17.2 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 <u>www.merx.com</u>.
- B17.3 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).
- B17.3.1 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.
- B17.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of their submission upon written request to the Consulting Contract Administrator.

#### B18. IRREVOCABLE OFFER

- B18.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.
- B18.2 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.

#### B19. WITHDRAWAL OF OFFERS

B19.1 A Proponent may withdraw their Proposal without penalty prior to the Submission Deadline.

#### B20. INTERVIEWS

B20.1 The Consulting Contract Administrator may, in their sole discretion, interview Proponents during the evaluation process.

#### B21. NEGOTIATIONS

- B21.1 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.
- B21.2 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.

B21.3 If, in the course of negotiations pursuant to B21.2, 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.

#### B22. EVALUATION OF PROPOSALS

B22.1 Award of the Contract shall be based on the following evaluation criteria:

(a)	compliance by the Proponent with the requirements of the Request for Pro acceptable deviation therefrom:	posal or (pass/fail)
(b)	qualifications of the Proponent and the Subconsultants, if any, pursuant to	B16: (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)	30%
(f)	Project Understanding and Methodology; (Section E)	25%
(g)	Project Schedule. (Section F)	5%

- B22.2 Further to B22.1(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.
- B22.3 Further to B22.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in their Proposal or in other information required to be submitted, that it is qualified.
- B22.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B22.1(a) and B22.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B22.5 Further to B22.1(c), Fees will be evaluated based on Fees submitted in accordance with B9.
- B22.6 Further to B22.1(c), the Award Authority may reject a Proposal as being non-responsive if it exceeds the funds available as shown in D7.6.
- B22.7 Further to B22.1(d), Experience of Proponent and Subconsultants will be evaluated considering the information provided in response to B10, including but not limited to the following criteria:
  - (a) Similarity of the Proponent's past projects to this Project;
  - (b) Success of the Proponent on past projects; and
  - (c) Past performance on City of Winnipeg projects, including but not limited to:
    - (i) adherence to project budget;
    - (ii) adherence to project schedule;
    - (iii) quality of work; and
    - (iv) overall satisfaction with the Proponent.
- B22.7.1 Proponents that have not worked with the City before will be evaluated based on the information provided in response to B10.2(a).
- B22.8 Further to B22.1(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, including but not limited to the following criteria:
  - (a) appropriateness of related years of experience of the Key Personnel;

- (b) relevancy of experience of the Key Personnel; and
- (c) appropriateness of approach to overall team formation and coordination of team members.
- B22.8.1 Proposals that receive less than half the available evaluation points for Experience of Key Personnel Assigned to the Project will be rejected in accordance with B22.2 and B22.3.
- B22.9 Further to B22.1(f), Project Understanding and Methodology will be evaluated considering the information provided in response to B12, including but not limited to the following criteria:
  - (a) appropriateness of the Project Management Approach;
  - (b) consistency and completeness of the Methodology;
  - (c) appropriateness of fees and/or hours assigned to individual tasks per Person;
  - (d) Proponent's understanding of the Project, including its deliverables, and constraints; and
  - (e) demonstration of insight beyond the information that was presented in this RFP.
- B22.9.1 Proponents that receive less than half the available evaluation points for Project Understanding and Methodology (Section E) will be rejected in accordance with B22.2 and B22.3.
- B22.10 Further to B22.1(g), Project Schedule will be evaluated considering the Proponent's ability to comply with the requirements of the Project, in accordance with B13, including but not limited to the following criteria:
  - (a) completeness of the Project Schedule;
  - (b) logic and sequencing of the tasks in the Project Schedule, and
  - (c) appropriateness of the timelines provided.
- B22.11 Notwithstanding B22.1(d) to B22.1(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.
- B22.12 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B20.
- B22.13 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.

#### B23. AWARD OF CONTRACT

- B23.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B23.2 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.
- B23.2.1 Without limiting the generality of B23.2, the City will have no obligation to award a Contract where:
  - (a) the prices exceed the available City funds for the Services;
  - (b) the prices are materially in excess of the prices received for similar services in the past;
  - (c) the prices are materially in excess of the City's cost to perform the Services, or a significant portion thereof, with their own forces;
  - (d) only one Proposal is received; or
  - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

- B23.3 Award of this Contract is contingent on the City receiving funding from the Government of Manitoba. The Government of Manitoba has committed to this funding in principle and is in the process of preparing an agreement. If funding for the Work is not received, the City shall have the right to not award a Contract.
- B23.4 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.
- B23.5 The City may, at their discretion, award the Contract in phases.
- B23.6 Further to B23.5, the City reserves the right to negotiate and award future phases to the successful Proponent.
- B23.7 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
- B23.7.1 The Contract documents as defined in C1.1(u) in their entirety shall be deemed to be incorporated in and to form a part of the award letter notwithstanding that they are not necessarily attached to or accompany said award letter.
- B23.8 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(v).
- B23.9 Following the award of Contract, a Proponent will be provided with information related to the evaluation of their Proposal upon written request to the Consulting Contract Administrator.
- B23.10 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 2022-09-02) are applicable to the Services of the Contract.
- C0.1.1 The General Conditions for Consultant Services are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/gen\_cond.stm</u>.
- 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.
- D1.2 If there is any conflict or inconsistency between the Proposal and the General Conditions for Consultant Services, the General Conditions for Consultant Services shall take precedence.
- D1.3 Further to C.1.1 (b) and C11, the following is applicable to Allowable Disbursements:
  - (a) booking of transportation and accommodations are expected to take place well in advance to obtain optimal discounted rates;
  - (b) the acceptable standard for air travel shall be economy class;
  - (c) air travel premium fees, such as seat selection premiums etc., will not be reimbursable unless specifically approved by the Consulting Contract Administrator;
  - (d) the acceptable standard for accommodation will be a single room in a safe environment, conveniently located and comfortably equipped;
  - (e) the acceptable standard for rental vehicles shall be mid-size;
  - (f) car rental premium fees, such as prepaid fuel or re-fuelling surcharges etc. will not be reimbursable unless specifically approved by the Consulting Contract Administrator;
  - (g) costs for alcoholic beverages will not be reimbursable and shall not be claimed;
  - (h) proof of purchase shall not constitute credit/debit card statements; and
  - (i) GST is to be deducted from the reimbursable value of merchant/vendor invoices.
- D1.4 The following shall be considered incidental to the Contract and will not be accepted as Allowable Disbursements:
  - (a) travel within the City of Winnipeg,
  - (b) courier costs, and
  - (c) meal costs for personnel not travelling outside their normal city of employment.

#### D2. CONSULTING CONTRACT ADMINISTRATOR

D2.1 The Consulting Contract Administrator is:

Tim Turzak, C.E.T.

Telephone No. 204-986-3760

Email Address: <u>tturzak@winnipeg.ca</u>

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

#### D3. DEFINITIONS

- D3.1 When used in this Request for Proposal:
  - (a) "AAW" means Airport Area West;
    - (i) In reference to this RFP, Airport Area West is also called CentrePort South (name changed to CentrePort South on Feb 2, 2023).
  - (b) "Airport" means the Winnipeg James Armstrong Richardson International Airport;

- (c) "CAD" means Computer Assisted Drafting;
- (d) "CentrePort" means: CentrePort Canada, an area that encompasses roughly 5330 Ha (13,165 acres) of land within the Perimeter Highway in the northwest quadrant of the City of Winnipeg. A figure showing area is attached in Appendix B.
- (e) "CCTV" means Closed Circuit Television Video;
- (f) "Class 1 Cost Estimate" means an estimate within an expected accuracy of -10% to +15%;
- (g) "Class 3 Cost Estimate" means an estimate within an expected accuracy within -20% to +30%;
- (h) "City" means the City of Winnipeg;
- (i) **"Commissioning**" means a process by which equipment, a facility or a plant is tested to verify if it functions according to design and functional requirements;
- (j) "CSS" means Change in Scope of Services;
- (k) "CWO" means Change Work Order;
- (I) "DFO" means Department of Fisheries and Oceans;
- (m) "DWF" means Dry Weather Flow;
- (n) "FI" means Field Instruction;
- (o) "GIS" means Geographical Information System;
- (p) "HMI" means Human Machine Interface;
- (q) "HRIA" means Heritage Resource Impact Assessment;
- (r) "HVAC" means Heating, Ventilation, and Air Conditioning;
- (s) **"Key Personnel"** means an individual designated in a Proponent's Proposal Submission to perform a lead role in one or more of the proposed key organizational positions indicated in this RFP for the Proponent or its team members;
- (t) **"Native Format**" means the original format from which a deliverable was generated (i.e. MS Word, MS Excel, AutoCAD, etc.);
- (u) "NEWPCC" means North End Sewage Treatment Plant;
- (v) "OCMS" means OCASI Client Management System;
- (w) "O&M" means Operation and Maintenance;
- (x) "OS3" means Offtake Structure 3;
- (y) "**OS4**" means Offtake Structure 4;
- (z) "OWAM" means Oracle Work and Asset Management;
- (aa) "PCN" means Potential Change Notice;
- (bb) "PDF" means Portable Document Format electronic file;
- (cc) "PLC" means Programmable Logic Controller;
- (dd) "Professional Engineer" means an engineer registered in the Province of Manitoba;
- (ee) "**Record Drawings**" means drawing that are prepared by the reviewing professional after verifying in detail the actual conditions of the completed project;
- (ff) "RFI" means Request for Information;
- (gg) "SCADA" means Supervisory Control and Data Acquisition;
- (hh) "SCORM" means Shareable Content Object Reference Model;
- (ii) "TM" means Technical Memorandum;
- (jj) "WWD" means City of Winnipeg's Water and Waste Department;
- (kk) "WWS" means Wastewater Services;

(II) "WWF" means Wet Weather Flow; and

(mm) "WWLS" means Wastewater Lift Station.

#### D4. BACKGROUND

D4.1 The CentrePort South area is bounded by the Perimeter Highway to the west, Saskatchewan Ave to the South, the Winnipeg James Armstrong Richardson International Airport to the east and the City of Winnipeg boundary to the north. Figure 1: CentrePort Study Area shows the area which includes both the red and yellow hatched areas. There is the need to provide regional water and wastewater services to the CentrePort South region to support growth and development in this area as it is currently not serviced.



Figure 1: CentrePort South Study Area

- D4.2 In August 2012 the Province of Manitoba Infrastructure and Transportation commissioned a project titled "CentrePort Regional Water and Wastewater Servicing Review". This study, completed by AECOM Canada, investigated servicing requirements for the entire CentrePort Area based on the land development assumptions at that time. This report is available to Proponents upon request to the Consulting Contract Administrator identified in D2.
- D4.3 Lands south of CentrePort Canada Way and west of Sturgeon Access (~650 ac) is designated by secondary plan and will be developed as a predominantly residential neighbourhood. The remaining lands within the project area are expected to be developed primarily for industrial use.
- D4.4 In 2019 KGS Group was retained by the City under <u>RFP 289-2019</u> for Airport Area West Regional Water and Wastewater Preliminary Engineering Services. Preliminary studies were completed and the alignment shown in Figure 2 was proposed for the regional infrastructure.

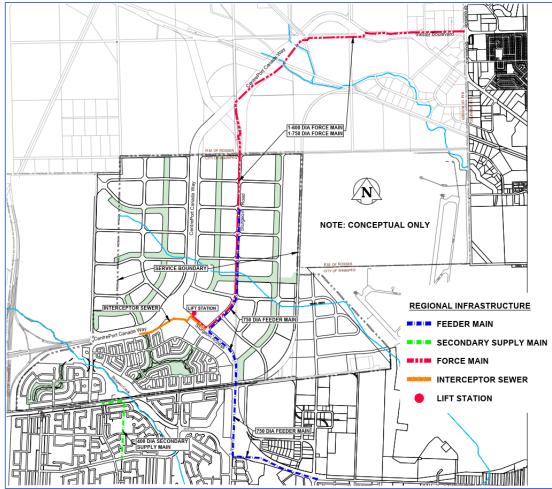


Figure 2: AAW (CentrePort South) Proposed Regional Water and Wastewater Infrastructure

D4.5 The proposed regional infrastructure has been broken down into discrete contracts to phase the work and the development plan was split into phases. Two general phases (Phase One and Phase Two) primarily cover the southern and northern portions, respectively. Phase One was divided into subphases in five-year increments over the first 20 years to capture low flow conditions expected in the early years of development.

Phase (in-service year)	Contract	Description
	1A	By-pass Lift Station
Phase 1A	2A	600 mm Force Main
(in-service year 0)	3	Interceptor and Intake Sewers
	4A	750 mm Feeder Main - Silver to Offtake Structure 3 (OS3)
Phase 1B (in-service year 5)	1B	Lift Station sub/superstructure and associated mechanical and electrical to support development for years 6-10
	5	400 mm Secondary Supply Main

Phase (in-service year)	Contract	Description
Phase 1C	1C	Lift Station Mechanical upgrades to support development for years 11 - 50
(in-service year 10)	2B	750 mm Force Main
Phase 2 (year 20)	4B	750 mm Feeder Main (OS3 to OS4)
Phase 3 (year 30)	6	Wastewater upgrades to interceptor

#### D5. RELEVANT DOCUMENTS AND DRAWINGS

- D5.1 Relevant documents and drawings are available by request to the Consulting Contract Administrator after completion of a Non-Disclosure Agreement. These documents and drawings will be released at the sole discretion of the City.
  - (a) AECOM Canada, "CentrePort Regional Water and Wastewater Servicing Review," Government of Manitoba, Manitoba Infrastructure and Transportation, Winnipeg, MB, August 2012.
- D5.2 The following relevant documents are available publicly.
  - (a) Airport Area West Regional Water and Wastewater Servicing Preliminary Engineering Final Report, KGS, May 2021 is attached as Appendix A.
  - (b) City of Winnipeg Airport Area West Water and Wastewater Study: <u>https://engage.winnipeg.ca/airport-area-west-water-wastewater-study</u>.
  - (c) City of Winnipeg RFP No. 289-2019 "Request for Proposal for Professional Consulting Services for Airport Area West Regional Water and Wastewater Servicing Preliminary Engineering" tender documents complete with existing system drawings; Tender Close Date May 30, 2019 (tender document available at <u>289-2019 Bid Opportunity Documents -Materials Management - Corporate Finance - City of Winnipeg.</u>
  - (d) By-Law No. 100/2020 Airport Area West Industrial Secondary Plan. Final Submission July 30, 2020, Stantec Consulting Ltd. and Landmark Planning & Design Inc on behalf of the Winnipeg Airport Lands Corporation (WALC) – adopted June 24, 2021 by Council. <u>City</u> <u>Clerk's eGovernment (winnipeg.ca)</u>
  - (e) By-Law No. 86/2016 Airport Area West Residential Area Secondary Plan December 2020 by WSP Canada Group Limited, adopted June 24, 2021 by Council. <u>City Clerk's</u> <u>eGovernment (winnipeg.ca)</u>
  - (f) By-law 8097/2002 Amendment to the Airport Area West Secondary Plan, July 30, 2020 application by Landmark Planning and Design Inc, Airport Area West Secondary Plan Transportation Analysis and 2016 CentrePort Winnipeg AAWSP Industrial Amendment Serving Infrastructure report by Stantec Consulting Ltd. – adopted June 24, 2021 by Council. <u>City Clerk's Decision-Making Information System (winnipeg.ca)</u>
  - (g) Appendix D A listing of currently available drawings associated with CentrePort South Regional Water and Wastewater Serving. Including in the listing are the available formats. Proponents may request to be provided with an electronic pdf file of a drawings(s) upon emailed written request to the Consultant Contract Administrator. Such requests are to be made at least one week prior to the RFP closing date.

#### D6. GENERAL REQUIREMENTS

D6.1 General Requirements for the Consultant

- D6.1.1 The Consultant shall ensure that the Scope of Services is performed under direct supervision of a Professional Engineer.
  - (a) All drawings, reports, recommendations and other documents involving the practice of professional engineering shall bear the stamp or seal and signature of a qualified engineer as required by the Engineering and Geoscientific Professions Act of the Province of Manitoba and By-laws of the Engineers Geoscientists Manitoba.
  - (b) Final design documents irrespective of the level of design shall bear an engineer's seal.
  - (c) Other reports and documents not involving the practice of professional engineering, such as letters of information and minutes of meetings, may be originated and signed by other personnel engaged by the Consultant and accepted by the City.
- D6.1.2 Progress estimates, completion certificates, and other reports related to the technical aspects of this Project shall be endorsed by the Consultant's Representative in a manner acceptable to the City.
- D6.1.3 The Consultant shall coordinate and obtain approval/permit(s) where required, including but not limited to: Manitoba Hydro, MTS, and City Departments.
- D6.1.4 The Consultant shall, at a minimum, utilize the most current industry standard sustainable practices and conform to the latest codes, standards, regulations, and legislative requirements in effect. The Consultant shall liaise with the Consulting Contract Administrator on the application of codes and standards.
- D6.1.5 The Consultant shall not substitute or replace Key Personnel throughout the duration of the Project without the written approval of the Consulting Contract Administrator.
  - (a) Experience and qualification as specified in B11 shall be submitted for all requested substitute(s) and replacement(s).
- D6.1.6 The Consultant shall coordinate with outside agencies as required to perform the Services. The Consultant shall confirm with the Consulting Contract Administrator the agencies that are being contacted prior to doing so.
- D6.2 General Requirements for Project Deliverables
- D6.2.1 All Deliverables shall have incorporated the Consultant's internal quality procedures before being submitted to the City.
  - (a) All Deliverables shall be reviewed by a representative of the Consultant who is proficient in technical writing prior to being submitted to the City.
  - (b) Any Deliverables deemed by the City to be of poor quality 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.
- D6.2.2 Project Deliverables include but are not limited to:
  - (a) Safe work plan;
  - (b) Project management plan;
  - (c) Consultant progress reports;
  - (d) Meeting minutes;
  - (e) Technical specifications;
  - (f) Detailed design drawings;
  - (g) Risk register;
  - (h) Class 1 cost estimates;
  - (i) Wastewater hydraulic model technical memorandum (TM);
  - (j) Photographs;
  - (k) Shop drawings (to be provided by the Contractor and reviewed by the Consultant);

- (I) Change control management documents (i.e. PCN's, CWO's, FI's, RFI's and associated logs);
- (m) Asset data schedule \ asset registry;
- (n) Operation and maintenance manuals (to be provided by the Contractor and reviewed by the Consultant);
- (o) Training documentation;
- (p) Record drawings;
- (q) Heritage resource impact assessments;
- (r) Commissioning documentation; and
- (s) Final construction report.
- D6.2.3 The deliverables shall be submitted in a substantially completed draft format for review prior to submittal as a final document. All deliverables shall be submitted to the City's Consulting Contract Administrator. All City review comments shall be considered and incorporated into the final version.
- D6.2.4 All draft and final deliverables shall be submitted in both Native and PDF Format. Where possible, all documents provided as PDF shall be in a single electronic file and searchable.
- D6.2.5 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 working group, the Consultant's response, and City's acceptance/rejection of Consultant's response.
- D6.2.6 Draft Documents
  - (a) 60% detailed design draft documents shall be submitted to the Consulting Contract Administrator at least 10 (ten) business days prior to the formal design review meeting.
  - (b) 90% detailed design draft documents shall be submitted to the Consulting Contract Administrator at least 10 (ten) business days prior to the formal design review meeting.
- D6.2.7 Final Deliverables Submission Requirements
  - (a) Final Documents
    - i. Final documents shall address all comments from the draft documents review.
    - ii. Final approvals from the Consulting Contract Administrator shall be provided to ensure all comments have been satisfactorily addressed.
  - (b) Wastewater Model Database
    - i. The wastewater hydraulic model shall be updated to reflect the most updated information per the City Modeling Guidelines in Appendix F.
    - ii. Consultant to submit all model files in native file format in addition to other requirements outlined in D11 and Appendix F.
  - (c) Drawings
    - i. Final drawings shall incorporate all comments from the draft drawing review.
- D6.2.8 Unless otherwise indicated, the review period for Project deliverables shall be a minimum of two (2) weeks and correspond to the number of pages and complexity of the document. The Consultant shall indicate these review periods on the Critical Path Method schedule as outlined in B13 Project Schedule (Section F).
- D6.3 General Requirements for Drawings
- D6.3.1 Drawings shall be prepared in accordance with 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://legacy.winnipeg.ca/waterandwaste/dept/cad\_gis.stm
- D6.3.2 Drawings shall not be prepared using the City's GeoMedia data or Google Earth screen captures and instead shall be prepared from the legal plans, certificates of title, as-built drawings, record drawings, aerial surveys and/or topographic surveys.
- D6.3.3 All profile components of drawings shall be in natural scale.
- D6.3.4 Where existing systems are being modified, the existing drawings shall be modified or superseded rather than creating a new drawing only showing a limited portion of the new work.
  - (a) show modifications to existing drawings by adjusting the existing revision number;
  - (b) drawings that are no longer in use shall be modified by marking them as obsolete;
  - (c) the Consultant acknowledges that not all existing drawings are in CAD files and recreation of the drawing in CAD may be required;
  - (d) the Consultant's professionals are responsible for the content of drawings bearing their seals. If existing drawing are being modified the Consultant shall notify the Consulting Contract Administrator; and
  - (e) Limited liability clauses will not be accepted on any final drawings.
- D6.3.5 The City shall provide Drawing numbers for all new Drawings that are generated. All references in the final Drawings shall reference the City's Drawing number not the Consultant's Drawing number.
  - (a) Drawing numbers shall be requested from the WWD Supervisor of Drafting & Graphic Services. The following information is required with the request:
    - i. City File Number;
    - ii. Project Name;
    - iii. Tender Number;
    - iv. Contract Number, and
    - v. Individual Drawing Titles (in spreadsheet format).
- D6.3.6 Provide a cross reference on the Drawings to other associated Drawings, whether new Drawings included with this Work or the available Historical Drawings.
- D6.3.7 Drawings submitted for tender should be complete with digital stamp.
- D6.3.8 The City will provide comments on the draft drawings. Comments shall be reviewed and incorporated into the final drawings.
- D6.3.9 All drawings shall be submitted in AutoCAD format version 2019 and in A1 hard copy format, unless otherwise specified.
- D6.3.10 Draft tender drawings to be submitted to the City for review and comment at 60% and 90% completion. Comments shall be reviewed and incorporated into the final tender Drawings, as applicable.
- D6.3.11 Consultant shall provide as part of each drawing submission, a complete index of drawings in Microsoft Excel (XLS) format. The index shall have filters enabled to facilitate retrieval of information and shall include the following:
  - (a) Drawing Number;
  - (b) Sheet Number;
  - (c) Revision Number;
  - (d) Drawing Title;
  - (e) Date of Issue;

- (f) Type (Feeder Main, Force Main, Electrical, Mechanical, Civil etc.);
- (g) Contract Number (1A, 2A, 3 or 4A); and
- (h) Tender Number.
- D6.4 General Requirements for Technical Specifications
- D6.4.1 The City of Winnipeg Standard Construction Specifications shall be used where applicable. The City of Winnipeg Construction Specification is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>www.winnipeg.ca/matmgt/Spec/Default.stm</u>.
- D6.4.2 The technical specifications for process, instrumentation, controls, and building upgrades shall follow the NMS format.
- D6.4.3 The Consultant shall review with the City the special requirements for materials of construction and/or process which shall be incorporated into the technical specifications.
- D6.4.4 Draft technical specifications to be submitted to the City for review and comment at 60% and 90% completion. Comments shall be reviewed and incorporated into the final technical specifications, as applicable.
  - (a) Prior to submitting the draft technical specifications, submit two representative specification sections for City review and comments. All further technical specification sections shall incorporate the City's comments.
- D6.5 General Requirements for Equipment List
- D6.5.1 At all draft Drawing and specification submittals, submit a draft equipment list. A sample equipment list can be found in Appendix R. The City will provide comments on the draft equipment list. Comments shall be reviewed and incorporated into the final tender submission, as applicable.
- D6.5.2 Have a meeting with City staff to determine:
  - (a) City staff training requirements for each piece of equipment;
  - (b) quantities if the work requires multiples of the same equipment with the same identification;
  - (c) spare parts requirements for each piece of equipment;
  - (d) submittal requirements (e.g. shop drawings, operations and maintenance information, product datasheets, etc.) for each piece of equipment; and
  - (e) lamicoid name and type for each piece of equipment.
- D6.6 General Requirements for Submittal List
- D6.6.1 At all draft specification submittals, submit a draft submittal list. A sample submittal list can be found in Appendix S. The City will provide comments on the draft submittal list. Comments shall be reviewed and incorporated into the final tender submission, as applicable.
- D6.7 General Requirements for Cost Estimates
- D6.7.1 AACE Class 1 Cost Estimate
  - (a) Draft AACE Class 1 Cost Estimate to be submitted to the City for review and comment at 90% completion of technical specifications. Comments shall be reviewed and incorporated into the final AACE Class 1 Cost Estimate, as applicable.
  - (b) AACE Class 1 Cost Estimate to include at a minimum
    - A list of all assumptions and exclusions for the estimate (e.g. currency exchange rates, labour rates; project delivery method, basis for labour hours, etc.);

- ii. line item take-offs for equipment, materials, and rentals showing the unit price, unit labour hours, and quantities. Material costs and labour hours to be extended out based on indicated quantities;
- iii. assumed base labour rates;
- iv. general condition costs including but not limited to bonding, insurance, permits, as-builts, shop drawings, and health & safety;
- v. mark-ups for general Contractor, division trades, and sub-trades; and
- vi. MRST as applicable.
- (c) Submit all cost estimates 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: <u>https://legacy.winnipeg.ca/infrastructure/asset-management-program/templatesmanuals.stm#4</u>.
- D6.8 General Requirements for Construction Schedule
- D6.8.1 Prepare an estimated construction schedule for the implementation of the design, taking into consideration whether phased construction requirements will be required to maintain compliance with the City's operation of the system.
- D6.9 General Requirements for Construction Plan
- D6.9.1 Provide a construction plan which addresses the Site constraints (e.g. buried Critical Infrastructure, etc.) and details the proposed construction sequence.
- D6.9.2 The plan shall suitable for both City and Contractor use.
- D6.9.3 The construction plan shall consist of the following sections at a minimum:
  - (a) Introduction
  - (b) Construction Sequence and Schedule
  - (c) Controls to Maintain System Operations
  - (d) Temporary Construction Requirements
  - (e) Risk Analysis
- D6.10 General Requirements for Photographs
- D6.10.1 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.
- D6.10.2 All photographs submitted to the City as part of the Project shall have the date and time stamped on the photograph.
- D6.11 General Requirements for Meetings
- D6.11.1 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, locations, number of meetings and proposed meeting schedule associated with meetings for each of the various tasks/work activities.
- D6.11.2 An agenda shall be sent to the Consulting Contract Administrator at least two (2) Business Days prior to any meeting.

- D6.11.3 The Consultant shall take minutes at all meetings and workshops in which they attend. Minutes are to be forwarded to the City's Consulting Contract Administrator within five (5) Business Days.
- D6.11.4 Schedule and chair Project meetings as listed in D8.5.
- D6.11.5 Mandatory meetings to be attended by the Consultant's Project Manager and any relevant Key Personnel required for specific discussion topics are as follows:
  - (a) Project Initiation Meeting (All Key Personnel required);
  - (b) Monthly Progress Meetings (Project Manager and any leads based on topics in Agenda); and
  - (c) Formal Design Review Meetings at 60% and 90% of detailed design (Key Personnel per Tender required).
    - i. 60% design review meetings per tender can be combined if appropriate, and if the project schedule allows it.
    - ii. 90% design review meetings per tender can be combined if appropriate, and if the project schedule allows it.
- D6.11.6 Remote Meetings
  - (a) Informal meetings can be held remotely with Microsoft teams or similar software.
- D6.11.7 Construction Progress Meetings
  - (a) To be held bi-weekly during construction.
  - (b) A combination of remote meetings and on-site meetings will be accepted by the City.
- D6.12 Relevant Design Standards
- D6.12.1 The following design standards shall be applicable to this project:
  - (a) WWD Electrical Design guide (Appendix G);
  - (b) WWD Identification Standard (Appendix H);
  - (c) WWD HMI Layout and Animation Plan (Appendix I);
  - (d) WWD Wastewater Treatment Facilities Automation Design Guide (Appendix J);
    - i. These design requirements will also be applied to the collection system where relevant and useful.
  - (e) WSTP Electrical and Instrumentation Standardization Summary (Appendix K)
    - i. The City of Winnipeg has standardized on specific electrical and automation manufacturers. The Consultant should use standardized equipment in their design where applicable.
  - (f) WSTP Electrical and Instrumentation Standardization Clauses (Appendix Q)
  - (g) Computer Assisted Drafting (CAD) and Geographic Information System (GIS) Standards and templates can be found here <u>https://legacy.winnipeg.ca/waterandwaste/dept/cad\_gis.stm</u>
  - (h) Modeling Standards
    - i. See D11 and Appendix F for specific modeling requirements as part of the scope of work.
    - ii. Wastewater modeling shall be completed using InfoWorks ICM.
  - (i) City of Winnipeg water and sewer design standards;
  - (j) Asset Registry Guideline (Appendix L);
  - (k) Operation and Maintenance Information (Appendix M);
  - (I) Training Requirements (Appendix N);
  - (m) Feeder Main Design Standard (Appendix O);

- (n) The City's Project Management Manual:
  - i. <u>https://legacy.winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#3</u>
- (o) The City's Project Management templates:
  - i. <u>https://legacy.winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#5</u>.
- (p) The City's Investment Planning templates:
  - i. <u>https://winnipeg.ca/infrastructure/asset-management-program/templates-</u> manuals.stm#4.
- D6.12.2 The Consultant shall notify the Consulting Contract Administrator of any conflict identified between the documents listed under D6.12.1 for resolution.
- D6.12.3 Notwithstanding the foregoing, the Consultant is being engaged by the City for its professional expertise; the Consultant shall bring to the City's Consulting Contract Administrator attention any aspect of the City's standards, manuals, guidelines or templates which the Consultant is of the opinion is not consistent with good industry practice.
- D6.13 General Requirements for Flow Monitoring Work Allowance
- D6.13.1 The general requirements for the Flow Monitoring Work Allowance are as follows:
  - (a) The Consultant shall include in Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this project by role. These rates will be used for the Flow Monitoring Work Allowance when defined and approved.
  - (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P, when that staff member is proposed for work under the Flow Monitoring Work Allowance, the Consultant shall follow the requirements as stated in D6.1.5 and B11.
  - (c) A mark-up of a maximum of 10% can be applied by the Proponent on work completed by a subcontractor. The mark-up shall be included in the Flow Monitoring Work Allowance.
  - (d) Expenditures under the Flow Monitoring Work Allowance must be authorized by the Consulting Contract Administrator identified in D2.
  - (e) The Contract price will be adjusted by written order to provide for a difference between the amount of the Flow Monitoring Work Allowance and the actual cost of the work.
  - (f) The City reserves the right to delete any or all of the Flow Monitoring Work Allowance from the Contract if the Work intended to be covered by the Flow Monitoring Work Allowance is not required, or if the Works intended are found to be more extensive than the provisional Flow Monitoring Work Allowance.
- D6.14 General Requirements for Geotechnical Work Allowance
- D6.14.1 The general requirements for the Geotechnical Work Allowance are as follows:
  - (a) The Consultant shall include in Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this project by role. These rates will be used for the Geotechnical Work Allowance when defined and approved.
  - (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P, when that staff member is proposed for work under the Geotechnical Work Allowance, the Consultant shall follow the requirements as stated in D6.1.5 and B11.
  - (c) A mark-up of a maximum of 10% can be applied by the Proponent on work completed by a subcontractor. The mark-up shall be included in the Geotechnical Work Allowance.

- (d) Expenditures under the Geotechnical Work Allowance must be authorized by the Consulting Contract Administrator identified in D2.
- (e) The Contract price will be adjusted by written order to provide for a difference between the amount of the Geotechnical Work Allowance and the actual cost of the work.
- (f) The City reserves the right to delete any or all of the Geotechnical Work Allowance from the Contract if the Work intended to be covered by the Geotechnical Work Allowance is not required, or if the Works intended are found to be more extensive than the provisional Geotechnical Work Allowance.
- D6.15 General Requirements for Heritage Resource Work Allowance
- D6.15.1 The general requirements for the Heritage Resource Work Allowance are as follows:
  - (a) The Consultant shall include in Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this project by role. These rates will be used for the Heritage Resource Work Allowance when defined and approved.
  - (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P, when that staff member is proposed for work under the Heritage Resource Work Allowance, the Consultant shall follow the requirements as stated in D6.1.5 and B11.
  - (c) A mark-up of a maximum of 10% can be applied by the Proponent on work completed by a subcontractor. The mark-up shall be included in the Heritage Resource Work Allowance.
  - (d) Expenditures under the Heritage Resource Work Allowance must be authorized by the Consulting Contract Administrator identified in D2.
  - (e) The Contract price will be adjusted by written order to provide for a difference between the amount of the Heritage Resource Work Allowance and the actual cost of the work.
  - (f) The City reserves the right to delete any or all of the Heritage Resource Work Allowance from the Contract if the Work intended to be covered by the Heritage Resource Work Allowance is not required, or if the Works intended are found to be more extensive than the provisional Heritage Resource Work Allowance.
- D6.16 General Requirements for Additional Work Allowance
- D6.16.1 The general requirements for the Additional Work Allowance are as follows:
  - (a) The Consultant shall include in Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this project by role. These rates will be used for the Additional Work Allowance when defined and approved.
  - (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P, when that staff member is proposed for work under the Additional Work Allowance, the Consultant shall follow the requirements as stated in D6.1.5 and B11.
  - (c) The Consultant shall apply a maximum of ten (10) percent markup on all work performed by a subcontractor. The mark-up shall be included in the Additional Work Allowance.
  - (d) Expenditures under the Additional Work Allowance must be authorized by the Consulting Contract Administrator identified in D2.
  - (e) The Contract price will be adjusted by written order to provide for a difference between the amount of the Additional Work Allowance and the actual cost of the work.
  - (f) The City reserves the right to delete any or all of the Additional Work Allowance from the Contract if the Work intended to be covered by the Additional Work Allowance is not required, or if the Works intended are found to be more extensive than the provisional Additional Work Allowance.

#### D7. SCOPE OF SERVICES

- D7.1 The Scope of Work of this RFP generally consists of consulting engineering design and contract administration services for CentrePort South Phase 1A regional water and wastewater infrastructure. Four (4) construction Contracts are anticipated for Phase 1A:
  - (a) Contract 1A By-pass Lift Station;
  - (b) Contract 2A 600 mm Force Main;
  - (c) Contract 3 Interceptor and Intake Sewers; and
  - (d) Contract 4A 750 mm Feeder Main.
- D7.1.1 Further details of CentrePort South Phase 1A Contract works can be found in the Preliminary Design Report (See Appendix A). The location, sizing and alignment of the regional infrastructure is to be finalized during the detailed design stage.
- D7.1.2 Land agreements will need to be in place before posting of the Construction Contracts. (See Appendix C).
- D7.2 The Services required under this Contract shall consist of the following phases and as outlined in D6 to D20 in accordance with the following:
  - (a) Project Management (D8);
  - (b) Consultant Progress Reports (D9);
  - (c) Land Agreements and Planning Services (D10);
  - (d) Wastewater Hydraulic Modeling (D11);
  - (e) Detailed Design and Specification Development (D12);
  - (f) Procurement Services (D13);
  - (g) Contract Administration Services Non-Resident (D14.2);
  - (h) Contract Administration Services Resident (D14.3);
  - (i) Record Drawings (D15);
  - (j) Project Closeout (D16);
  - (k) Flow Monitoring Work Allowance (D17);
  - (I) Geotechnical Work Allowance (D18);
  - (m) Heritage Resource Work Allowance (D19); and
  - (n) Additional Work Allowance (D20).
- D7.3 The Services required for this project shall be in accordance with the City's Project Management Manual <u>http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2</u> and templates <u>http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4</u>. Notwithstanding the foregoing, the Consultant is being engaged by the City for their professional expertise; the Consultant shall bring to the Consulting Contract Administrator'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.
- D7.4 Unless otherwise stated, the document titled "Definition of Professional Consultant Services" and attached as Appendix E shall be applicable to the provision of Professional Engineering services for this Project.
- D7.5 Review all applicable information, data, surveys, reports and existing drawings related to the Project including, but not limited to the information contained in this RFP.
- D7.6 The funds available for this Contract are \$7,500,000.

#### D8. PROJECT MANAGEMENT

- D8.1 Plan, organize, secure, and manage resources to complete the phases outlined in D9 to D20.
- D8.2 Create and submit a project management plan no later than twenty-eight (28) Calendar Days after Project Award. The project management plan shall include but not be limited to:
  - (a) Project Scope Statement
    - (i) Describing the services, cost and time elements of the project, out of scope work, project constraints and restrictions, major assumptions, and the City's acceptance criteria for a successfully delivered project.
  - (b) Project Work Plan
    - (i) Outline the key deliverables including review submissions, the key activities for the deliverables, the review submission dates and the completion date for the deliverables.
  - (c) Project Schedule
    - (i) Include the information required in B13.
    - (ii) The approved schedule will be used as the Project baseline throughout the Project.
    - (iii) The Project schedule is to be updated and included with the Consultant Progress Reports indicated in D8.3. The updated Project schedule to include the percent of work complete for each task.
  - (d) Risk Management Plan
    - Prepare a risk management plan identifying risk event causes, risk event outcomes, degree of certainty, effects on Project objectives, severity of risk, response/action(s) to be undertaken, contingency plan, and associated costs to manage risks.
    - (ii) Using the City's spreadsheet template located on the City's Asset Management Program website located at: <u>https://legacy.winnipeg.ca/infrastructure/asset-</u> <u>management-program/templates-manuals.stm#5.</u> A draft risk management plan has been prepared by the City and will be provided to the Consultant.
    - (iii) The risk management plan is to be updated and included with the Consultant Project Reports indicated in D8.3.
  - (e) Change Management
    - (i) Identify the schedule, quality, and budget impacts of any proposed changes.
    - (ii) Maintain and regularly update PCN, CSS, RFI and decision logs.
  - (f) Quality Assurance and Control
    - (i) Establish appropriate levels of review and approvals for all Project Deliverables. Identify individuals responsible for the quality review and any independent technical reviews.
  - (g) Human Resources
    - (i) Describe the team organizational and management approach.
    - (ii) Include an organizational chart.
  - (h) Communication
    - (i) Illustrate the various stakeholders, what information needs to be communicated, the timing and delivery method of the communication, who is responsible for the communication, and the feedback mechanism.
  - (i) Project Closeout Plan
    - (i) Establish how to close phases of the Project and Project overall.
- D8.3 Consultant Progress Reports
  - (a) Issue Consultant Progress Reports monthly after the pre-commencement meeting up to the Total Performance of the last Construction Tender.
  - (b) Details of the Consultant Progress Reports can be found in D9.

- D8.4 Coordinate regular project and design meetings and provide minutes. The meetings shall be used to update the Consulting Contract Administrator on the status of the Project, review the Deliverables, and to discuss other project management issues.
  - (a) The meeting minutes template is available on the City of Winnipeg Documents for City Asset Management Program website <u>https://legacy.winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm</u>.
  - (b) Meetings shall be held monthly during design and construction stages.
  - (c) If critical design dates outlined in the project schedule are not achieved during the design stages, regular project meeting frequency shall increase to every two weeks until the design stage is complete. No additional fees will be contemplated for additional meetings.
  - (d) The frequency of meetings may vary based upon the level of project activity.
- D8.5 In addition to the regular Project meetings detailed in D8.4, schedule and chair the following meetings:
  - (a) Pre-commencement meeting to be scheduled immediately upon award of the Project;
  - (b) Land agreements and planning meetings, as described in D10.4;
  - (c) Meetings to review the, 60% and 90% draft tender documents, as described in D12.3(c) and D6.11.5(c);
  - (d) One risk review workshop meeting, prior to the posting of the first Construction Tender. The Consultant shall allow for up to three (3) hours in duration for the risk review workshop. (All key personnel required to attend);
  - (e) Allow for six (6) hours to attend risk meetings during the Construction phase at the request of the Consulting Contract Administrator. (Project Manager and Contract Administrator required to attend);
  - (f) Two (2) workshops with WWD operations staff to identify operational constraints and potential construction issues/concerns;
    - (i) Each workshop will have a duration of up to two (2) hours.
  - (g) Flow monitoring schedule and planning meeting as described in D17.7;
  - (h) Flow monitoring planning meeting as described in D17.8;
  - (i) Pre-construction meetings;
  - (j) Bi-weekly construction progress meetings;
  - (k) Pre-commissioning meetings;
  - (I) Training meetings;
  - (m) Project closeout meeting as described in D16.6; and
  - (n) Meetings to confirm and certify Substantial Performance, Total Performance / warranty period commencement, and Final Acceptance / end of warranty period.
- D8.5.1 Meetings can be combined if appropriate.
- D8.5.2 Additional meetings may be required in the event that issues arise during the course of the project.
- D8.6 Provide adequate notice (at least one (1) week) prior to any site visit or work that will require assistance from City personnel.
- D8.7 Carry out other project management activities as required.
- D8.8 Project Management Deliverables
  - (a) Project Management Plan within twenty-eight (28) Calendar Days of award.
  - (b) Consultant Progress Reports as per D8.3.

(c) Monthly meeting agenda, PowerPoint presentation slides (as applicable) and meeting minutes.

#### D9. CONSULTANT PROGRESS REPORTS

- D9.1 The Consultant shall prepare and submit monthly reports using the Consultant Progress Report template from the Project Management Manual. All sections within this report shall be completed. One report shall be submitted for every month. For months with no project activity, a single report that combines two or more months can be submitted upon prior written approval by the Consulting Contract Administrator.
  - (a) The Consultant Progress Reports template is available on the City of Winnipeg Documents for City Asset Management Program website <u>https://legacy.winnipeg.ca/infrastructure/asset-management-program/templates-</u> <u>manuals.stm#6</u>.
  - (b) Include a detailed monthly "cost to complete" report. The report is to include the actual costs to date (for Consultant and Contractors) plus projected costs to complete the contract including allowances for any unforeseen costs. The report will identify any expected budget overruns or surpluses.
- D9.2 Consultant Progress Reports shall be submitted to the Consulting Contract Administrator by the fifteenth (15th) day of the following month. When the 15th day of the month falls on a weekend, the report shall be submitted on the first working day of the following week.
- D9.3 Monthly Consultant invoices will not be paid until the corresponding Consultant Progress Report has been accepted.

#### D10. LAND AGREEMENTS AND PLANNING SERVICES

- D10.1 General
  - (a) Land agreements are required for CentrePort South regional water and wastewater infrastructure.
  - (b) At the time of writing this RFP, the City has initiated discussions with Province of Manitoba for the purchase of the wastewater lift station land location. (See Appendix C - Land Agreements Table). Other lands identified in the table will need to be acquired during detailed design.
- D10.2 CentrePort South anticipated land agreements types are:
  - (a) Land Purchase:
    - (i) Private Owners
    - (ii) Province of Manitoba
  - (b) Railway Crossings; and
  - (c) Easements.
- D10.3 The Consulting Contract Administrator will coordinate easements and land acquisitions based on guidance from the Consultant. The Consultant shall be responsible for the following:
  - (a) Finalizing the location and alignment of the regional water and wastewater infrastructure;
  - (b) Identifying any land acquisition and easements required for the new infrastructure;
  - (c) Construction access and easement need for obtaining land agreements beyond typical City jurisdiction or process;
  - (d) Compiling a list of affected owners;
  - (e) Identifying rail crossings and making applicable applications (on behalf of the City);
  - (f) Providing technical support for the anticipated land agreement meetings identified in D10.4;

- (g) Providing clear direction to the Consulting Contract Administrator the lands required for the regional infrastructure, the timing of when the land agreements are required by, and input and recommendations on the anticipated land agreement type.
  - (i) The Consultant shall plan and schedule land agreements activities based on input from the City Project team.
- D10.4 The following land agreement and planning meetings are anticipated:
  - (a) Land agreements strategy meeting with City Project team;
    - (i) To be held within one (1) month of the pre-commencement meeting.
  - (b) Meeting with the Rural Municipality of Rosser;
  - (c) Meeting with the Province of Manitoba; and
  - (d) Meeting with the City Real Estate Branch.
- D10.4.1 Prepare agenda, lead and record minutes of the land agreement and planning meetings.
- D10.4.2 Prepare PowerPoint presentations (as required).
- D10.5 The Consultant shall provide all the necessary information to the City in a timely fashion to prevent land agreement delays.
- D10.6 Project land acquisitions are a significant risk to a project, the Consultant shall finalize the location of the regional water and wastewater infrastructure early on in the project.
  - (a) If critical stages outlined in D27 are not achieved due to the City agreements of the lands, the dates listed in D27 will be adjusted accordingly.
  - (b) No additional fees will be contemplated for Project development due to land agreement delays under a year in duration.

#### D11. WASTEWATER HYDRAULIC MODELING

- D11.1 General
  - (a) Wastewater from both the new residential and the new industrial areas in AAW will flow by gravity to a new lift station. From the new lift station, wastewater will be pumped to the Northwest Interceptor at Inkster and Brookside Blvd. for treatment at NEWPCC.
    - (i) The extents of the northwest interceptor sewer system to be hydraulically analyzed shall include the following separate sewer districts:
      - i. Brooklands
      - ii. King Edward
      - iii. Manitoba
      - iv. Burrows
      - v. Inksbrook
      - vi. Inkster Garden
      - vii. Northwest System 2
      - viii. Amber Trails
      - ix. Maples
      - x. Leila North
      - xi. Templeton
      - xii. Ferrier
  - (b) Wastewater flow estimation guidelines for the City can be found here: <u>https://winnipeg.ca/waterandwaste/dept/wastewaterFlow.stm</u>
  - (c) The hydraulic modeling software to be used is InfoWorks ICM.

- (d) All hydraulic modelling analysis, model maintenance, calibration and verification tasks completed by the Consultant will be in accordance with the City of Winnipeg Hydraulic Modeling Guidelines, see Appendix F.
- (e) The City will provide the following to the Consultant:
  - (i) A copy of the City InfoWorks ICM hydraulic model Master Database ('City Master Database') with the associated model files;
    - i. The City Master Database will be made available in an "as-is" condition and will not be further modified into a cut-down version, or other modification to make the Master Database more suitable for the project in question.
  - (ii) A copy of the CentrePort South preliminary design hydraulic model database; and
  - (iii) A copy of the previously completed flow monitoring within the area surrounding the CentrePort South development.
    - i. This flow monitoring data is limited to one portion of the regional interceptor system, and is not considered sufficient for model calibration purposes.
- D11.2 Hydraulic Model Gap Analysis
  - (a) The Consultant shall complete an evaluation of the conditions and parameters in place with the current hydraulic model representation of the existing northwest interceptor sewer system. The Consultant shall identify all gaps/issues they believe to be within the database.
    - (i) The goal of this analysis is to update the hydraulic model such that it is fit for purpose as part of the downstream regional sewer system capacity evaluation.
  - (b) The Consultant shall evaluate the latest GIS Records, as built drawings, site survey results, SCADA Data, etc. in order to identify gaps in the database representation.
  - (c) Hydraulic gaps identified are to ensure the model representation is in line with Appendix F - City of Winnipeg Hydraulic Modeling Guidelines, and shall include at minimum:
    - (i) Up to date sewer representation as of 2022;
    - (ii) Up to date population distribution across model subcatchments as of 2022; and
    - (iii) Addition of new subcatchments, links and nodes to represent areas of recent development.
  - (d) The City will support the Consultant in collecting the appropriate data to aid the Consultant in the hydraulic model gap analysis.
    - (i) The City will make no attempt to complete necessary model work to address gaps identified in the hydraulic model. The Consultant is responsible to complete all required model work to address gaps.
  - (e) Document all gaps/issues identified, and how they will be addressed, in a Hydraulic Model Data Gap Analysis Technical Memorandum (TM).
    - (i) If the gaps/issues cannot be addressed appropriately by the Consultant, they shall be documented as such as part of the Hydraulic Model and Data Gap Analysis TM.
- D11.3 Hydraulic Model Update and Calibration
  - (a) The Consultant shall complete hydraulic model updates and calibration of the current hydraulic model representation of the existing northwest interceptor sewer system, which Phase 1A is proposed to tie into.
    - (i) All gaps/issues identified in D11.2(e) shall be addressed prior to model calibration.
    - (ii) Hydraulic model calibration and verification shall use flow monitoring data collected as per D17.
  - (b) The City Master Database is to be updated such that flows generated in the catchment are calibrated to actual conditions, be it from flow monitoring data or from SCADA instrument data in the sewer system.
  - (c) The City will support the Consultant where possible in providing reference information on expectations for growth within the area under study.

- (d) Current flows from the Rural Municipality of Rosser can be assumed with the City's support as required, and included in the updated hydraulic model representation.
- (e) Future growth in flows from Rural Municipality of Rosser and future City development outside of the CentrePort South lands **will not** be considered a part of this project.
- (f) Submit the updated and calibrated City Master Database to the City.
  - (i) Include simulation results from calibration and verification WWF and DWF events.
  - (ii) Include survey files showing calibrated model simulation results in comparison to actual flow survey and/or SCADA instrument data.
- D11.4 Detriment Analysis Using the Hydraulic Model
  - (a) The CentrePort South Phase 1A preliminary design hydraulic model database shall be updated to a detailed design level as part of the refinements to the area servicing design.
  - (b) The CentrePort South Phase 1A detailed design shall be built into the updated and calibrated City Master Database as created in D11.3. Detriment Analysis shall be performed on this model.
    - (i) The performance of this updated model compared to specific level of service standards shall be evaluated, specifically to verify there to be no reduction in level of service within the existing northwest interceptor sewer system as a result of the solution(s) proposed.
  - (c) Detriment Analysis shall be completed for the following level of service standards, as applicable:
    - (i) Surface Flooding
    - (ii) Surcharge (Basement Flooding)
    - (iii) Spill/Overflows
  - (d) Where the analysis findings result in detriments in the downstream sewer system as a result of Phase 1A servicing, the extent of capacity constraints resulting in the detriments shall be identified as part of the analysis.
    - (i) Identify any regional sewer system upgrades that will be required to permit the servicing of CentrePort South Phase 1A.
      - i. The interceptor sewer pipe at Adsum Drive has been identified as a future constraint in the downstream regional sewer system in the CentrePort South Preliminary Design Report.
  - (e) The Detriment Analysis process shall not require that a variation of the solution model over the design horizon be produced. The Detriment Analysis shall be for current conditions only.
  - (f) For further details on the Detriment Analysis process, see Appendix F.
  - (g) Submit the updated and calibrated City Master Database including the latest model representation of CentrePort South Phase 1A to the City.
    - (i) Include Detriment Analysis simulation results.
- D11.5 Hydraulic Modeling Deliverables
  - (a) Model databases, detriment analysis results, and associated files shall be submitted as per the model guidance requirements (Appendix F).
  - (b) Hydraulic Model and Data Gap Analysis TM as per D11.2(e).
  - (c) Updated and Calibrated City Master Database as per D11.3(f).
  - (d) Updated and Calibrated City Master Database including the latest model representation of CentrePort South Phase 1A servicing as per D11.4(g).
  - (e) Hydraulic Model Update TM
    - (i) This TM is to be submitted concurrently with the upgraded hydraulic models as stated in sub-bullets (c) and (d) above.
    - (ii) This TM shall include the following minimum requirements:

- i. Summary of work completed to update, calibrate, and verify the City Master Database;
- ii. Update on how the approach to update the model representation may or may not have differed from the approach documented in the Hydraulic Model and Data Gap Analysis TM;
- iii. Summary of work completed to update the CentrePort South Phase 1A servicing representation; and
- iv. Summary of Detriment Analysis simulation results, including the identification of any regional sewer system upgrades that will be required to permit the servicing of CentrePort South Phase 1A.

# D12. DETAILED DESIGN AND SPECIFICATION DEVELOPMENT

- D12.1 Provide all necessary professional services as required to prepare the detailed designs and four tender submissions for the Phase 1A of the development plan of CentrePort South:
  - (a) Contract 1A By-pass Lift Station;
  - (b) Contract 2A 600 mm Force Main;
  - (c) Contract 3 Interceptor and Intake Sewers; and
  - (d) Contract 4A 750 mm Feeder Main.
- D12.2 Detailed Design General Requirements
- D12.2.1 The general requirements listed below shall apply to both detailed design and tender submissions listed in D12.1.
- D12.2.2 The development of the Detailed Design shall be based upon the Preliminary Design deliverables and recommendations (Appendix A).
- D12.2.3 The project shall generally conform to the latest codes, standards, regulations, licences and legislative requirements in effect. The Consultant shall liaise with the City on the application of codes and standards.
- D12.2.4 The Consultant shall comply with the design standards listed in D6.12.
- D12.2.5 The detailed design shall include all requirements including but not limited to: site development, civil, structural, architectural, process, HVAC, plumbing, mechanical, electrical, automation, temporary facilities and operational consumables as applicable to the final design scope.
- D12.2.6 The Consultant shall coordinate with outside agencies and City departments external to the Water and Waste Engineering Division as required to perform the services. The Consultant shall confirm with the Consulting Contract Administrator agencies being contacted prior to doing so. This includes but is not limited to Transport Canada, The Department of Fisheries and Oceans and Government of Manitoba.
- D12.2.7 Collect and review all available existing information including files, reports, drawings, operations information, etc. Where necessary, conduct site investigations and informal meetings with the Consulting Contract Administrator and Operations staff to verify existing conditions and to supplement available information.
- D12.2.8 Submit the required number of completed drawing sets to Underground Structures and other utility companies for review. Ensure any comments or changes from this review are incorporated into the project prior to construction.
- D12.2.9 Communicate and coordinate with Manitoba Transportation and Infrastructure and Public Works for design and implementation of traffic control requirements.
- D12.2.10 The Consultant shall review actual planned development to ensure design matches the development phasing used by the developers.

- (i) The Consultant needs to consider available development plan and local water or sewer design information and account for the same as appropriate.
- D12.2.11 The Consultant shall identify all permits necessary for construction.
- D12.2.12 The Consultant shall obtain all necessary permits, and regulatory approvals for CentrePort South regional water and wastewater infrastructure including but not limited to:
  - (i) Rural Municipality of Rosser;
  - (ii) Manitoba Conservation Office of Drinking Water;
  - (iii) Manitoba Environment, Climate and Parks Department;
  - (iv) Department of Fisheries and Oceans (DFO);
  - (v) Navigable Waters (Creek Crossings);
  - (vi) Navigation Canada; and
  - (vii) Manitoba Historic Resources Branch.
- D12.2.13 Unless otherwise stated, the indicated deliverables and any other deliverables which, in the opinion of the Consulting Contract Administrator are typical of a Detailed Tender Package, shall be prepared by the Consultant. Delegation of deliverables to the construction Contractor will not be accepted.
- D12.2.14 Organize meetings with City staff to ensure all required information, issues, and concerns are accounted for.
- D12.2.15 Review all pertinent background information including, but not limited to:
  - (i) Past bid opportunities and tenders; as applicable;
  - (ii) Drawings related to the Project; and
  - (iii) Past reports and TMs.
- D12.2.16 Provide any other information applicable to the design.
- D12.3 Detailed Design Progress Meetings
  - (a) Throughout the detailed design phase, meet with the City steering committee monthly to discuss progress, findings, obtain input from City personnel, and discuss design options.
  - (b) Lead two (2) workshops with WWD operations staff, and other City departments to identify operational constraints and concerns with the planned construction.
  - (c) Conduct meetings with the City to discuss the 60% and 90% project deliverables approximately ten (10) Business Days after the submission to the City. Topics to be discussed include but are not limited to:
    - (i) addressing City review comments;
    - (ii) anticipated construction cost;
    - (iii) anticipated constructability of the design, and
    - (iv) land agreement status.
  - (d) The 60% design review meetings per tender can be combined if appropriate, and if the project schedule allows it.
  - (e) The 90% design review meetings per tender can be combined if appropriate, and if the project schedule allows it.
  - (f) These meetings shall be shown in the Consultant's Project Schedule.
  - (g) Additional meetings can be accommodated to suit the Consultant's requirements, and should be shown in the Consultant's Project Schedule.
- D12.4 CentrePort South Phase 1A Construction Plan
  - (a) Provide a construction plan that details the proposed construction sequence, schedule, and mitigation of site constraints.
    - (i) Include the preconstruction HRIA into the Construction plan and schedule.

- (b) The plan shall clearly demonstrate how the work will be implemented while maintaining operation of the existing infrastructure.
- (c) Provide details on the concepts of how the Project will be delivered.
- (d) Include Contractor's laydown areas and construction access.
- (e) Determine construction impacts on environment and traffic, and appropriate mitigation.
- (f) Include construction sequencing with associated implementation schedule that takes into consideration.
  - (i) seasonal work,
  - (ii) potential tie-ins to the existing system,
  - (iii) commissioning,
  - (iv) critical stage dates listed in D27; and
  - (v) coordination with other projects occurring in and around CentrePort South lands.
- (g) The construction plan shall be suitable for both City and Contractor use.
- D12.5 CentrePort South Phase 1A Commissioning Plan
  - (a) Prepare a Project Commissioning Plan to detail the commissioning processes, roles and responsibilities, commissioning specifications and objectives, procedures, verification and certification requirements and documentation and acceptance criteria for the Project.
    - (i) The plan should show detailed planning, lists, and schedules, not merely a highlevel description of commissioning.
    - (ii) Clearly indicate the tasks required and the party responsible for each task.
    - (iii) Include all disciplines and coordination between the disciplines.
    - (iv) Include all pre-commissioning requirements.
    - (v) Integrate a Project training plan within the Project Commissioning Plan.
      - i. The plan shall include how WWD staff shall be trained to competently operate and maintain the Project.
      - ii. Details on training requirements are included in Appendix N, D6.5.2(a) and D14.2(u).
  - (b) The Commissioning plan should speak to the Commissioning tasks listed in D14.3(s).
- D12.6 General Requirements for the Detailed Design Tender Packages
  - (a) Detailed Tender packages to include:
    - (i) Drawings from all disciplines;
    - (ii) Technical specifications;
    - (iii) The tender document;
    - (iv) Equipment Lists;
    - (v) Submission Lists;
    - (vi) Class 1 cost estimate;
    - (vii) Construction Schedule;
    - (viii) Construction plan;
    - (ix) Project commissioning plan;
    - (x) Applicable reference drawings of the existing site;
    - (xi) Project arc flash study;
    - (xii) Operation and maintenance manual requirements;
    - (xiii) Contractor training requirements;
    - (xiv) Contractor commissioning requirements;
    - (xv) Detailed design notes and calculations package; and
    - (xvi) Any other information required by the Contractor.

- (b) Submit one (1) electronic copy of the 60% draft Detailed Tender Package for all aspects of the work, including detailed construction drawings and technical specifications.
  - (i) The Consultant should allow for a ten (10) Business Day review period for the City to provide comments. A blackout period of December 23-January 3 will apply to the review period if applicable. This should be accounted for and shown in the proposal.
  - (ii) Submit electronic copies of the draft tender document and technical specifications in Microsoft Word format.
  - (iii) The electronic copies of the draft Drawings shall be submitted in PDF format.
  - (iv) Conduct a meeting to review the City's comments on the 60% draft tender documents.
- (c) Submit one (1) electronic copy of the 90% draft Detailed Tender Package for all aspects of the work, including all tender package items listed in D12.6(a) if applicable.
  - (i) The Consultant should allow for a ten (10) Business Day review period for the City to provide comments. A blackout period of December 23-January 3 will apply to the review period if applicable. This should be accounted for and shown in the proposal.
  - (ii) Submit electronic copies of the draft tender document and technical specifications in Microsoft Word format.
  - (iii) The electronic copies of the draft Drawings shall be submitted in PDF format.
  - (iv) Conduct a meeting to review the City's comments on the 90% draft tender package.
  - (v) Incorporate all City comments into the final tender package.

## D12.7 Odour Control Study

The wastewater lift station will be in a jointly commercial and industrial area, effective odour control is essential. The lift station is expected to receive low flows during the early stages of the development, and minimal pump cycles times are expected. As a result, this will lead to very long detention times within the sanitary sewage network, wet well and force main. The long detention times can lead to odorous compound formation.

- (a) An odour control study is to be completed during detailed design. The Consultant shall review the following for CentrePort South Phase 1A development.
  - (i) odour control methods;
  - (ii) removal;
  - (iii) odour suppression; and
  - (iv) odour prevention.
- (b) The odour control study is to consider the future full buildout lift station capacity and the development of CentrePort South lands.
- (c) The odour control study is a stand-alone document and shall be submitted as part of the detailed design tender package for Contract 1A By-pass Lift Station.
- D12.8 Risk Management
  - (a) The detailed design Risk Management Plan shall include outstanding risks from the Preliminary Design stage. (Appendix A Risk Management Plan).
  - (b) The Consultant shall identify risks and associated mitigations in each of the following phases; design, construction, commissioning and turnover to WWD operations.
  - (c) The Consultant shall ensure that all risks designated to be transferred to the Contractor are appropriately included in the Detailed Tender Package such that an effective transfer of risk occurs.
  - (d) The Consultant shall facilitate one (1) formal risk workshop prior to the posting of the first construction tender.
  - (e) The risk management plan is to be updated and included with the Consultant Progress Reports indicated in D9.

- (a) Prepare a Class 1 Cost Estimate following incorporation of City review comments of the 90% tender package submission for each Tender.
  - (i) The Class 1 Cost Estimate shall be submitted at least one (1) week prior to sending the Tender for posting by the Materials Management division.
  - (ii) The Class 1 Cost Estimate shall be completed using the latest version of the City's Basis of Estimate template, available on the City Asset Management Program page at The City of Winnipeg, Corporate Finance, Infrastructure Planning Division website: <u>https://legacy.winnipeg.ca/infrastructure/asset-managementprogram/templates-manuals.stm#4</u>.
- D12.10 Constraints
  - (a) Land acquisitions will be required from private landowners to accommodate the proposed regional infrastructure for water and sewer servicing.
  - (b) Land agreements will need to be in place prior to posting of the construction tenders.
  - (c) There are concerns for heritage resources in CentrePort South lands. Further archaeological assessments are required.
  - (d) The interceptor sewer pipe at Adsum Drive has been identified as a future constraint in the downstream regional sewer system in the CentrePort South Preliminary Design Report.
  - (e) CentrePort South Phase 1A project funds are limited to the bi-party funding agreement.
- D12.11 Detailed Design of the Water Infrastructure
- D12.11.1 General
  - (a) The detailed design of the water infrastructure shall include but not be limited to the following:
    - (i) Feeder mains, water pressure monitoring station, feeder main valve chambers, air release chambers, offtake structures, valves, and pipe supports to suit presumed land use of developed lands.
  - (b) To provide adequate pressure and fire flow, a Feeder Main size of 750 mm was selected and approved by City WWD.
- D12.11.2 Detailed Design (Contract 4A 750 mm Feeder Main)
  - (a) The first Tender (Contract 4A) is for the installation of the 750 mm Feeder Main from Silver Avenue to Offtake Structure 3 (OS3).
  - (b) The 750 mm Sturgeon Road Feeder Main has been developed to a preliminary design stage and is shown on plan profile drawings (Appendix A).
    - (i) Note: In the preliminary design report there was Offtake Structure 3A, and Offtake Structure 3B. It was later determined that only one of these structures were necessary and Offtake Structure 3B became OS3.
  - (c) The Consultant shall provide all necessary professional services as required to prepare a detailed design and tender submission (Contract 4A) for the CentrePort South 750 mm Feeder Main. The scope of work for design shall include, but not be limited to:
    - (i) feeder main pipes;
    - (ii) pipe fittings;
    - (iii) offtake chambers;
    - (iv) valve chambers;
    - (v) air release chambers;
    - (vi) pressure monitoring station;
    - (vii) commissioning plan;
    - (viii) connection to existing infrastructure; and
    - (ix) site development and restoration.
  - (d) The Consultant shall confirm the following during detailed design:

- (i) final location and alignment of the water infrastructure;
- (ii) pipe installation methods (open cut / trenchless);
- (iii) required land agreements; and
- (iv) pipe material.
- (e) Design Services General
  - (i) Offtake Structure 3 (OS3) shall include a pressure monitoring station complete with an external, pole-mounted recorder with wireless transmission capabilities and a broadcast antenna located at the top of the pole.
    - i. The pressure monitoring station shall be designed to communicate with the City of Winnipeg SCADA system.
  - (ii) The 750 mm Feeder Main will require an encasement pipe where it crosses under the railway tracks just north of Saskatchewan Avenue in accordance with the latest revision of Transport Canada TC E-10. The Consultant shall consult with the railway owner during detailed design for any additional railway crossing requirements.
  - (iii) Review the impact of the work on existing traffic patterns and determine an appropriate traffic management plan.
  - (iv) The Consultant shall complete all necessary horizontal and vertical surveys to facilitate the work.
- (f) Contract 4A is required to be in service for the start of phase 1A to support any development in the industrial zone. Development within the residential subdivision can initially begin without a connection to the Feeder Main by using the connections to the existing system south of Saskatchewan.
- (g) Water Modeling was completed during preliminary design stage and is not required for detailed design.
- (h) The detailed Feeder Main design shall comply with the City's Feeder Main Design Standards, included in Appendix O.
- D12.12 Detailed Design of the Wastewater Infrastructure
- D12.12.1 General
  - (a) The detailed design of the wastewater infrastructure shall include but not be limited to the following:
    - By-pass lift station and force main design, interceptor and intake sewers, capacity, hydraulic design, pump selection and system curves, chambers, site layout, pipe alignment, connections to existing system and list of selected equipment and materials.
- D12.12.2 Detailed Design (Contract 1A By-Pass Lift Station)
  - (a) The second tender (Contract 1A) is for the development of a smaller lift station using the by-pass components of the future full-buildout lift station. The station would include a small heated and insulated structure to support the mechanical, electrical and instrumentation needs throughout the operation of phase 1A.
- D12.12.3 By-Pass Lift Station Design Requirements:
  - (a) Provide detailed design for a by-pass lift station as described in the Preliminary Design Report and shown on drawing LS-100 (Appendix A).
  - (b) The Consultant shall provide all necessary professional services as required to prepare a detailed design and tender submission. The scope of work for design shall include, but not be limited to:
    - (i) Inlet manhole with gate for temporary bypass operation;
    - (ii) Site development, drainage, approach and parking;
    - (iii) Temporary discharge line;
    - (iv) By-pass chamber combined with tees and blind flange for emergency bypass connection; and

- (v) Temporary pump control building constructed on inlet manhole combined with generator, electrical and HVAC.
- (c) The following engineering services are required for the by-pass lift station:
  - (i) Structural and architectural engineering.
  - (ii) Building mechanical and HVAC engineering design.
  - (iii) Electrical, instrumentation and control system design, including arc flash hazard study.
  - (iv) Design of Civil and Municipal services outside the future full buildout lift station.
    - i. design must take into consideration maintenance vehicle access to lift station and space for the removal of heavy equipment.
    - ii. design of civil works including site layout, grading, access design, storm water management, etc.
  - (v) Design of the process piping (suction and discharge), including pumps, valves, fittings, flow meters and pump motor layout.
  - (vi) Development of temporary by-pass pumping operations specifications.
  - (vii) Design of force main discharge line and by-pass pumping connections.
  - (viii) Groundwater management, monitoring, testing, and approach for the by-pass lift station and the future full-buildout lift station.
  - (ix) Preparation of standardized electrical equipment; (if required)
  - (x) Mechanical Engineering Process Pumping and Piping
    - i. The Consultant shall conduct a hydraulic review of the by-pass lift station system to determine what the maximum allowable flow volume would be without overwhelming the downstream interceptor.
    - ii. Pumps shall be of the same manufacturer and shall be identical, non-clog sewage pumps capable of handling 75mm (3") solids and suitable for vertical dry-pit installation and capable to run in reverse mode. Pump assemblies that are considered a submersible style pump where the motor is directly connected to the pump will not be accepted.
      - Note: The Consultant shall confirm pump selection with WWD operations during design.
    - iii. Consultant to review peak wet and dry weather flows and size pumps accordingly.
    - Pumps must be capable of selected duty for both PLC Mode and Backup (Local) mode such that City staff can decide which pump always starts/stops first.
    - v. Pumps must be able to rotate through the duty cycle so that the lead pump changes with ever cycle.
    - vi. Pumps must be capable of being run in reverse for unclogging/de-ragging purposes.
    - vii. Each pump shall include a complete rebuild kit for overhaul of each pump. This includes spare parts such as: upper bearings (motor side) set, lower bearings (pump side) set, mechanical seal set, wear rings, gaskets, O-rings, AEGIS ground ring and associated hardware. Include one (1) spare impeller (trimmed to size).
  - (xi) Electrical, Instrumentation & Automation
    - i. The Consultant shall ensure all equipment, instrument and PLC signal tags meet the City of Winnipeg Identification Standards. (Appendix H)
    - ii. Electrical system design shall include pump station controls, power supply and emergency standby generator;
      - The wastewater lift station location does not have a power line available. The Consultant is to coordinate electrical services works with Manitoba Hydro.

- iii. By-pass pumping equipment, instrument and controls must be able to communicate to City operations SCADA system.
- iv. Provide panel and automation programming design and drawings for inclusion in tender.
- v. Provide control narrative to describe how all equipment within the station is controlled in manual and automatic modes of operation. The Control Narrative will be used as a guideline for the Consultant to provide programming of the PLC and set up communication. The Consultant will be responsible for this and will need to submit to the Department during the design review process. The final control narrative shall be provided in a report format and sealed by an Engineer.
- vi. Provide cleaning cycle function or auto de-ragging options of the pumps programmed into the PLC Logic so that the pumps can run in reverse mode and be capable to run remote from the SCADA operations centre.
- vii. Provide pumping strategy control narrative that considers reducing clogging and ragging of the pumps.
- viii. Prepare P&ID drawings, following City of Winnipeg standards showing the process and instrumentation for all process, HVAC and miscellaneous services.
- (xii) Process design for chemical addition / odor control measures, including chemical storage, if required;
- (xiii) Provide detailed design for a new temporary building structure that is insulated and code compliant with all building codes.
  - i. The temporary building structure must be sufficient in size and layout to adequately accommodate the equipment and components and space for operational maintenance activities.
- (xiv) Complete all necessary horizontal and vertical surveys to facilitate the work.
- (d) By-pass lift station components and location will need to work with future full buildout lift station. The Consultant shall ensure the design is compatible with planned future works.
- D12.13 Detailed Design (Contract 3 Interceptor and Intake Sewers)
  - (a) The Interceptor and Intake Sewers have been developed to a preliminary design stage and are shown on the plan profile drawings (Appendix A).
  - (b) The third tender (Contract 3) is for the installation of approximately 860 m of 750 mm and 260 m of 900 mm Interceptor Sewer pipes as well as 70 m of 1200 mm Intake Sewer which terminates at the wastewater lift station.
  - (c) The Consultant shall provide all necessary professional services as required to prepare a detailed design and tender submission (Contract 3) for the CentrePort South Interceptor and Intake Sewers. The scope of work for design shall include, but not be limited to:
    - (i) Interceptor Sewer pipes;
    - (ii) Intake Sewer pipe;
    - (iii) Manholes;
    - (iv) Microtunneling shafts;
    - (v) Connection to existing infrastructure; and
    - (vi) Site development and restoration.
  - (d) The Consultant shall confirm the following during the detailed design phase:
    - (i) Final location and alignment of the Interceptor and Intake Sewer pipes;
      - i. Further coordination with the Province of Manitoba will be required to optimize the final alignment to ensure that it is not in conflict with their future planned interchange.
    - (ii) Pipe installation methods;
    - (iii) Required land agreements; and
    - (iv) Sewer pipe shape, hydraulics, capacity and sizing.

- (e) Design Services General
  - (i) During early stages of development, the flows generated may be insufficient to provide minimum scour velocities in the pipes. The Consultant shall review the expected flows and provide input to the City if a pipe flushing program is required.
    - i. If required, include expanded maintenance program for flushing and pigging in the Construction contract.
  - (ii) Further investigations are required to confirm sewer pipe depth and constructability methods.
  - (iii) Review sewer system hydraulics and determine flow control requirements.
  - (iv) Review the impact of the work on existing traffic patterns and determine an appropriate traffic management plan.
  - (v) The Consultant shall complete all necessary horizontal and vertical surveys to facilitate the work.
- D12.14 Detailed Design (Contract 2A 600 mm Force Main)
  - (a) The 600 mm Force Main pipe has been developed to a preliminary design stage and is shown on plan profile drawings (Appendix A).
  - (b) The fourth tender (Contract 2A) is for the installation of the 600 mm Force Main from the lift station location and connecting to the 1350 mm interceptor sewer which currently terminates on Inkster Boulevard at Brookside Boulevard. The approximate length of Force Main pipe is 7.2 km.
  - (c) The Consultant shall provide all necessary professional services as required to prepare a detailed design and tender submission (Contract 2A) for the CentrePort South 600 mm Force Main. The scope of work for design shall include, but not be limited to:
    - (i) Force Main pipes;
    - (ii) Air control chambers;
    - (iii) Gate valve and cleanout chambers;
    - (iv) Drain chambers;
    - (v) Connection to existing infrastructure;
    - (vi) Construction of granular maintenance access pullouts;
    - (vii) Pipeline monitoring devices;
    - (viii) Encasement pipes;
    - (ix) Site development and restoration; and
    - (x) Commissioning plan.
  - (d) The Consultant shall confirm the following during the detailed design phase:
    - (i) Final location and alignment of the Force Main pipe;
    - (ii) Pipe installation methods;
    - (iii) Crossing agreements for railways and oil/gas pipelines;
    - (iv) Required land agreements; and
    - (v) Hydraulics, capacity and sizing.
  - (e) Design Services General
    - (i) The general alignment for the Force Main was recommended by the City early in the preliminary design stage to stay within the Sturgeon Road right of way within CentrePort South lands. Some minor optimization of the alignment is expected during detailed design.
    - (ii) The Force Main alignment crosses two separate CP Railway ROW for which crossing applications will be required.
    - (iii) The Consultant shall complete all necessary horizontal and vertical surveys to facilitate the work.

## D13. PROCUREMENT SERVICES

- D13.1 After Approval by the Consulting Contract Administrator, submit the Detailed Tender Packages to Materials Management for public bidding.
  - (a) All tender packages shall be prepared and posted in accordance with the City of Winnipeg Materials Management Division requirements.
    - (i) the City bid submission forms, Bid Procedures, General Conditions, Supplemental Conditions which are available at <u>https://legacy.winnipeg.ca/matmgt/templates/;</u>
  - (b) Coordinate review of the package with Materials Management and make changes as requested to the tender package.
- D13.1.1 When submitting the tenders to Materials Management, send an e-mail to WWD Drafting and Graphics Supervisor with the following information:
  - (a) City File Number;
  - (b) Project Name;
  - (c) Tender Number;
  - (d) Contract Number, and
  - (e) Individual Drawing Titles (in spreadsheet format).
- D13.2 Provide appropriate response to bidders and advice to the City during tender call and issue addenda to the contract documents as necessary.
- D13.3 Arrange for and lead bidder's site visit(s).
- D13.4 Review bid submissions for completeness and prepare bid tabulations for multiple tenders.
- D13.5 Review low bidder qualifications.
  - (a) Perform a complete review of the low bidder's qualification to determine if they are capable of performing the work under the terms of the contract.
- D13.6 If required, Coordinate and lead a pre-award meeting with general construction Contractor.
- D13.7 Complete a review, analysis, comparison, tabulation, calculation, and evaluation of the tenders received. Make recommendations for award of Tender.
  - (a) If the bids deviate more than 15% from the Class 1 Cost Estimate, provide justification for the difference in pricing in the award recommendation letter. Submit a Letter of Recommendation, copies of the bids, a tender comparison sheet, and a tender tabulation.
- D13.8 Following tender close, submit one (1) electronic copy of the Final Detailed Tender Package including all addenda.
- D13.9 Procurement services are required for four (4) construction tender Contracts.

#### D14. CONTRACT ADMINISTRATION

- D14.1 General Requirements.
  - (a) Administer the construction contract(s).
  - (b) Attend meetings with City staff to ensure all required information, issues, and concerns are accounted for.
  - (c) Use the appropriate City templates throughout the course of the Project. All documents can be found on the City's Infrastructure Planning Office website: <u>https://www.winnipeg.ca/infrastructure/asset-management-program/templates-</u> <u>manuals.stm.</u>
- D14.1.1 Relevant City templates include but are not limited to:

- (a) pre-construction meeting agenda and meeting minutes;
- (b) proposed change notice (PCN);
- (c) PCN log;
- (d) request for information (RFI);
- (e) RFI log;
- (f) field instruction;
- (g) field instruction log;
- (h) contract change log;
- (i) change work order (CWO);
- (j) decision log;
- (k) daily construction report;
- (I) inspection report;
- (m) meeting minutes;
- (n) site meeting minutes;
- (o) Certificate of Substantial Performance;
- (p) Certificate of Total Performance; and
- (q) Certificate of Acceptance.
- D14.1.2 All personnel provided by the Consultant for non-resident or resident engineering Contract Administration work shall be experienced and qualified to perform the work.
- D14.1.3 The City reserves the right to withhold payment of Consultant fees for additional Contract Administration services which result out of errors or omissions in the design work prepared by the Consultant.
- D14.2 Contract Administration Services (Non-Resident)
  - (a) Prior to construction, prepare and submit a written and photographic record of the physical condition of the work area, existing facilities, and structures sufficient to equip the City to provide valid evidence and relevant testimony in settlement of any claim involving the City by any court of law, or by any other party for damages arising from the Project.
  - (b) Coordinate and conduct a pre-construction meeting with all other relevant parties in attendance and provide minutes of meeting to all in attendance and those to be copied.
  - (c) Make application to public agencies for necessary authorizations and permits, prepare and submit reports and drawings thereto, and appear before the same in support of all applications.
    - (i) Coordinate with the Contractor for completion of permits, if applicable in a timely matter.
  - (d) Consultation with and advice to the Department during the course of construction.
  - (e) Review and accept Contractor submittals.
    - (i) The review and acceptance of Contractor submittals (i.e. shop drawings, safe work plan, etc.) shall be conducted by a Professional Engineer(s) of the appropriate discipline and any other associated or impacted disciplines.
    - (ii) Provide one comprehensive review of each submittal that the Contractor has stamped and submitted. Subsequent reviews of submittals shall be at the cost to the Contractor.
  - (f) Review and report to the Department upon laboratory, shop and other tests conducted upon materials and /or equipment placed or installed by the Contractor to ensure to the Department conformance to the contract Drawings and Specifications, without relieving the Contractor of his contractual and legal obligations in respect thereof.

- (g) Review acceptability of inspection and test plans from Contractors, vendors or manufacturers.
- (h) Review any alternate materials or methods that may be required to progress the work. No alternates shall be approved without written authorization from the City.
- (i) Furnish copies to the Department of all significant correspondence relating directly or indirectly to the project by parties external to the Consultant's Contract Administrator.
- (j) Promptly prepare, certify, and submit progress estimates to the City for payment to the Contractor(s) for construction performed in accordance with the drawings and specifications.
- (k) Coordinate and prepare PCN's regarding the Contractor scope of work as required. This may include the preparation of specifications and Drawings for the PCN.
- (I) Review extra work claims submitted by the Contractor. Provide backup material to the Consulting Contract Administrator as requested.
- (m) Prepare and process CWO's accordingly in a timely manner.
- (n) Review and respond to Contractor RFIs in a timely matter.
- (o) Prepare Contractor site instructions/clarifications/directives as required.
- (p) Interpret technical aspects of the Contract as requested by the City.
- (q) Plan, coordinate, manage and lead all shutdown and tie-in protocols, required for construction and commissioning. Prepare detailed shutdown or tie-in protocols that detail out a schedule of work, delegate responsibilities, and clearly identify all operational impacts and plans to address. Review operational and construction risks and plan risk mitigation measures as appropriate. Act as the interface between the Contractor and City during the shutdowns and tie-ins.
  - (i) Base any required construction shutdown and tie-in protocols on the procedures developed during the Detailed Design phase.
- (r) Arrange for regular job meetings (minimum one per two-week period) on/near the work site or at an agreed location throughout the duration of the contract work. The meetings are to be attended by the Contract Administrator, or their designate, as well as the Resident inspector, the Contractor, and the Department's Consulting Contract Administrator.
  - i. The typical frequency of meetings shall be bi-weekly during the course of construction, although meeting frequency may vary based upon the level of construction activity.
  - ii. Provide minutes of all site meetings within five (5) working days of the meeting.
- (s) Monitor project progress and ensure all items of work are completed within the terms of the contract.
- (t) Commissioning Services
  - (i) Coordinate with the installation Contractor and equipment supplier for all required site testing and commissioning services.
  - Coordinate with the Contractor to ensure appropriate measures regarding safety, health and environmental aspects are implemented throughout the commissioning activities.
  - (iii) Coordinate commissioning activities with City operations personnel as required. Ensure that City operations personnel are always aware of the current commissioning status and any upcoming operational requirements or impacts.
  - (iv) The Consultant is fully responsible for the planning and leadership of the overall commissioning activities. While the Contractor and the City team may perform specific commissioning tasks, this does not reduce or eliminate the Consultant's responsibilities. Schedule and coordinate all commissioning work in coordination with the Contractor's schedule.
  - (v) Ensure all commissioning team members have clear definition of their role and understanding of their responsibilities.

- (vi) Conduct pre-commissioning meetings as applicable.
- (vii) Prepare agenda, lead and record minutes of the commissioning meetings.
- (viii) Review all commissioning records and ensure that the overall commissioning records demonstrate compliance to the specifications and overall Project design requirements.
  - i. Ensure all equipment and control system settings are documented.
- (ix) Manage the commissioning documentation.
- (u) Training
  - Coordinate and manage training sessions for City personnel for the operation and maintenance of new and upgraded facilities and equipment in accordance with Appendix N. This includes but is not limited to planning and scheduling of training sessions, review of training procedures and training documents prepared by the Contractor.
  - (ii) Coordinate with the Installation Contractor and Equipment Supplier to provide a minimum of four (4) on-site training sessions to provide instruction to City staff on the safe operation of all new equipment including recommended maintenance tasks and schedules.
  - (iii) The Consultant is responsible for the overall packaging and quality assurance of the training program, although delivery of selected portions may be by the Contractor or subcontractor.
  - (iv) Hands-on training needs to be completed shortly after classroom training.
  - (v) Training materials to be submitted to the City for review and comment prior to the on-site training.
  - (vi) Coordinate to ensure video records of each unique training session are provided to the City. Ensure acceptable and uniform standard of video quality.
    - i. Note: Simply video recording the training sessions is not considered adequate. Audio video material needs to be edited and integrated into comprehensive modules.
  - (vii) The Consultant shall create online SCORM content with clear learning objectives and assessment built-in. The SCORM content shall be compatible with OCMS (WWS learning management system).
    - i. SCORM is a collection of standards and specifications for web-based electronic educational technology (also called e-learning).
  - (viii) Training requirements are identified in Appendix N.
- (v) Coordinate with the Installation Contractor and Equipment Supplier to provide three (3) full sets of all Operation & Maintenance manuals to the City for all newly installed equipment and devices.
- (w) Administer Substantial Performance with regards to the construction Contract.
  - Coordinate and lead a comprehensive detailed inspection prior to Substantial Performance, including the Contractor and the City. Document and report on all issues identified and coordinate completion of the issues.
  - (ii) Make a recommendation to the Consulting Contract Administrator when the Contractor has achieved Substantial Performance.
  - (iii) Act as Payment Certifier and administer all contracts as required under the Builder's Liens Act of Manitoba.
  - (iv) Upon approval, Prepare and issue a Certificate of Substantial Performance.
- (x) Administer Total Performance with regards to the construction Contract.
  - Coordinate and lead a comprehensive, detailed inspection prior to Total Performance, including the Contractor and the City. Document and report on all issues identified and coordinate completion of the issues.
  - (ii) Make a recommendation to the Consulting Contract Administrator when the Contractor has achieved Total Performance.

- (iii) Upon approval, prepare and issue the Certificate of Total Performance.
- D14.3 Contract Administration Services (Resident)
  - (a) Provide reference line and elevation control points for the works and check the Contractor's adherence.
  - (b) Monitor the activities of the Contractor to ensure:
    - (i) project schedules are being realized;
    - (ii) damage to property is addressed;
    - (iii) contract requirements are being met; and
    - (iv) site safety is in accordance with Provincial Regulations.
  - (c) Provide **full time** construction inspection and acceptance of the work during installation and construction.
    - (i) Full time inspections services will be required for the Interceptor, Force Main and Feeder Main contracts.
    - (ii) Inspection services will be (as required) for the by-pass lift station contract.
  - (d) Provide inspection services when the Contractor is on-site to ensure that the construction conforms to the design Drawings and specifications.
  - (e) Provide weekly construction reports during the course of construction. The reports shall include but not be limited to:
    - (i) Working days and days lost due to unforeseen conditions over the course of construction; and
    - (ii) Written and photographic records of the construction, including construction progress.
  - (f) Keep a continuous record of Project activities including but not limited to the weekly construction reports, photographic record of construction work and equipment, working days, teleconferences, emails, inspections, and observations sufficient to equip the City to provide valid evidence and relevant testimony in settlement of any claim involving the City by any court of law, or by any other party for damages arising from the Project.
    - (i) Provide weekly construction reports to the Department's Consulting Contract Administrator no later than five (5) working days after the week in question.
    - (ii) A weekly construction report shall be submitted per Construction Contract.
  - (g) Ensure that Quality Assurance/Quality Control (Qa/Qc) is undertaken to Building Code requirements and Departmental standards.
  - (h) Enforcement of Contractor conformance with the City of Winnipeg Manual of Temporary Traffic Control in Work Areas on City streets in compliance with expected standards of safety for motorists and pedestrians, without relieving the Contractor of his contractual and legal obligations in respect thereof.
  - (i) Witness quality control procedures implemented by the Contractor.
  - (j) Co-ordination and staging of other works by third parties on the site including, but not limited to, Hydro, Gas, Communications and other City forces.
  - (k) Coordination with any developer project works that may be installed at the same time.
  - (I) Participate in regular construction review meetings.
    - (i) The typical frequency of the meetings shall be bi-weekly during the course of construction, although meeting frequency may vary based upon the level of construction activity.
  - (m) Reports are to be promptly made the Department's contact person regarding unusual or changed site conditions which may or will result in extra work to the project.
  - (n) All extra work to the project must be reviewed and approved by the Department's contact person prior to approval being given to the Contractor to undertake the Work.

- (o) In conjunction with the Department, provision of advance notice to adjacent residents and businesses who will have public services and/or access disruptions during construction.
- (p) Acting in the interest of the Department, provide responsible, sensitive and prompt reaction to the reasonable requests and complaints of citizens regarding the conduct of the project.
- (q) Arranging for and carrying out testing of materials to ensure conformance with the Drawings and Specifications, without relieving the Contractor of his contractual and legal obligations in respect thereof.
- (r) The Consultant will be required to attend commissioning site visits to ensure proper testing is performed. Prepare and submit commissioning reports including general scope, work completed, items requiring completion and/or changes and other items.
- (s) Commissioning tasks for Phase 1A shall include, but not be limited to:
  - (i) Contract 4A (750 mm Feeder Main)
    - i. Hydrostatic pressure testing, flushing, disinfection and chlorination.
    - ii. Ensuring proper operation of all valves.
    - iii. Pipe joints included in connection sections shall be exposed to inspect for leakage.
  - (ii) Contract 1A (By-pass Lift Station)
    - i. Testing of all control equipment, components, and system for proper operations.
      - Ensuring proper operation of high-level alarm switches and hydrogen sulfide sensors (if required).
      - Pump operation and SCADA system control.
    - ii. Verification of valve open-close operations.
  - (iii) Contract 2A (600 mm Force Main)
    - i. Flushing and hydrostatic testing of the force main.
    - ii. Verification of valve open-close operations.
      - Air release valves operating as designed.
    - iii. Testing of all control equipment, components, and systems for proper operation.
  - (iv) Contract 3 (Interceptor and Intake Sewers)
    - CCTV inspection and condition coding of the sewers.
- (t) Ensure the Contractor fills out the required commissioning forms for each commissioning site visit to be incorporated into the O&M manual. City staff will be required to be on site during commissioning activities to witness commissioning.
- (u) Sign-off on all commissioning and training records.
- (v) Participate in a comprehensive, detailed inspection prior to Substantial Performance. Document and add all issues identified to the deficiency log.
- (w) Participate in a comprehensive, detailed inspection prior to Total Performance. Document and add all issues identified to the deficiency log.
- (x) Prepare, update, maintain, and coordinate a deficiency list of all issues identified during inspections. Coordinate remediation of the deficiency list with the Contractor.

#### D15. RECORD DRAWINGS

- D15.1 Record drawings are to be submitted in two phases:
  - (a) Preliminary Record Drawings
  - (b) Final Record Drawings
- D15.2 Preliminary Record Drawings

- (a) The Consultant shall prepare and submit Preliminary Record Drawings within two (2) months of the Total Performance of the construction contracts.
- (b) The preliminary record drawing submission is to consist of a drawing transmittal letter to the Department's Supervisor of Drafting & Graphic Services, copied to the Department's contact person, and along with one (1) complete set of separate full-size (A1 Oversize) drawings and PDF files for the Works.
- (c) Record drawings are to include all construction details and materials of the competed works, including the following:
  - (i) All construction details,
  - (ii) Complete materials list for each individual component installed,
  - (iii) Date of installation of Works (Substantial Performance), and
  - (iv) Installation Contractor.
- (d) The reviewed record drawings will be returned with comments (if any) for completion.
- D15.3 Final Record Drawings
  - (a) Once all revisions have been made, submit one (1) complete set of full size (A1 Oversize) drawings for the Works, complete with the preliminary prints with comments, and the digital AutoCAD and PDF file for each record drawing to the Department's Supervisor of Drafting & Graphic Services. Each drawing file must have the Water and Waste Department drawing number assigned to that drawing.
    - (i) Submit the Final Record Drawings within one month of receipt of comments from the Department.
  - (b) All sealed Construction documents produced for the project are required to be updated to become sealed Record Drawings. The Record Drawings shall include all changes from the final construction work.
  - (c) Final record drawings shall be sealed by a Professional Engineer with tracked document revision history.
  - (d) Final record drawings must be sealed with either a P.Eng. stamp, or a secure digital stamp.
- D15.4 Payment for Record Drawings will be as Follows:
  - (a) 50% upon acceptance of the Preliminary Record Drawings;
  - (b) 50% upon acceptance of the Final Record Drawings.
- D15.4.1 The Proponent shall submit a Record Drawing price per construction Contract as detailed on Form B: Fees.
- D15.5 Record Drawings shall adhere to the General Requirements for Drawings as described in D6.3.

#### D16. PROJECT CLOSEOUT

- D16.1 Confirm and ensure complete turnover of project Contract Administration documentation (shop drawings, Record Drawings, operations and maintenance manuals, spare parts, photographs, etc.) to the City by the Contractor and verify that the documents are in conformance with the construction contract.
  - (a) Review the operation and maintenance manuals to ensure they conform to the specification requirements and in accordance with Appendix M.
- D16.2 The City will require the Consultant and Subconsultants to provide, within sixty (60) Business Days of the completion of Total Performance (for each Contract) electronic copies of all design documents including but not limited to background notes, calculations, working notes, research, field logs, working copy spreadsheets, model inputs, survey notes, etc. used in generating deliverables and pertinent to the Project, so that the City has a complete understanding of all details related to this Project.

- (a) The format for the provided materials may take multiple formats, but should be provided in format (spreadsheets, CAD drawings, scans, etc.) in an organized electronic filing system.
- (b) The rationale for requiring this information is that we (The City, or Consultants working for the City) on subsequent work related to this project may need to refer to specific details in the future.
- D16.3 Provide a final construction report to the City within three (3) months of the Final Construction Tender Total Performance Date. The final construction report shall include the following:
  - (a) A brief summary of the project, including;
    - (i) services accomplished, including the initial and final scope of the Project (Phase 1A);
    - (ii) issues encountered during the Project and the resolutions achieved;
    - (iii) final or projected final contract cost; and
  - (b) appendices, including:
    - (i) photographs typical pre-construction, during construction, and post-construction photographs;
    - (ii) cost summary;
    - (iii) tabulation of tenders;
    - (iv) change orders;
    - (v) summary of progress payments;
    - (vi) final construction contract schedule;
    - (vii) subcontractor list;
    - (viii) daily or weekly reports;
    - (ix) progress meeting minutes;
    - (x) shop drawings/submittals;
    - (xi) field instructions;
    - (xii) Contractor RFI's and responses;
    - (xiii) material test reports;
    - (xiv) warranty information;
    - (xv) validation documentation;
    - (xvi) commissioning documentation;
    - (xvii) certificates of Substantial Performance and Total Performance; and
    - (xviii) asset data.
- D16.3.1 Submit two (2) paper copies and one (1) electronic PDF copy of the final construction report.
- D16.3.2 The final construction report shall summarize all four (4) construction tenders for CentrePort South Phase 1A Regional Water and Wastewater Infrastructure.
- D16.4 Warranty Services
- D16.4.1 For the following Tenders provide one (1) year warranty services tied to the date of Total Performance.
  - (a) Contract 2A Force Main
  - (b) Contract 3 Interceptor and Intake Sewers
  - (c) Contract 4A Feeder Main
- D16.4.2 For Contract 1A By-pass Lift Station provide two (2) year warranty services tied to the date of Total Performance.
- D16.4.3 The warranty services shall include but are not limited to the following:

- (a) provision of inspection services, at the request of the City, during the warranty period of the construction contract to advise the City in writing of any deficiencies and the proposed resolution of the deficiencies. Upon approval of the City, provide the Contractor appropriate notice to correct the deficiencies;
- (b) determination if corrective work is part of Contractor's warranty;
- (c) liaison and coordination with the Contractor to repair defective work;
- (d) conduction of the inspection and approval of warranty work (as requested);
- (e) issuance of instructions for correction of deficiencies;
- (f) review of updates to operations and maintenance manuals and resolve deficiencies;
- (g) respond to requests of the City related to the Project;
- (h) coordinate and lead a comprehensive, detailed inspection prior to the expiration of the warranty period for construction, including the Contractor and the City. Document and report on all issues identified and coordinate completion of the issues; and
- (i) prepare and issue the certificate of acceptance.
- D16.5 Asset Data
  - (a) The Consultant shall provide a comprehensive list of all maintainable assets along with associated data based on the Guideline to Document Asset Registry. The list shall be in a spreadsheet in a format defined by the City for uploading into the City's Oracle Work and Asset Management (OWAM) system.
  - (b) The Consultant shall reference the latest revision of the Wastewater Services Division asset registry document outlined in Appendix L.
- D16.6 Attend the Project closeout meeting with the City to:
  - (a) mark the completion of the Project;
  - (b) review Project performance;
  - (c) identify the lessons learned; and
  - (d) confirm that essential contractual and other project closure activities are completed.
- D16.7 Deliverables from Project Closeout shall include, but not be limited to:
  - (a) Design Documents;
  - (b) Operation & Maintenance Manuals in both hard copy and electronic format;
  - (c) Training Materials;
  - (d) Final Asset Registry;
  - (e) Final Construction Report in both hard copy and electronic file format;
  - (f) End of warranty period site inspection, recommendations, and meeting minutes; and
  - (g) Certificate of Acceptance for construction contract(s).

# D17. FLOW MONITORING WORK ALLOWANCE

- D17.1 The Consultant is to undertake flow monitoring to calibrate the existing sewer system.
- D17.2 This Specification shall cover the supply, installation, programming, equipment performance tracking, calibration, and verification of flow monitoring equipment at up to ten (10) locations along the Northwest Interceptor Sewer. The work shall also include the supply and installation of all power and communications equipment at each site to provide a fully functioning system, inclusive of connection to Manitoba Hydro service point. Finally, the work shall also include data processing and analysis of the quality of flow monitoring data collected from the flow monitoring equipment.
- D17.3 The Consultant shall account for the flow monitoring work in the schedule of the proposal.

- D17.4 Scope of Flow Monitoring work to include
  - (a) Site selection;
  - (b) Pre-Survey Site Investigations;
  - (c) Flow Monitoring Subcontractor Procurement (if required);
  - (d) Sewer Flushing;
  - (e) Installation of up to ten (10) monitoring instruments;
  - (f) Manhole survey;
  - (g) Flow Monitoring Coordination and Support:
    - (i) The flow survey period is to be based on a maximum 6-month period. The proponent will collect and assess the data during that time.
- D17.5 The Consultant shall use City templates in completing the flow monitoring work.
- D17.6 Flow monitoring data collection and data quality assessment shall be in accordance with the Appendix P: Wastewater Planning User Group (WAPUG) Code Of Practise For The Hydraulic Modeling Of Sewer Systems (Version 3.001), specifically Section 3.0 Data Requirements and Section 5.0 Flow Surveys.
- D17.7 The Consultant shall schedule and lead a flow monitoring schedule and planning meeting with WWD Engineering staff.
  - (i) To be held within two (2) weeks of the award of Contract.
- D17.8 The Consultant shall schedule and lead a flow monitoring planning meeting with WWS operations and WWD Engineering staff. The purpose of this meeting is to provide detailed information to WWS and to coordinate flow monitoring activities. Agenda items include, but are not limited to:
  - (a) Coordination of sewer flushing activities around proposed flow monitor sites;
  - (b) Location of monitoring instruments; and
  - (c) Reporting and analysis of flow monitoring results.
- D17.9 The flow monitoring results are not required for the detailed design of Phase 1A wastewater infrastructure. The flow monitoring information will aid in calibrating the current City Master Database hydraulic model representation. The calibrated City Master Database will then be used to identify constraints, if any, in the downstream regional sewer system to accommodate the Phase 1A wastewater infrastructure.
- D17.10 The Flow Monitoring Work Allowance indicated in B9.4(a) is to be used for flow monitoring work activities. Expenditures under the Flow Monitoring Work Allowance must be authorized by the Consulting Contract Administrator identified in D2.

## D18. GEOTECHNICAL WORK ALLOWANCE

- D18.1 The detailed design stage requires geotechnical investigations to characterize the geotechnical condition of the subsurface soils/bedrock and groundwater. This information will be used to refine the optimum alignment, provide geotechnical design criteria necessary for foundation/structural design, determine construction requirements, and to facilitate more accurate costing information.
- D18.2 From the Preliminary Design Report, the following geotechnical investigations are recommended at the detailed design stage:
  - (a) Interceptor Sewer
    - additional drilling to be undertaken to the north of the proposed lift station in the east-west direction that coincides with station 3+700 along Sturgeon Road to finalize the Interceptor Sewer alignment.

- (ii) additional drilling be completed to delineate the till/bedrock interface along the proposed alignment.
- (iii) the launch shaft location should be refined based on geotechnical investigations.
- (b) Force Main
  - (i) additional geotechnical investigations should be completed in the regions with the areas of potential bedrock excavation to determine the bedrock quality, suitable excavation methods, and if blasting is required.
  - (ii) Additional groundwater monitoring be completed with the regions with till and bedrock excavation to gain a better understanding on the groundwater conditions and the requirements for dewatering if open trench excavation is utilized.
- (c) Feeder Main
  - (i) additional drilling to be completed along the proposed alignment to infill the existing data and develop the stratigraphy and groundwater information for the portions without geotechnical data.
- (d) Wastewater Lift Station
  - (i) additional geotechnical investigations with triple tube bedrock coring be completed at the location of the proposed WWLS to gain a better understanding of the bedrock quality.
- D18.2.1 Further details of the Preliminary Design stage geotechnical investigations and recommendations can be found in Appendix A.
- D18.3 Work items to be considered as part of this allowance include, but are not limited to:
  - (a) reviewing existing geotechnical information including
    - (i) Reports, borehole logs, etc.
  - (b) providing a proposed investigation location plan to be reviewed by the City;
  - (c) procurement of a drilling Contractor;
  - (d) verifying that the Contractor has all necessary utility locates and work permits;
  - (e) supervision of the investigation activities by qualified personnel;
  - (f) collection and testing of samples;
  - (g) groundwater monitoring;
  - (h) preparation of the Geotechnical Report;
  - (i) conducting topographic land surveys, including preparation of a topographic land survey report;
  - (j) conducting geophysical surveys, including preparation of a Geophysical Survey Report; and
  - (k) any other activities necessary to characterize the geotechnical condition of the subsurface soils/bedrock and groundwater levels.
- D18.4 When conditions arise that require the completion of the Geotechnical work listed in D18.3, the Consultant will prepare a concise scope of work and cost proposal, following requirements as defined in D6.14, in collaboration with the Consulting Contract Administrator. The proposal shall be submitted to the Consulting Contract Administrator for final approval.
- D18.5 No work shall start prior to approval stated in D18.4.

# D19. HERITAGE RESOURCE WORK ALLOWANCE

- (a) At the time of writing this RFP the City has initiated discussions with Province of Manitoba Historic Resources Branch.
  - (i) The Province of Manitoba has identified CentrePort South lands as a major concern for heritage resources.

- (b) The Consultant shall submit specific project footprints with supportive illustrative materials (pdf maps) for the Province to conduct a detailed review of the footprint and determine if any potential impacts to heritage resources.
- (c) A preconstruction HRIA is required on the regional water and wastewater infrastructure.
- (d) Heritage resource construction monitoring is required for the Feeder Main contract, and may be required for the Force Main and Interceptor Sewer contracts.
  - (i) The full extent of the construction monitoring requirements will be determined when the final alignment is confirmed, and the preconstruction HRIA is complete.
- (e) The Consultant shall procure the necessary services to complete the heritage resource work:
  - (i) payment for the HRIA and Construction Monitoring will be made using the Heritage Resource Work Allowance. The Consultant shall prepare a concise scope of work and cost proposal, following requirements as defined in D6.15, in collaboration with the Consulting Contract Administrator.
  - (ii) No additional fees will be contemplated for heritage resource delays. The Consultant shall include the HRIA into the project schedule.
- (f) The HRIA's can only be performed during frost free and snow free conditions.
- (g) The Consultant shall obtain all necessary permits/approvals from the Province of Manitoba.
- (h) The Heritage Resource Work Allowance indicated in B9.4(c) is to be used for Heritage Resource work activities. Expenditures under the Heritage Resource Work Allowance must be authorized by the Consulting Contract Administrator identified in D2.

## D20. ADDITIONAL WORK ALLOWANCE

D20.1 The Additional Work Allowance indicated in B9.4(d) is to be used for engineering and design services that arise due to unforeseen conditions arising in preliminary stages of the project. When such work arises, the Consultant will prepare a concise scope of work and cost proposal, following requirements as defined in D6.16, in collaboration with the Consulting Contract Administrator. The proposal shall be submitted to the Consulting Contract Administrator for final approval. No work shall start prior to this approval.

# D21. ACCESSIBLE CUSTOMER SERVICE REQUIREMENTS

- D21.1 The Accessibility for Manitobans Act (AMA) imposes obligations on The City of Winnipeg to provide accessible customer service to all persons in accordance with the Customer Service Standard Regulation ("CSSR") to ensure inclusive access and participation for all people who live, work or visit Winnipeg regardless of their abilities.
- D21.1.1 The Consultant agrees to comply with the accessible customer service obligations under the CSSR and further agrees that when providing the Goods or Services or otherwise acting on the City of Winnipeg's behalf, shall comply with all obligations under the AMA applicable to public sector bodies.
- D21.1.2 The accessible customer service obligations include, but are not limited to:
  - (a) providing barrier-free access to goods and services;
  - (b) providing reasonable accommodations;
  - (c) reasonably accommodating assistive devices, support persons, and support animals;
  - (d) providing accessibility features e.g. ramps, wide aisles, accessible washrooms, power doors and elevators;
  - (e) inform the public when accessibility features are not available;
  - (f) providing a mechanism or process for receiving and responding to public feedback on the accessibility of all goods and services; and
  - (g) providing adequate training of staff and documentation of same.

# D22. UNFAIR LABOUR PRACTICES

- D22.1 Further to C3.2, the Consultant declares that in bidding for the Work and in entering into this Contract, the Consultant and any proposed Subconsultant(s) conduct their respective business in accordance with established international codes embodied in United Nations Universal Declaration of Human Rights (UDHR) <u>https://www.un.org/en/about-us/universal-declaration-of-human-rights</u> International Labour Organization (ILO) <u>https://www.ilo.org/global/lang-en/index.htm</u> conventions as ratified by Canada.
- D22.2 The City of Winnipeg is committed and requires its Consultants and their Subconsultants, to be committed to upholding and promoting international human and labour rights, including fundamental principles and rights at work covered by ILO eight (8) fundamental conventions and the United Nations Universal Declaration of Human Rights which includes child and forced labour.
- D22.3 Upon request from the Consulting Contract Administrator, the Consultant shall provide disclosure of the sources (by company and country) of the raw materials used in the Work and a description of the manufacturing environment or processes (labour unions, minimum wages, safety, etc.).
- D22.4 Failure to provide the evidence required under D22.3, may be determined to be an event of default in accordance with C14.
- D22.5 In the event that the City, in its sole discretion, determines the Consultant to have violated the requirements of this section, it will be considered a fundamental breach of the Contract and the Consultant shall pay to the City a sum specified by the Consulting Contract Administrator in writing ("Unfair Labour Practice Penalty"). Such a violation shall also be considered an Event of Default, and shall entitle the City to pursue all other remedies it is entitled to in connection with same pursuant to the Contract.
- D22.5.1 The Unfair Labour Practice Penalty shall be such a sum as determined appropriate by the City, having due regard to the gravity of the Consultant's violation of the above requirements, any cost of obtaining replacement goods/ services or rectification of the breach, and the impact upon the City's reputation in the eyes of the public as a result of same.
- D22.5.2 The Consultant shall pay the Unfair Labour Practice Penalty to the City within thirty (30) Calendar Days of receiving a demand for same in accordance with clause D22.5. The City may also hold back the amount of the Unfair Labour Practice Penalty from payment for any amount it owes the Consultant.
  - (a) The obligations and rights conveyed by this clause survive the expiry or termination of this Contract, and may be exercised by the City following the performance of the Work, should the City determine, that a violation by the Consultant of the above clauses has occurred following same. In no instance shall the Unfair Labour Practice Penalty exceed the total of twice the Contract value.

# SUBMISSIONS

#### D23. AUTHORITY TO CARRY ON BUSINESS

D23.1 The Consultant shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Consultant does not carry on business in Manitoba, in the jurisdiction where the Consultant does carry on business, throughout the term of the Contract, and shall provide the Consulting Contract Administrator with evidence thereof upon request.

# D24. SAFE WORK PLAN

- D24.1 The Consultant shall provide the Consulting Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.4(a) for the return of the executed Contract.
- D24.2 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 <a href="http://www.winnipeg.ca/matmgt/safety/default.stm">http://www.winnipeg.ca/matmgt/safety/default.stm</a>

## D25. INSURANCE

- D25.1 The Consultant shall procure and maintain, at their own expense and cost, insurance policies with limits no less than those shown below.
- D25.2 As a minimum, the Consultant shall, without limiting their obligations or liabilities under any other contract with the City, procure and maintain, at their own expense and cost, the following insurance policies:
  - (a) Comprehensive or Commercial General Liability Insurance including:
    - 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;
    - 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 \$5,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence. Such insurance may be met through the commercial general liability policy, if applicable.
  - (c) Professional liability Insurance including:
    - (i) an amount not less than \$ 5,000,000.00 per claim and \$ 5,000,000.00 in the aggregate.
- D25.2.1 The Consultant's professional liability Insurance shall remain in force for the duration of the Project and for twelve (12) months after Total Performance.
- D25.3 The policies required in D25.2(a) shall provide that the City and Manitoba and its Ministers, officers, employees and agents are 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.
- D25.4 The Consultant shall require any Consultants hired to perform geo technical drilling and sample collecting or closed-circuit television to procure and maintain, at their own expense and cost, comparable insurance to that set forth under D25.2(a) and D25.2(b).

- D25.5 The Consultant shall require each of their Subconsultants hired for design, architectural or engineering services as outlined in the Scope of Services to provide comparable insurance to that set forth under D25.2(a) and D25.2(c).
- D25.6 The Consultant shall provide the Consulting Contract Administrator with a certificate(s) of insurance in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Services, but in no event later than the date specified in C4.4(a) for the return of the executed Contract. Such certificates shall state the exact description of the Services and provide for written notice in accordance with D25.9.
- D25.7 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.
- D25.8 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.
- D25.9 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

#### D26. COMMENCEMENT

- D26.1 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.
- D26.2 The Consultant shall not commence any Services until:
  - (a) the Consulting Contract Administrator has confirmed receipt and approval of:
    - (i) evidence of authority to carry on business specified in D23;
    - (ii) the Safe Work Plan specified in D24; and
    - (iii) evidence of the insurance specified in D25.
  - (b) the Consultant has attended a meeting with the Consulting Contract Administrator, or the Consulting Contract Administrator has waived the requirement for a meeting;
  - (c) The direct deposit application specified in D30.1
- D26.3 The City intends to award this Contract by June 26, 2023.

# D27. CRITICAL STAGES

- D27.1 The Consultant shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
  - (a) Submission of the project management plan by July 25, 2023.
  - (b) Tender Package (Contract 4A Feeder Main) including review and approval by WWD, finalize by Jan 16, 2024.
  - (c) Tender Package (Contract 1A Lift Station) including review and approval by WWD, finalize by Feb 15, 2024.
  - (d) Tender Package (Contract 3 Interceptor Sewer) including review and approval by WWD, finalize by June 28, 2024.
  - (e) Tender Package (Contract 2A Force Main) including review and approval by WWD, finalize by June 28, 2024.

## D28. COVID-19 SCHEDULE DELAYS

- D28.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Services shall be performed by the Consultant with due consideration to the health and safety of workers and the public, directives from health authorities and various levels of government and in close consultation with the Consulting Contract Administrator.
- D28.2 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.
- D28.3 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.
- D28.4 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 D28.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D28.5 The Services schedule, including the durations identified in the Contract, will be adjusted to reflect delays accepted by the Consulting Contract Administrator.
- D28.6 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Consulting Contract Administrator, shall be documented in accordance with C8.

#### MEASUREMENT AND PAYMENT

#### D29. INVOICES

D29.1 Further to C11, the Consultant shall submit an invoice for each portion of Work performed. to:

The City of Winnipeg Corporate Finance - Accounts Payable 4th Floor, Administration Building, 510 Main Street Winnipeg MB R3B 1B9

Facsimile No.: 204-949-0864 Send Invoices to <u>CityWpgAP-INVOICES@winnipeg.ca</u> Send Invoice Inquiries to <u>CityWpgAP-INQUIRIES@winnipeg.ca</u>

- D29.2 Invoices must clearly indicate, as a minimum:
  - (a) the City's purchase order number;
  - (b) date of delivery;
  - (c) delivery address;
  - (d) type and quantity of work performed;
  - (e) the amount payable with GST and MRST shown as separate amounts; and
  - (f) the Consultant's GST registration number.
- D29.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

# D30. PAYMENT

D30.1 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 <a href="https://winnipeg.ca/finance/files/Direct\_Deposit\_Form.pdf">https://winnipeg.ca/finance/files/Direct\_Deposit\_Form.pdf</a>.

# **DISPUTE RESOLUTION**

# D31. DISPUTE RESOLUTION

- D31.1 If the Consultant disagrees with any opinion, determination, or decision of the Consulting Contract Administrator, the Consultant shall act in accordance with the Consulting Contract Administrator's opinion, determination, or decision unless and until same is modified by the process followed by the parties pursuant to D31.
- D31.2 The entire text of C17.4 is deleted, and amended to read: "Intentionally Deleted"
- D31.3 The entire text of C17.5 is deleted, and amended to read:
  - (a) If Legal Services has determined that the Disputed Matter may proceed in the Appeal Process, the Consultant must, within ten (10) Business Days of the date of the Legal Services Response Letter, submit their written Appeal Form, in the manner and format set out on the City's Materials Management Website, to the Chief Administrative Officer, and to the Consulting Contract Administrator. The Consultant may not raise any other disputes other than the Disputed Matter in their Appeal Form.
- D31.4 Further to C17, prior to the Consulting Contract Administrator's issuance of a Final Determination, the following informal dispute resolution process shall be followed where the Consultant disagrees with any opinion, determination, or decision of the Consulting Contract Administrator ("Dispute"):
  - (a) In the event of a Dispute, attempts shall be made by the Consulting Contract Administrator and the Consultant's equivalent representative to resolve Disputes within the normal course of project dealings between the Consulting Contract Administrator and the Consultant's equivalent representative.
  - (b) Disputes which in the reasonable opinion of the Consulting Contract Administrator or the Consultant's equivalent representative cannot be resolved within the normal course of project dealings as described above shall be referred to a without prejudice escalating negotiation process consisting of, at a minimum, the position levels as shown below and the equivalent Consultant representative levels:
    - (i) The Consulting Contract Administrator;
    - (ii) Supervisory level between the Consulting Contract Administrator and applicable Department Head;
    - (iii) Department Head.
- D31.4.1 Names and positions of Consultant representatives equivalent to the above City position levels shall be determined by the Consultant and communicated to the City at the precommencement or kick off meeting.
- D31.4.2 As these negotiations are not an adjudicative hearing, neither party may have legal counsel present during the negotiations.
- D31.4.3 Both the City and the Consultant agree to make all reasonable efforts to conduct the above escalating negotiation process within twenty (20) Business Days, unless both parties agree, in writing, to extend that period of time.
- D31.4.4 If the Dispute is not resolved to the City and Consultant's mutual satisfaction after discussions have occurred at the final escalated level as described above, or the time period set out in D31.4.3, as extended if applicable, has elapsed, the Consulting Contract

Administrator will issue a Final Determination as defined in C1.1(v), at which point the parties will be governed by the Dispute Resolution process set out in C17.

## THIRD PARTY AGREEMENTS

## D32. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D32.1 Funding for the Services of the Contract is being provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada and accordingly, as required by the applicable funding agreements, the following terms and conditions shall apply.
- D32.2 For the purposes of D32:
  - (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.
- D32.3 Indemnification By Consultant
- D32.3.1 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.
- D32.3.2 The Consultant agrees that in no event will Canada or Manitoba, their respective officers, servants, employees or agents be held liable for any damages in contract, tort (including negligence) or otherwise, for:
  - (a) any injury to any person, including, but not limited to, death, economic loss or infringement of rights;
  - (b) any damage to or loss or destruction of property of any person; or
  - (c) any obligation of any person, including, but not limited to, any obligation arising from a loan, capital lease or other long term obligation;

in relation to this Contract or the Work.

- D32.4 Records Retention and Audits
- D32.4.1 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.
- D32.4.2 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 D32.4.1 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.

#### D32.5 Other Obligations

- D32.5.1 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.
- D32.5.2 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.
- D32.5.3 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.
- D32.5.4 The Consultant shall properly account for the Services provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.
- D32.5.5 The Consultant represents and warrants that no current or former public servant or public office holder, to whom the Value and Ethics Code for the Public Sector, the Policy on Conflict of Interest and Post Employment, or the Conflict of Interest Act applies, shall derive direct benefit from this Contract, including any employment, payments, or gifts, unless the provision or receipt of such benefits is in compliance with such codes and the legislation.
- D32.5.6 The Consultant represents and warrants that no member of the House of Commons or of the Senate of Canada or of the Legislative Assembly of Manitoba is a shareholder, director or officer of the Consultant or of a Subconsultant, and that no such member is entitled to any benefits arising from this Contract or from a contract with the Consultant or a Subconsultant concerning the Work.

APPENDIX A – AIRPORT AREA WEST REGIONAL WATER AND WASTEWATER SERVICING PRELIMINARY ENGINEERING FINAL REPORT APPENDIX B – MAP OF CENTREPORT APPENDIX C – LAND AGREEMENTS TABLE APPENDIX D - CENTREPORT SOUTH DRAWING LIST APPENDIX E – DEFINITION OF PROFESSIONAL CONSULTANT SERVICES APPENDIX F – COW MODELING GUIDELINES APPENDIX G – WWD ELECTRICAL DESIGN GUIDELINE APPENDIX H – WWD IDENTIFICATION STANDARD APPENDIX I – HMI LAYOUT AND ANIMATION PLAN APPENDIX J – WSTP AUTOMATON DESIGN GUIDE APPENDIX K – WSTP E&I STANDARDIZATION SUMMARY APPENDIX L – ASSET REGISTRY GUIDELINE APPENDIX M – O&M MANUAL INFORMATION **APPENDIX N – TRAINING REQUIREMENTS** APPENDIX O – FEEDER MAIN DESIGN STANDARDS APPENDIX P – WAPUG COP FOR THE HYDRAULIC MODELING OF SEWER SYSTEMS APPENDIX Q - WSTP E&I STANDARDIZATION CLAUSES APPENDIX R – EQUIPMENT LIST EXAMPLE

APPENDIX S – SUBMITTAL LIST EXAMPLE